

The Value of Caregiving: A Comparative Analysis of Compensation in Military Child Development Centers

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FINAL REPORT
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Military Family Research Institute
Purdue University

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EXECUTIVE SUMMARY

INTRODUCTION

At the request of the Office of Military Community and Family Policy, this report compares the compensation packages of Department of Defense (DoD)¹ Child Development Center (CDC) staff to those of employees in occupations similar to child care work in content, experience, compensation, and/or compatibility to the military lifestyle.

According to the regulations of the Military Child Care Act of 1989 (MCCA), caregiver² compensation must be competitive. “For the purpose of providing military CDCs with a qualified and stable civilian workforce, employees at a military installation who are directly involved in providing child care and are paid from non-appropriated funds (NAF):³

1. in the case of entry-level employees, shall be paid at rates of pay competitive with the rates of pay paid to other entry-level employees at that installation who are drawn from the same labor pool, and
2. in the case of other employees, shall be paid at rates of pay substantially equivalent to the rates of pay paid to other employees at that installation with similar training, seniority, and experience.”

To assess consistency with the requirements of the MCCA and to assess the level of competitiveness off the installation, we examine the pay and benefits of both military and civilian jobs that draw employees from the same labor pool as CDC caregiving staff. Levels of training, experience, education, and responsibility are considered, and both hourly wage and annual income are used to compare compensation.

The first section of this report reviews recent studies addressing the issues surrounding staff turnover in the child care profession. Because high turnover rates are a problem, the child care industry has produced several seminal reports, studies, and workbooks on the topic. Information gleaned from these reports is applied to understanding the complexities of turnover in military CDCs. The second section of this report is a comparative analysis of compensation. Data from various sources are used to compare CDC caregiver positions with both military and civilian jobs—termed benchmark jobs. For military comparisons, we use descriptions of jobs frequently advertised by Department of Defense Education Activity (DoDEA) schools. For civilian comparisons, we use national data sets to compare *descriptively* the content, wages, and qualifications of CDC caregiving positions with selected civilian benchmark jobs. We address five questions regarding child care compensation packages:

¹ Refer to Appendix A for clarification of acronyms.

² In our usage, the term “caregiver” embraces a continuum of services ranging from those designed to provide care while parents are at work to those designed to provide an educational experience for young children. As is common in the early care and education field, the terms caregiver, teacher, and provider are used interchangeably throughout this report to include elements of care and education.

³ Note that since the MCCA’s inception, employees who are directly involved in providing child care can also be paid from General Schedule (GS) funds.

1. How do the wages and qualifications of jobs in military CDCs compare to those of DoDEA and civilian jobs featuring similar content?
2. How do the wages and content of jobs in military CDCs compare to those of DoDEA and civilian jobs requiring similar qualifications?
3. How do the content, qualifications, and wages of jobs in military CDCs compare to those of civilian jobs compatible with the military lifestyle?
4. How do the content and qualification of jobs in military CDCs compare to those of DoDEA and civilian jobs with similar wages?
5. How do the benefits of jobs in military CDCs compare to those of civilian jobs featuring similar content, qualifications, and/or wages?

The last section of this report presents a summary of the findings and specific recommendations for enhancing the compensation packages of CDC caregiving staff based on these findings.

PROGRAM QUALITY AND CHILD DEVELOPMENT

Today, more young children are in child care than at any other time in history. The quality of child care has become a national topic of discussion, as findings from rigorous, longitudinal studies have found their way into the news. These studies ask: Will child care attendance be harmful to children? What benefits do children receive from child care? In summary, the research literature provides support for the link between child care program quality and later child development outcomes.

Enhanced Social and Emotional Development

High quality child care—in both center and family/home-based child care settings—facilitates enhanced social and emotional development in children (e.g., Kontos, Howes, Shinn, & Galinsky, 1997; Vandell & Wolfe, 2000). This is particularly apparent for children who are considered at-risk for social and emotional difficulties. The developmental gains associated with high quality child care are often stable beyond childhood.

Enhanced Cognitive and Language Development

High quality child care facilitates the cognitive and language development of children (e.g., Burchinal, Peisner-Feinberg, Bryant, & Clifford, 2000; National Institutes of Health, National Institute of Child Health & Human Development, Center for Research for Mothers & Children, 2000) even when taking into account other factors such as maternal vocabulary, family income, child gender, and quality of home environment. Furthermore, the benefits of high-quality child care persist over time and are especially notable for children at-risk.

Another View: Quantity of Care

Despite the conclusions from the literature just cited, there remains debate regarding the effects of child care on children's development, especially their socioemotional adjustment. The debate centers around the effect of *quantity* of care – that is early, extensive, and continuous care such as care initiated in the first year of life for more than 20 to 30 hours per week –and its association with child outcomes. Recent data from the NICHD Study of Early Child Care (NICHD Early Child Care Research Network, 2003) suggest that cumulative *quantity* of child care across the infancy, toddler, and preschool years accounts for significant variation in child problem behaviors at 4.5 and 5 years of age. That is, the more time children spent in any of a variety of child care arrangements over the first 4.5 years of life, the more aggressive and defiant behavior and conflict with adults they display at 54 months of age and in kindergarten, as reported by mothers, caregivers, and teachers. Although these effects were small, they persisted even when quality, type, and instability of child care, maternal sensitivity, and other family background factors were taken into account. Despite a number of important caveats to this finding, this research may have broad-scale implications for policy.

THE ROLE OF STAFF TURNOVER IN PROGRAM QUALITY: LINKS TO CHILD DEVELOPMENT

Attachment theory provides a useful framework for understanding how child care quality impacts child development. As applied to the teacher-child relationship, attachment theory assumes that if a child feels emotionally secure with his or her teacher, the child can use the teacher as a secure base and a resource for exploring the learning opportunities of the classroom (Birch & Ladd, 1997; Pianta, 1998, cited in Howes, 2000). However, attachment can only occur with caregivers with whom the child has interacted frequently for some time. This can be a challenge because caregivers in some child care settings often shift from one group of children to another, or they leave the field of child care entirely. Children in centers that regularly lose and change staff have a harder time attaching to new teachers and establishing secure teacher-child relationships. High staff turnover has a negative impact on children's development: in centers with high turnover rates, children are less competent in language development and social skills and less attached to their teachers (Whitebook, Howes & Phillips, 1990).

Stability of care is an important predictor of children's development. A considerable body of research has linked teacher stability, and in particular, the quality of the teacher-child relationship to children's social (e.g., Howes & Hamilton, 1992-2000; Howes, Hamilton, & Phillipsen, 1998) and cognitive competence (Peisner-Feinberg et al, 2001). However, in order to understand the effects of provision of continuity of care on children's social-emotional functioning, it is necessary to consider under what conditions and within what contexts that it does so (Cryer, 2002).

FACTORS CONTRIBUTING TO TURNOVER

Wages

A number of influential studies⁴ on child care staffing find that centers that offer higher wages provide higher-quality care. Most important is the fact that higher wages help attract and retain a competent child care workforce (e.g., Appelbaum, 2001; Whitebook, Sakai, Gerber & Howes, 2001). Although low wages remain the most important factor influencing intent to leave (Phillips, Howes, & Whitebook, 1991; Stremmel, 1991), the direct associations between wages and turnover have been rather weak. Some research suggests that the relationship between wages and turnover depends on other factors.

Level of Education and Training

Teachers with higher salaries and benefits also have stronger qualifications and more formal education and specialized training than do teachers with low salaries (Barnett, 2003). Teachers who contribute the most to rapid turnover are those who have little or no college-level experience or specialized early childhood training.

Job Commitment and Satisfaction with Pay

The relationship between job satisfaction and turnover is complex. Some research suggests that satisfaction with particular aspects of child care work, (e.g. contact with children) enhances commitment (Jorde-Bloom, 1988; Stremmel, 1991) but findings are mixed (Phillips et al., 1991). Satisfaction with the intrinsic nature of child care work (e.g., co-worker relations, opportunities for autonomy and challenge, and working conditions) but dissatisfaction with extrinsic aspects (e.g., compensation) is common (Jorde-Bloom, 1988; Phillips et al., 1991; Stremmel, 1991). This suggests that a major reason for high turnover rates is that staff simply cannot afford to remain in the field despite a strong commitment to and enjoyment of their work.

Stress and Burnout

Feeling tired and stressed are common complaints voiced by child care providers. As the day proceeds and the stress levels increase, teachers are less likely to have high-quality interactions with colleagues and/or children. Occupational stress and the “burnout” that follows also influence a caregiver’s commitment to remain in the classroom and the child care/teaching profession (Wisniewski, & Gargiulo, 1997). There are many sources of stress in the caregiving environment (e.g., organizational structure, interactions with colleagues and children) but good communication (e.g., regular staff meetings) can increase job satisfaction and reduce job stress (Stremmel, Benson, & Powell, 1993).

⁴ The National Child Care Staffing Study (Whitebook et al., 1990); The National Child Care Staffing Study 1988-1997 (Whitebook et al., 1998); Study of Accreditation in Child Care Centers (Whitebook, Sakai, & Howes, 1997); Then and Now: Changes in Child Care Staffing, 1994-2000 (Whitebook, Sakai, Gerber, & Howes, 2001).

PUTTING IT ALL TOGETHER: THE TURNOVER PROCESS

The most definitive study of turnover among child care staff to date captures the turnover process in high-quality child care centers. *Then & Now: Changes in Child Care Staffing, 1994-2000* (Whitebook et al., 2001) followed 75 child care centers in three California communities for 6 years. Findings from this study suggest that once started, turnover in child care centers is difficult to control. In this sense turnover appears to operate in a circular manner where:

- low wages lead to turnover in qualified employees,
- turnover of colleagues leads to job stress for remaining employees,
- job stress leads to lower job satisfaction,
- the hiring of lower-qualified employees further decreases job satisfaction,
- low job satisfaction leads to turnover in remaining qualified employees.
- turnover leads to lower program quality

In the section that follows, we compare CDC caregiving positions to military and civilian jobs that are similar in terms of content, qualifications, lifestyle, wages, and benefits. Prior to examining the compensation packages offered by CDCs, however, it is helpful to understand the source of funding for military CDCs and the staffing structure they maintain.

FUNDING AND PAY STRUCTURES FOR POSITIONS IN MILITARY CDCS

Funding for Military Child Care

Military CDCs are one of four main components of a comprehensive DoD Child Development System (CDS). Funding for each component comes from two sources: (a) appropriated funds (APFs) authorized by the Congress of the United States; and (b) non-appropriated funds (NAFs) generated from child care fees paid by users of child care services provided at military CDCs that are based on total family income (TFI).

According to the Military Family Act, Public Law 104-106 (Feb 10, 1996), “it is the policy of Congress that the amount of APFs available during a fiscal year for operating expenses for military CDCs shall be not less than the amount of child care fee receipts that are estimated to be received by DoD during that fiscal year.” APFs account for approximately 60% of total center program costs and cover such items as civilian pay and benefits, travel, training, supplies, equipment, and contracts. NAFs account for almost 40% of total program costs while covering compensation and benefits of child care employees who are directly involved in providing child care and food-related expenses not paid by USDA or DoD, APFs and consumable supplies. Child care employees who work in military CDCs are civilian employees of the DoD, regardless of whether they are paid from APFs or NAFs.

General Schedule (GS) Employees

The GS system is a classification and pay system covering most white-collar civilian Federal employees in professional, administrative, technical, clerical, and protective occupations. The laws governing APF GS employees are administered by the U.S. Office of Personnel Management (OPM), which deals with all aspects of civilian personnel management in the Federal sector. OPM develops standards by which GS jobs are classified and administers retirement, health, and life insurance programs, and adjudicates position classification appeals. Positions in the GS are defined by *occupational group*, a group of related occupations; *series*, subdivisions of occupational groups based on similarity of work and qualifications; and *grade*, a numerical designation, GS-1 through GS-15, that identifies the range of levels of difficulty, responsibility and qualification requirements. Each GS grade has 10 steps. Within-grade increases (WGIs) or step increases are periodic increases in a GS employee's rate of basic pay from one step of the grade of the position to the next higher step of that grade.

At this time, there is not a specific caregiving position in the GS system. Instead, GS caregivers fall into the generic 1702 - Education and Training Technician Series. As described in the *Handbook of Occupational Groups and Families* these are nonprofessional, technical support positions that require a practical understanding or specialized skills and knowledge of the activity as opposed to full professional knowledge of concepts, principles, and practices. To compensate for the lack of precision in defining caregiver positions, the Services have created their own job descriptions and standards following the guidelines of the GS-1702 series. All GS employees are eligible to receive benefit packages except for temporary employees whose appointments are limited to one year or less or who are expected to work less than six months in each year, and intermittent/non full-time employees without a regularly scheduled tour of duty.

NAF Employees

As Federal employees within the DoD, all NAF personnel actions (e.g. recruitment, selection, placement, promotion) must comply with applicable employment laws and regulations. Employment policies, position classification, pay, and allowances for NAF personnel can be found in the *DoD Civilian Personnel Manual*.⁵

The DoD NAF payband system is the biggest single difference between APF and NAF rules governing employee classification and pay. Pay banding involves the establishment of several broad salary ranges. Pay Systems for DoD NAF child care employees are covered under a separate Child Care (CC) Payband System implemented in consonance with Chapter 88 of 10 U.S.C. "Military Family Programs and Military Child Care" and DoD Instruction 6060.2 "Child Development Programs." Unlike GS caregiving positions, all NAF positions have a standard description and set of requirements common to all Services. The CC Payband system covers NAF Child Development Program Assistants, Leaders, and Technicians. There are two pay bands or grade levels, CC-I and CC-II. The range in pay for CC-I child caregiving positions is equal to the hourly rate of pay for a GS-2, Step 1, through GS-3, Step 10, whereas the range in pay for CC-II child caregiving positions is equal to the hourly rate of pay for a GS-4, Step 1, through GS-5, Step 10. Pay rates prescribed for GS child caregiving positions also apply.

⁵ Office of the Under Secretary of Defense for Personnel and Readiness; DoD 1400.25-M, 1996

All Regular Full-Time (RFT) and Regular Part-time (RPT) caregivers are eligible to participate in NAF health, retirement, insurance, and other benefit programs and receive the same training package standard to GS employees. Flexible employees serve in either continuing or temporary positions and are usually hired on an “as-needed” basis. Flex caregivers are not eligible to receive benefits, and, although they are required to receive the same training as regular caregiving staff, it may take them longer to complete the required orientation and training modules due to their working fewer hours.

Currently, about one third of all CDC caregivers are classified as GS employees and about two-thirds are classified as NAF employees. About 60% of all caregivers receive benefits; this includes all GS employees and regular NAF employees. Thus, about 40% of all CDC caregiving staffs—paid with NAFs—do not receive benefits. These NAF employees are most likely flex workers.⁶

DoD NAF Employee Wage Plan

Pay increases and promotions are tied to completion of training, which is a condition of employment. Each CDC is responsible for implementing a training program for all caregiving personnel. These training programs are directly linked to wages and promotion. They include, orientation, initial training (36 hours to be completed with 6 months of beginning work), and ongoing annual training consisting of various employee training modules. These modules are based on the Child Development Associate (CDA) Credential competencies in 13 functional areas.

CAREER COMPARISONS: MILITARY CHILD CARE VERSUS MILITARY BENCHMARK JOBS

As all DoD employees are paid according to the GS level their job occupies—including NAF employees—our comparison between DoD jobs focuses on job content and employee qualifications. The information presented in this section will enable you to answer such questions as, “Do CDC caregivers classified as GS-3 employees have jobs requiring similar training, knowledge, and tasks as other DoD GS-3 positions?”

Selection of Military Benchmark Jobs

The DoD jobs most comparable to CDC caregiving positions are those occupied by employees of the Department of Defense Dependents Schools (DoDDS). DoDDS’ employees are responsible for caregiving, monitoring, teaching, and/or maintaining the welfare of children. In all, we selected the following DoDDS benchmark jobs:

- monitor
- health aide
- lead monitor
- health technician

⁶ Reference annual report OCY referred to in personal communication dated May 10, 2002.

- education aide
- education technician
- pre-kindergarten and kindergarten teachers
- library technician
- school support assistant (a)

Assignment of Global Work Levels

In addition to comparing the content and qualifications of both CDC and DoDDS positions, we compare the overall occupational level—or “global work level.” Created by the Department of Labor (DoL) and the Bureau of Labor Statistics (BLS), global work levels measure the occupational status of a job. When an occupation is leveled, it is slotted into one of 15 work levels based on an analysis of nine factors. These nine factors form the underlying structure for evaluation of GS Federal employees. BLS researchers have determined that several of these factors, most notably knowledge and supervision received, have strong explanatory power for wages.

1. Knowledge
2. Supervision received
3. Guidelines
4. Complexity
5. Scope and effect
6. Personal contacts
7. Purpose of contacts
8. Physical demands
9. Work environment

We rated each CDC⁷ caregiver and DoDDS⁸ position on the nine job factor criteria, based on descriptions of responsibilities and requirements. These ratings were entered into a program on the BLS web site⁹ that calculated the overall work level for each position. The nine job factors are differently weighted, and the final score—or global work level—reflects the occupational status of the position.

GS-2 Level Results

The Child Development Program Assistant, Entry-Level position is compared with the DoDDS position of Monitor

Although the tasks are simple and routine for both positions at the GS-2 level, it would appear that the Monitor position requires some specialized knowledge or skill whereas as no previous experience is required for the CDC caregiver position. Supervision of GS-2 caregivers is highly emphasized in their job description, whereas it is less apparent in the description for Monitor. Finally, Monitors⁹ are required to function at slightly higher levels in the area of communications than are CDC caregivers.

⁷ Ratings were assigned by Barbara Thompson, Senior Program Analyst, DoD Office of Child and Youth.

⁸ Ratings were assigned by the authors, with the help of DoDEA personnel.

⁹ Refer to the public data query for the National Compensation Survey at:
<http://146.142.4.24/labjava/outside.jsp?survey=nc>

GS-3 Level Results

The Child Development Program Assistant, Intermediate-Level position is compared with the DoDEA positions of Lead Monitor and Health Aide

At the GS-3 level, CDC caregivers and Lead Monitors would appear to function at similar levels of overall responsibility but with different job tasks. Health Aides are rated higher than caregivers at the GS-3 level mostly because of more responsibility for degree of knowledge required and fewer guidelines received.

GS-4 Level Results

The Child Development Program Assistant, Target-Level position is compared with the DoDEA positions of Health Technician, Education Aide, and Library Technician

At the GS-4 level, results vary along with the technical nature of the benchmark jobs. Three of the four GS-4 Level positions are rated at global work level 5; the Health Technician is rated at global work level 4. This seems appropriate given that the CDC position is rated higher than the Health Technician in complexity, scope and effect, and physical demands. The duties and requirements of an Educational Aide are the most similar to those of caregivers in a CDC. And, while Library Technicians require more experience *or* more education than CDC caregivers do, they are not required to possess both.

GS-5 Level Results

The Child Development Program Assistant, Leader-Level position and the Child Development Program Technician position are both compared with the DoDEA positions of Education Technician and School Support Assistant (A)

The two CDC positions in this category form part of a child care career ladder. Although both of the CDC positions are classified within the same GS-5 grade level, the caregiver technician position rates higher in overall occupational level compared with the leader-level caregiving position. In general, the job descriptions of the CDC positions describe more leadership-oriented tasks than those of the comparison positions. On the other hand, the DoDDS comparison jobs appear to require specialized technical knowledge.

The leader-level caregiver position rates lower in global work level than the DoDDS Education Technician benchmark position, whereas the higher-rated caregiver technician position rates the same as the Education Technician and higher than the School Support Assistant (A). The job expectations of CDC Leader Level position and the DoDDS School Support Assistant (A) position appear to be comparable in their overall level of responsibility and level of technical expertise required. However, the Child Development Program Technician position would appear to have more supervisory responsibilities, more autonomy, and greater responsibility for the design, implementation, and day-to-day functioning of an overall program than the DoDDS

Education Technician position. Therefore, the fact that both positions are rated as an “8” would appear to be inconsistent.

The Child Development Program Technician position is compared with the DoDEA positions of Teacher (Pre-kindergarten) and Teacher (Substitute).

Both the CDC caregiver position and the pre-kindergarten position fall under the GS Education Group occupational series. However, the qualification standards for the caregiving position are covered under Clerical and Administrative Support Positions whereas those for the pre-kindergarten position are covered under Professional and Scientific Positions. Thus, in terms of basic minimum or entry-level educational requirements for all grades, the pre-kindergarten position requires the successful completion of a Bachelor’s degree from an accredited college or university with a major in the appropriate field (e.g., ECE) compared to the CDC position which requires an Associates of Arts degree in ECE (i.e., 2 years above high school). In addition to education, the pre-kindergarten position received higher global ratings in complexity. Compensation for the pre-kindergarten position is based on experience/degree and is in accordance with the DDESS Teacher Salary Schedule. For example, typical advertised annual salaries for teacher positions with a bachelor’s degree start at \$31,059 and can range up to \$60,818. Compare this to the entry level (GS-5, step 1) and maximum earning potential (GS-5, step 10) for the CDC program technician position, which is \$10.89/hour or \$22,651/year and \$14.16/hour or \$29,453/year (2002 rates) respectively. The Overall Global occupational level rating for the DoDDS pre-kindergarten teacher position is rated as a 9 (the published national rating ranges from 5 to 9) compared to the CDC program technician position, rated as an 8.

Although the substitute position does not differ from the teacher position in series and grade (i.e. the minimum qualifications required are a bachelor’s degree in education and certification), it does differ in terms of compensation. Substitute teachers are paid on an hourly basis and are considered as part-time, temporary positions. Although they are entitled to overtime, they are not eligible for the benefit package that regular employees enjoy. Because of the temporary nature of the position, the substitute teacher is rated considerably lower than the caregiving position for scope and effect, and supervision received. The Overall Global occupational level rating reflects these lower work level ratings and currently, the DoDDS substitute teacher position is rated as a 7, which is less than the 8, accorded to CDC caregivers.

In sum, comparisons between the DoDDS pre-kindergarten position and the highest level child care position in a military CDC give the edge to the pre-kindergarten position. The higher professional knowledge requirements, more complex decision-making and greater independence of the pre-kindergarten position supports its higher occupational status and attests to the different roles and patterns of responsibility in the two working environments. Equally justified is the lower occupational rating given to the DoDDS substitute teacher position compared to the CDC caregiver technician position given its very narrow operating responsibilities and limited scope.

CAREER COMPARISONS: MILITARY CHILD CARE VERSUS CIVILIAN BENCHMARK JOBS

Sustaining the competitiveness of child care compensation packages clearly emerges as a priority for CDCs. Using benchmark jobs for comparison allows decision-makers to perform side-by-side evaluations of child care positions and other jobs competing for employees within the same labor pool. These comparisons can guide the DoD in designing competitive compensation packages, resulting in the recruitment and retention of high-quality caregivers. CDC caregiving positions were compared to civilian benchmark jobs that are similar in terms of content, qualifications, military lifestyle, wages, and benefits.

Civilian Data Sources

The 2002 General Schedule Salary Table identified wages for CDC caregiver positions. For civilian estimates, the following data sources were used:

- *Current Population Survey (CPS)*: Data from the 1999, 2000, and 2001 March Supplements of the CPS were converted to 2002 dollars using inflation factors of 1.0792, 1.0441, and 1.0152 respectively;
- *National Compensation Survey (NCS)*: Tables 2-4 from the year 2000 National Bulletin were used to obtain data on wages (converted to 2002 dollars) by global work level;
- *National Study of the Changing Workforce (NSCW)*: 1997 wages (converted to 2002 dollars) were used to obtain data on employment status and benefits.

Methodology

To compare compensation, average hourly wage, average weekly work hours, calculated annual income, calculated full-time annual income, average education level, frequencies of full-time employees (versus part-time), and general benefits (health, pension plan) are reported (see Tables 1-4). In addition to comparing civilian child care with civilian benchmark jobs, we include military child care. To do this, an average hourly wage for all five CDC positions was constructed. Using the 2002 General Schedule, hourly wages were averaged using the minimum and the maximum rates of entry, intermediate, target, and leader/program technician levels. The average hourly wage for CDC caregivers, calculated in this manner, is \$10.67/hour.¹⁰ We used the average number of weekly-work hours for civilian child care workers (22.1 hours) and this average hourly wage of \$10.67 to estimate an annual income of \$12,262 for CDC caregivers. We also estimated a full-time annual income of \$22,194 based on a 40-hour work-week.

¹⁰ This figure represents an unweighted rate – that is, it does not attempt to adjust for size of population in each of the five CDC positions. An additional set of analyses used weighted rates for CDC GS employees based on the number of caregivers at each GS level. Since the effect of weighting resulted in no change to the majority of our analyses, only the unweighted results are reported. For more detail on these analyses, please contact the authors.

Content Benchmark Results

Jobs with similar content were identified based upon the nature of the work as described in the *Occupational Outlook Handbook*.¹¹ Additionally, jobs were selected that required behavior similar to that of child care work. The results of these comparisons follow:

Civilian Child Care

As can be seen in Table 1, hourly wages for child care workers and jobs featuring similar content appear to increase as education levels increase.

- Civilian child care workers rank 5th in education, but 7th in wages among these 10 benchmark jobs.
- Child care workers routinely work the fewest number of hours per week; less than half (41.9%) of all civilian child care workers have full-time positions.

Fewer work hours lead to a comparatively low annual income for civilian child care workers.

- Civilian child care workers earn just under \$10,000/year based on their average 22.1 weekly work hours, making them second to lowest paid group of workers among jobs similar in content.
- If child care workers did work full-time (40 hours/week) on average, their annual income would nearly double to \$17,824.

Military Child Care

- CDC caregivers earn *higher* hourly wages than do workers in all civilian jobs featuring similar content and requiring similar or lower education levels; they earn *lower* hourly wages compared to civilian jobs featuring similar content and requiring higher education levels.
- Only private household child care workers and early childhood teachers' assistants earn below the minimum GS step of CDC caregivers (\$7.95/hour); elementary school teachers and social workers occupy the only benchmarked jobs that pay above the maximum GS step of CDC caregivers (\$14.16/hour).

Jobs with similar content

- Child care workers
- Household child care workers (i.e., family day care, babysitters, nannies)
- Early childhood teachers' assistants
- Teachers' aides
- Pre-kindergarten and kindergarten teachers
- Elementary school teachers
- Nursing aides
- Health aides
- Animal caretakers
- Social workers

Although full-time CDC caregivers' average hourly wages are higher than those of most jobs featuring similar content, as with civilian caregivers, low work hours leads to a low annual income for CDC caregivers.

¹¹ U.S. Department of Labor, Bureau of Labor Statistics, 2003-03 edition. See <http://www.bls.gov/oco/>

- Part-time CDC caregivers earn \$12,262/year on average.
- The average CDC caregiver earns roughly the same hourly wage as a teachers' aide, yet earns \$4,375 less per year.
- Only civilian child care workers (both center and private household) and early childhood teachers' assistants earn lower annual incomes than CDC caregivers.

Table 1
Child Care Work and Benchmark Occupations Based on Job Content

Occupation	N	Hourly wage	Actual annual income	Full-time annual income	Education level	Weekly work hours	Employment		Using health plan through employer	Offered pension plan by employer
		M	M	M	M	M	% FT	% Hourly	% Yes	% Yes
2002 GS: Average for CDC caregivers.....		10.67	12,262*	22,194						
Civilian child care workers, n.e.c.....	84	8.57	9,734	17,824	39.5	22.1	41.9	74.8	25.9	56.5
Civilian child care workers, private household..	90	6.91	9,266	14,374	38.2	23.5	39.7	67.4	11.2	3.4
Early childhood teachers' assistants.....	158	7.28	10,632	15,138	39.1	27.9	48.9	84.2	18.0	30.2
Teachers' aides.....	217	10.02	16,637	20,833	40.2	31.8	54.3	74.3	44.4	74.9
Pre-kindergarten and kindergarten teachers.....	150	13.78	26,899	28,664	41.4	36.9	81.9	52.3	54.3	50.6
Elementary school teachers..	549	18.67	39,147	38,843	43.2	40.1	88.8	13.6	71.4	85.5
Nursing aides, orderlies, and attendants.....	562	9.15	16,819	19,039	39.1	35.1	72.6	88.7	43.1	47.4
Health aides, except for nursing.....	109	9.31	16,495	19,356	39.2	33.5	66.9	86.5	49.9	59.1
Animal caretakers.....	30	8.35	14,834	17,378	39.2	32.4	63.1	86.8	30.5	29.9
Social workers.....	224	15.50	31,724	32,238	42.3	39.2	92.6	39.3	74.4	74.3

*Estimated using the average work hours of civilian child care workers

N = Number of workers in sample. M = Mean. n.e.c. = "Not elsewhere classified." FT = Full-time employed.

Civilian hourly wages are based on 2000 data, converted to 2002 dollars.

Education levels are coded as follows:

- | | | |
|-----------------------------|--|--|
| 35 = 9 th grade | 38 = 12 th grade no diploma | 41 = Associated degree—Occupation/Vocation |
| 36 = 10 th grade | 39 = High school diploma | 42 = Associated degree—Academic program |
| 37 = 11 th grade | 40 = college but no degree | 43 = Bachelor's degree |

Education Benchmark Results

Level of education was used as an index of qualification. Table 2 contains information on military and civilian child care and civilian jobs requiring similar education levels.

Civilian Child Care

- When education level remains constant, civilian child care workers’ hourly wages are at the lower-end of the wage spectrum.
- According to the data, civilian child care workers earn hourly wages similar to those of animal caretakers, health aides, and nursing aides. Electricians and correctional institution officers earn the highest wages for their level of education.
- Civilian child care workers earn the lowest *annual* income of employees in all benchmark jobs requiring similar education levels.
- Based on the average number of hours that civilian child care providers work, which is approximately 22.1 hours per week, they earn between \$898 and \$5,100 less per year than early childhood teachers’ assistants and animal caretakers.
 - This is significant because early childhood teachers’ assistants and animal caretakers earn the lowest *hourly* wages of these benchmark jobs—\$1.29 and \$0.22 less per hour, respectively—than civilian child care workers.

Jobs with similar Qualifications
• Early childhood teachers’ assistants
• Nursing aides
• Health aides
• Animal caretakers
• Correctional institution officers
• Bank tellers
• Data-entry keyers
• File clerks
• Receptionists
• Electricians
• Hair dressers and Cosmetologists

Military Child Care

CDC average *hourly* wages are higher than those for most civilian benchmark jobs featuring similar educational requirements.

- Average CDC caregiver wages are most similar to hairdressers and cosmetologists. Only correctional institution officers, electricians, and data-entry keyers earn more than the average military child care provider does.
- When *annual* income is considered, part-time CDC caregiver wages substantially drop in competitiveness:
 - Only civilian child care workers (both center and private household) earn lower annual incomes than CDC caregivers based on their part-time work schedule.

Table 2
Child Care Work and Benchmark Occupations Based on Education Level

Occupation	—	Hourly Wage	Actual annual income	Full-time annual income	Education Level	Weekly Work Hours	Employment		Using health plan through employer	Offered pension plan by employer
	N	M	M	M	M	M	% FT	% Hourly	% Yes	% Yes
2002 GS:										
Average for CDC caregivers.....		10.67	12,262*	22,194						
Civilian child care workers, n.e.c....	84	8.57	9,734	17,824	39.5	22.1	41.9	74.8	25.9	56.5
Early childhood teachers' assistants	158	7.28	10,632	15,138	39.1	27.9	48.9	84.2	18.0	30.2
Nursing aides, orderlies, and attendants	562	9.15	16,819	19,039	39.1	35.1	72.6	88.7	43.1	47.4
Health aides, except for nursing.....	109	9.31	16,495	19,356	39.2	33.5	66.9	86.5	49.9	59.1
Animal caretakers	30	8.35	14,834	17,378	39.2	32.4	63.1	86.8	30.5	29.9
Correctional institution officers	87	13.96	29,389	29,044	39.8	40.6	96.5	53.7	83.3	84.0
Bank tellers	122	9.69	16,767	20,155	39.8	32.6	60.7	75.3	54.1	69.7
Data-entry keyers.....	216	11.51	22,398	23,940	39.9	36.4	82.4	82.6	52.0	62.3
File clerks.....	133	9.68	15,476	20,143	39.5	29.0	57.1	83.4	38.2	55.0
Receptionists.....	321	9.60	16,530	19,966	39.6	31.9	62.1	84.2	43.5	53.8
Electricians	207	17.69	37,696	36,788	39.6	41.1	98.2	86.6	73.5	71.0
Hair dressers, cosmetologists.....	141	10.49	19,154	21,815	39.4	34.7	64.1	37.5	26.9	20.1

* Estimated using the average work hours of civilian child care workers

N = Number of workers in sample. M = Mean. n.e.c. = "Not elsewhere classified." FT = Full-time employed.

Civilian hourly wages are based on 2000 data, converted to 2002 dollars.

Education levels are coded as follows:

38 = 12th grade no diploma 40 = Some college but no degree

39 = High school diploma 41 = Associated degree—Occupation/Vocation

Military Lifestyle Benchmark Results

Military lifestyle benchmark jobs were identified as competitors of military child care work by CDPMs. Table 3 contains information on military and civilian child care workers and civilian jobs similar in military lifestyle.

Civilian Child Care

Of the civilian jobs deemed most available to military spouses, child care work offers competitive hourly wages, but falls below the average wages paid to dental hygienists and secretaries.

- Civilian child care work ranks 3rd of 7 in hourly wages of jobs convenient to military spouses
- Educational attainment of child care workers, while on a par with secretaries, falls slightly below that of dental technicians, who generally have some college.
- Civilian child care workers have earned a high school diploma, on average, whereas employees in these other occupations have not.
- Civilian child care work offers the second to the lowest *annual* income of jobs deemed most available to military spouses.
- When average work hours are considered, cooks, food service supervisors, and cashiers earn higher annual incomes than civilian child care workers do—from \$1,583 to \$4,773 more per year.

Jobs similar in military lifestyle

- Cashiers
- Food counter and related occupations
- Cooks
- Supervisors of food preparation and service occupations
- Secretarial-administrative occupations
- Dental hygienists

Military Child Care

Except for dental hygienists and secretaries, CDC caregivers earn *hourly* wages higher than all benchmark civilian jobs identified as being widely available to military spouses, including civilian child care.

- When *annual* income is considered, CDC caregiver wages lose their competitive edge with jobs widely available to the military spouses.
- CDC caregivers earn roughly the same annual income as cashiers and food service supervisors.
- Military CDC caregivers earn almost \$3 more per hour than the average cook, yet work 12 hours less per week, resulting in \$2,245 less per year

Table 3
Child Care Work and Benchmark Occupations Based on Military Lifestyle

Occupation		Hourly wage	Actual annual income	Full-time annual income	Educa- tion level	Weekly work hours	Employment		Using health plan through employer	Offered pension plan by employer
	N	M	M	M	M	M	% FT	% Hourly	% Yes	% Yes
2002 GS:										
Average for CDC caregivers		10.67	12,262*	22,194						
Civilian child care workers, n.e.c. ...	84	8.57	9,734	17,824	39.5	22.1	41.9	74.8	25.9	56.5
Cashiers	843	7.52	11,317	15,647	38.4	27.9	44.1	94.3	22.0	36.2
Food counter, fountain, and related occupations	119	6.29	7,390	13,083	37.4	21.9	23.7	98.0	6.7	29.3
Cooks.....	602	7.94	14,507	16,518	38.1	34.1	69.2	86.7	26.0	28.5
Supervisors, food preparation and service occupations.....	122	7.83	12,942	16,281	38.5	29.7	58.2	89.3	22.9	36.1
Dental Hygienists.....	29	26.75	41,852	55,645	41.9	30.0	42.3	83.8	42.1	62.0
Secretaries.....	678	11.44	21,921	23,795	39.9	36.1	82.1	62.4	57.4	62.6

*Estimated using the average work hours of civilian child care workers. CDC caregiver hourly wage ranged from \$7.95 (minimum @GS-2) to \$14.16 (maximum @ GS -5).

N = Number of workers in sample. M = Mean. n.e.c. = “Not elsewhere classified.” FT = Full-time employed.

Civilian hourly wages are based on 2000 data, converted to 2002 dollars.

Education levels are coded as follows:

37 = 11th grade

38 = 12th grade no diploma

39 = High school diploma

40 = Some college but no degree

Wage Benchmark Results

Table 4 contains information on civilian child care and civilian jobs similar in hourly wage.

Civilian Child Care

Civilian child care workers are the most educated employees in benchmark jobs offering similar pay.

- The average civilian child care worker has a high school diploma.
- On average, cooks, food service supervisors, and sewing machine operators have not earned their high school diploma.

Because child care workers are employed for the fewest number of hours among employees who earn similar hourly wages, child care workers come away with the lowest *annual* income.

- Although civilian child care workers earn roughly the same amount *per hour* as animal caretakers, cooks, food service supervisors, and amusement park attendants, they earn from \$2,264 to \$5,100 *less per year* than employees in these occupations.
 - The average sewing machine operator earns \$8,525 more per year than does the average child care worker.

Military Child Care

CDC caregivers earn higher *hourly* wages than do workers in civilian child care and all benchmark occupations with similar wages.

With low weekly work hours, competitive hourly wages do not translate into competitive *annual* wages

- CDC caregivers earn nearly \$2 more per hour than nursing aides, health aides, animal caretakers, and sewing machine operators, however, they earn between \$2,245 and \$5,997 less per year

Jobs similar in Mean Hourly Wages

- Nursing aides
- Health aides
- Animal caretakers
- Cooks
- Supervisors of food preparation and service occupations
- Attendants of amusement and recreation facilities
- Textile sewing machine operators

Table 4
Child Care Work and Benchmark Occupations Based on Hourly Wage

Occupation		Hourly wage	Actual annual income	Full-time annual income	Educa-tion level	Weekly work hours	Employment		Using health plan through employer	Offered pension plan by employer
	N	M	M	M	M	M	% FT	% Hourly	% Yes	% Yes
2002 GS:										
Average for CDC caregivers.....		10.67	12,262*	22,194						
Civilian child care workers, n.e.c....	84	8.57	9,734	17,824	39.5	22.1	41.9	74.8	25.9	56.5
Nursing aides, orderlies, and attendants.....	562	9.15	16,819	19,039	39.1	35.1	72.6	88.7	43.1	47.4
Health aides, except for nursing.....	109	9.31	16,495	19,356	39.2	33.5	66.9	86.5	49.9	59.1
Animal caretakers	30	8.35	14,834	17,378	39.2	32.4	63.1	86.8	30.5	29.9
Cooks	602	7.94	14,507	16,518	38.1	34.1	69.2	86.7	26.0	28.5
Supervisors, food preparation and service occupations	122	7.83	12,942	16,281	38.5	29.7	58.2	89.3	22.9	36.1
Attendants, amusement and recreation facilities.....	68	8.08	11,998	16,804	39.0	26.8	57.8	90.8	29.8	47.4
Textile sewing machine operators .	97	8.98	18,259	18,679	38.1	38.6	89.1	83.3	56.2	54.0

* Estimated using the average work hours of civilian child care workers

N = Number of workers in sample. M = Mean. n.e.c. = “Not elsewhere classified.” FT = Full-time employed.

Civilian hourly wages are based on 2000 data, converted to 2002 dollars.

Education levels are coded as follows:

37 = 11th grade

38 = 12th grade no diploma

39 = High school diploma

40 = Some college but no degree

41 = Associated degree—Occupation/Vocation

CAREER LADDERS: WAGE BENCHMARKS AND GLOBAL WORK LEVELS

Data from the NCS were used to compare the hourly wages of military and civilian child care workers, and those of identified benchmark occupations, based on global work level.¹² For civilian estimates, 2000 data were used to estimate 2002 dollars.¹³ For military wages, the 2002 GS salary table was used. In this data set, unlike the previous data set, child care workers appear to be working more hours; only those workers in entry-level child care positions work part-time or less. On average, beginning with global work level 5, child care providers work full-time, or 35 hours per week or more.

Global Work Level 1 Results

The average civilian child care wage appears to rank in the middle among other entry-level civilian benchmark jobs in global work level 1 (i.e. 7th of 14).

Entry-level hourly wages for CDC caregivers are highly competitive. Entry-level CDC caregivers start as some of the highest paid employees in global work level 1. In fact, the lowest step of the GS-2 wage schedule is higher than almost all benchmark job averages, including that of civilian child care work.

Global Work Level 3 Results

Civilian child care hourly wages appear to fall in rank from global work level 1 to global work level 3 where they rank 13th of 17.

Intermediate-level hourly wages for CDC caregivers remain competitive. Child Development Program Assistants (GS-3) beginning pay levels are slightly above the average civilian child care wage. Only groundskeepers and gardeners earn a higher hourly wage, on average, than the top (step 10) GS-3 caregiver. However, the competitiveness of GS-3 wages wane from those of GS-2 wages.

Global Work Level 5 Results

Compared to the preceding global work level, civilian child care hourly wages increase in rank by a small amount to 13th of 20, but fail to regain the lead held at global work level 1.

Target-level hourly wages for CDC caregivers are no longer competitive. Target-level wages begin at \$2.84 less per hour than the average civilian child care wage, and maximize at the average wage of civilian child care. These GS-4 employees start at the average wage of civilian substitute teachers—the lowest wage average in global work level 5. Wages of CDC caregivers continue to fall in rank as global work level increases.

¹² No levels were reported by the NCS for the occupation of Dental hygienists.

¹³ An inflation factor of 1.0441 was applied to the 2000 data. See <http://data.bls.gov/cgi-bin/cpicalc.pl>.

Global Work Level 7 Results

Civilian child care workers fall in rank to become the lowest paid employees among the benchmark jobs in global work level 7 (i.e., 13th of 13).

Leader-level hourly wages for CDC caregivers are also low in competitiveness. GS-5 wages begin about \$.50/hour below civilian child care work. Even at step 10, GS 5 wages fall more than \$3 below the average of all benchmark jobs. Elementary school teachers, on average, earn \$12 more per hour than the highest GS-5 step; pre-kindergarten/kindergarten teachers earn almost \$5 more per hour than the highest step.

Global Work Level 8 Results

The highest global work level given to civilian child care work is global work level 8. CDC Program Technicians are also rated at global work level 8. With the exception of substitute teachers and social workers, civilian child care workers remain the lowest paid among all benchmark jobs in global work level 8 (i.e., 7th of 9).

Hourly wages for Child Development Program Technicians are the least competitive at this level inasmuch as they are classified at a GS-5 grade level. At global work level 8, even the average civilian child care worker earns over \$4 more per hour than the maximum earning potential of a GS-5 employee. The impact of this decline in competitiveness becomes more pronounced when other occupations are considered. For example, according to these data, military spouses and civilians living near military installations will reach higher earning potentials if they climb the career ladder in food service (on average, \$5 more per hour) or secretarial (on average, \$11 more per hour) positions than if they pursued a career in military child care.

CAREER PERQUISITES:

MILITARY CHILD CARE VERSUS BENCHMARK JOB BENEFITS

Surveys from the NSCW were used to obtain information about benefits offered to employees. Unfortunately, too few data are available for civilian child care workers; however, data are available for six benchmark occupations: teachers' aides, elementary school teachers, nursing aides, receptionists, cashiers, and cooks. Benefit data are also available for full-time CDC caregivers, as they receive GS employee benefits.

Health Care Benefits

All full-time CDC caregivers are offered subsidized health care coverage, compared to as few as 32% to 39% of teachers' aides, cashiers, and cooks. Elementary school teachers have the best health care benefits; nearly half have their entire health care cost covered and the remainder receive partial cost coverage.

Time-Off Benefits

All full-time CDC caregivers receive paid vacation days and holidays, and are allowed days off for a sick child without the loss of pay or vacation. A good majority of teachers' aides, elementary school teachers, nursing aides, and receptionists also receive these time-off benefits. Cashiers and cooks are least likely to receive time-off benefits.

Child Care Benefits

As a DoD employee, all CDC caregivers have access to the military subsidized child care system, regardless of employee status (full-time, part-time, or flexible). However, with slots at 50 hours per week, CDC caregivers working less than full-time may not need and/or be able to afford the weekly rate. Although teachers' aides ranked second behind CDC caregivers, only 26% receive child care benefits.

Pension Plan Benefits and Training Opportunities

All full-time CDC caregivers are offered a pension plan and receive employer contributions toward it. The majority of teachers' aides, elementary school teachers, nursing aides, and receptionists also receive these benefits. Cooks and cashiers are least likely to receive pension plan benefits. As for training, all CDC caregivers receive training opportunities, as do most teachers' aides, elementary school teachers, and nursing aides.

SUMMARY OF FINDINGS

Military Child Care versus Military Benchmark Jobs

How do CDC caregiver jobs compare to other DoD jobs classified at the same GS-level?

- Overall, CDC caregiver positions within GS levels 2 through 4 have knowledge requirements, job duties, and responsibilities equivalent to those of other similar DoD positions.
- When there are differences between CDC caregiver positions and DoDDS positions in GS-level 2 through 4, CDC caregiver positions usually:
 - require more on-the-job training and less education;
 - receive more supervision;
 - require more complex tasks with greater impact on program operations
 - require more public contact and more safety precautions.
- Within the GS-5 pay grade, the leader-level CDC caregiving position rates lower in overall occupational level than the CDC caregiver technician position. Compared to other DoD GS-5 jobs, the CDC leader-level caregiving position:

- is equal in overall occupation level to the DoDDS School Support Assistant A and requires a comparable level of responsibility, autonomy, and technical expertise.
- is lower in overall occupational level than the DoD Education Technician position primarily due to lower professional knowledge requirements. The Education Technician position requires specialized knowledge and technical expertise whereas the leader-level CDC position requires more standardized knowledge.
- The CDC program technician position, classified at a GS-5 pay grade, reflects the highest overall occupational level in the CDC child care career ladder. Compared to other DoD GS-5 jobs, the CDC program technician position:
 - is equal in overall occupational level to the DoD Education Technician despite the fact that the CDC caregiver technician position requires more education and experience than the Education Technician position, has more supervisory responsibilities, is rated higher in complexity and scope and receives less supervision than the Education Technician position.
 - is lower in overall occupational level than the DoDDS Pre-kindergarten Teacher position and requires:
 - less education, less professional knowledge and more on-the job training;
 - slightly less overall independence;
 - more supervisory duties and training;
 - similar tasks and responsibilities.
 - is higher in overall occupational level than the DoDDS Substitute Teacher position and requires:
 - less education and less professional knowledge;
 - more on-the-job training;
 - considerably more responsibility and autonomy;
 - less supervision.

Military Child Care versus Civilian Benchmark Jobs

How do military CDC jobs compare to civilian jobs featuring similar content?

Without considering global work level, CDC caregiver average hourly wages are highly competitive compared to those of all civilian benchmark jobs.

- CDC caregivers earn higher hourly wages than civilian child care workers—about \$2 more per hour on average. However, the CDC average hourly rate of \$10.67 used in these analyses is an unweighted rate – that is, it does not attempt to adjust for size of population in each of the five CDC positions. If the majority of CDC staff are not at the GS-4/5 level, this figure may be unrealistically high.
- CDC caregivers earn higher hourly wages than do workers in all civilian jobs featuring similar content and requiring similar or lower education levels; they earn lower hourly

wages compared to civilian jobs featuring similar content and requiring higher education levels.

- In comparison, hourly wages for civilian child care increase as education levels increase. Civilian child care workers rank 5th in education but 7th in wages among 10 benchmark jobs judged similar in content.

How do military CDC jobs compare to civilian jobs featuring similar qualifications?

- CDC average hourly wages are higher than those for most civilian benchmark jobs featuring similar educational requirements
- In comparison, civilian child care workers earn the lowest annual income of employees in all benchmark jobs requiring similar education levels. Specifically, civilian child care wages rank 10th out of 12 jobs requiring similar educational levels.

How military CDC jobs compare to civilian jobs compatible with the military lifestyle?

- Except for dental hygienists (and to a lesser extent, secretaries) CDC caregivers earn higher hourly wages than workers in all other civilian jobs identified as being widely available to military spouses, including civilian child care--anywhere from \$2 to \$4 more per hour on average.
- Similarly, civilian child care work offers competitive hourly wages, but falls below average wages paid to dental hygienists and secretaries, ranking 3rd of 7 in hourly wages of jobs convenient to military spouses.

How do military CDC jobs compare to civilian jobs featuring similar wages?

- CDC caregivers earn higher hourly wages than do workers in civilian child care and all benchmark occupations with similar wages. Considering the span of wages obtainable by CDC caregivers, military child care workers fare very well compared to workers in these civilian jobs.
- With low weekly work hours, competitive hourly wages do not translate into competitive annual wages for CDC caregivers. The average CDC caregiver earns just over \$12,000 per year working an estimated 22.1 hours per week. With a full-time work week, the average CDC caregiver would earn just over \$22,000 per year. Thus, they earn a little more than half (55.2%) of their full-time earning potential every year.
- Based on average hourly wage and estimated annual work hours, CDC caregivers earn:
 - \$2.32 more per hour but \$2,572 less per year than animal caretakers,
 - \$0.65 more per hour but \$4,375 less per year than teachers' aides,
 - \$1.52 more per hour but \$4557 less per year than nursing aides,
 - \$0.18 more per hour but \$6,892 less per year than hairdressers and cosmetologists,

- \$0.98 more per hour but \$4,505 less per year than bank tellers,
- \$1.69 more per hour but \$5,997 less per year than sewing machine operators,
- and \$2.73 more per hour but \$2,245 less per year than cooks,
- If military CDCs cannot offer caregivers more hours than the typical civilian child care center—and if caregivers desire more work hours—then they lose the advantage afforded to them by their higher hourly wage.
- In comparison, civilian child care workers are the most educated employees in benchmark jobs offering similar wages where they rank 1st out of 8 in education level. However, compared with other employees who are paid similar hourly wages, civilian child care workers are less likely to work full-time and rank 8th of 8 in terms of number of weekly hours worked. As a result, among civilian employees who earn similar hourly wages, civilian child care workers come away with the lowest annual income, earning just under \$10,000 per year working an average of 22.1 hours per week. Working full-time, child care workers would earn \$17,824 annually.

How do the benefits of jobs in military CDC compare to those of civilian jobs featuring similar content, qualifications, and/or wages?

- Full-time CDC caregivers fare well when it comes to health care, time-off, child care, and pension plan benefits.

Military Child Care: Wage Benchmark and Global Work Levels

When global work level is considered, CDC caregiving hourly wages are highly competitive with those of all lower-level civilian benchmark jobs, but rapidly lose ground at higher Global Work Levels.

- Entry-level wages for CDC caregivers are highly competitive. In fact, these caregivers begin as some of the highest paid employees in global work level 1.
- Intermediate-level wages for CDC caregivers remain competitive in global work level 3, though competitiveness falls from that of entry-level CDC positions.
- Target-level wages for CDC caregivers are no longer competitive in global work level 5; target-level wages begin at \$2.84 less per hour than the average civilian child care wage, and maximize at the average wage of civilian child care.
- Leader-level wages for CDC caregivers lack competitiveness in global work level 7; leader-level wages begin at about \$0.50/hour below civilian child care workers and even at step 10 fall more than \$3 below the average of all benchmark jobs.
- Wages for Child Development Program Technicians are the least competitive at global work level 8; even civilian child care workers at global work level 8 earn an average hourly wage of \$4 more than the maximum earning potential of a CDC Program Technician.
- As higher global work level CDC jobs lose competitiveness with civilian benchmark jobs, it is likely that career-oriented employees will seek other jobs that accommodate the military lifestyle.

- Employees will reach higher earning potentials if they climb the career ladder in food service (on average, \$5 more per hour) or secretarial (on average \$11 more per hour) occupations than if they pursue a career in military child care.
- Similar to CDC caregivers, civilian child care hourly wages fall in competitiveness as global work level increases. Specifically, civilian child care wages rank:
 - 7th out of 14 jobs in global work level 1,
 - 13th out of 17 jobs in global work level 3,
 - 13th out of 20 jobs in global work level 5,
 - and 13th out of 13 jobs in global work level 7.

RECOMMENDATIONS

Our recommendations for reducing turnover among qualified child care professionals are broken down into three domains: (1) compensation; (2) quality improvement; and (3) recruitment. It should be noted that compensation recommendations are specific to military CDCs; quality improvement and recruitment recommendations represent more general strategies to improve retention and recruitment of child care providers in center-based programs.

Compensation Recommendations Specific to Military CDCs

Compensation incentives lead to immediate financial gain for child care workers (Whitebook & Eichberg, 2001) and remain the most important vehicle for stabilizing the workforce and reducing turnover. These can be subdivided into *recurring* incentives – those that result in permanent increases to an employee’s rate of pay and/or ongoing increases in benefits such as health coverage; and *non-recurring* incentives – those that are independent of regular pay such as financial rewards. It is important to distinguish between the two types of incentives because even though the latter may be substantial in dollar amount, rewards do not represent an increase in annual operating costs, nor, however, do they represent a dependable, unrestricted source of funds for caregivers.

Our major recommendations address the shortcomings associated with current military compensation systems. Based on our findings, it is apparent that while entry-level wages for CDC caregivers are competitive, CDC caregiving positions beyond the intermediate level (CC-I or GS-03) are no longer competitive in the marketplace. Furthermore, due to the constraints imposed by competing and somewhat incompatible compensation systems, administrators have limited flexibility by choice or mandated at a higher level with which to address these problems.

Create a coherent salary and wage classification system for all caregiving positions, regardless of funding source.

Such a system needs to be seamless and invisible with respect to funding source – that is, funding source in and of itself should not dictate level of pay and qualifications for positions. Rather, caregivers with comparable qualifications and experience should receive the same salary

and benefits whether paid by APF or NAF. The salary and wage system should be based on clear, accurate job descriptions and jobs should be classified according to their level of responsibility, complexity, and amount of training and education required. Care should be taken to accommodate a diverse staffing pattern that includes caregivers with lower as well as more advanced credentials.

Having two salary systems (i.e., GS and NAF) that reward education, training and tenure differently for the same job risks serious division and discontent in the workplace. Furthermore, the greater security and benefits of GS positions reinforce status differentials and tend to make NAF employees feel like second-class citizens. With such inconsistencies in the salary system, it is difficult to create work environments that foster teamwork and build high morale.

A standardized set of caregiver job descriptions and a coherent salary and wage classification system throughout the military child development system (CDS) establishes a method to award salary increases consistently and fairly (Whitebook & Bellm, 1999). As such, it would strengthen the military's ability to:

- More easily accommodate transfers and promotions at each installation as well as within the military CDS as a whole;
- Establish caregiving as a bonafide career track within the total military system (similar to other occupations at large national corporations). This would help attract and retain a (more) highly qualified staff that desires to work within the child care field;
- Reward prior caregiving experience within the military system much as DoDDS rewards tenure within their system for teachers. This means that less time would need to be devoted to training and orientation of new staff and more time would be available for child care.

To be effective, a revised system needs to incorporate the following:

- Allow for a combination of education and experience that would accommodate grade levels in excess of GS-5 even for staff without bachelor degrees.
- Recognize and reward level of education. For example, even though certain positions may not require the completion of a bachelor's degree, do not penalize staff who have earned such degrees and who desire to work directly with children. Build in appropriate flexibility to the system to enable paying such individuals at higher grades or different levels than those who are filling the same position without a degree. (Currently, most caregiving staff who work directly with children are not required to have bachelor's degrees; those who do may not always be paid at a level commensurate with their education. Consequently, CDC employees with bachelor's degrees typically are administrators.)
- Provide a broader range of salary levels than is currently available, particularly at the high end where compression is most evident and costly. For example, it is imperative that DoD be able to differentiate among the various NAF positions that currently are paid at the GS-5 grade level. The current salary compression that exists at the GS-5 level is a direct result of the salary caps imposed by the NAF CC payband system. For example, it is not appropriate that the senior caregiving position (i.e., the CDC program technician)

be compensated at the same grade level as the more junior level target and leader level program assistant positions.

- Provide consistency with respect to eligibility for and payment of benefits for all levels of full- and part-time staff. For example, eliminate the inequities that currently exist where benefits represent an additional 25% of salaries and wages for GS staff but only an additional 22% of salaries and wages for NAF staff (U.S. General Accounting Office, 1999). Such inequities create divisiveness within the caregiving environment (see Zellman & Johansen, 1998).

Although the current practice of using two different (i.e., GS and NAF) classification/pay systems may be feasible in the future, in their current format, neither system by itself is ideal for the caregiving environment. The following changes would be very useful:

Create a unique Caregiving Occupational Series and Specific Qualification Standards within the GS System.

As previously noted, the current generic 1702 job series is too vague to be effective. It tends to attract people with the appropriate qualifications for the grade, but not the interest in caregiving as an occupation. Instead, applicants use the position to “get in the door” and move up to higher positions within the GS system. This practice encourages unnecessary turnover, hampers future recruiting efforts, and negatively impacts morale. Most important, it negatively impacts quality of care. Note that this is not a new recommendation; it has been made before¹⁴ and will no doubt continue to be made because it represents a glaring omission and a basic need.

We recognize that the creation of a new job category is an enormous task within the competitive service bureaucracy. Until such a time as a specific caregiving classification guide and standard can be established in the GS system (with corresponding NAF equivalents) we recommend that the CDC leader-level and program technician positions continue to use the 1702 occupational series but that they be covered under “Administrative and Management” position qualification standards (i.e. two grade interval work) rather than “Clerical and Administrative Support” position qualification standards (one-grade interval work). We make this recommendation based on the following criteria:

- The supervisory nature of the work for both these positions can be a significant and substantial part of the overall position (i.e., occupy at least 25% of the employee’s time) particularly at larger installations where there may be a large number of entry-level staff.
- A combination of education and experience would meet total qualification requirements for a GS-7 grade level particularly if the applicant has a bachelor’s degree and specialized experience equivalent to a GS-5.
- The global work level ratings of the Program Technician position, in particular, are on a par with other higher-rated DoDDS positions such as School Support Assistant b, and pre-Kindergarten teacher.

¹⁴ Rand argued for this in its 1998 report.

- Results of this study indicate a need to address salary compression at the higher global work levels in order to retain the considerable investment already made in training and education of staff; and to prevent loss of the most highly skilled and qualified employees to better-paying (similar) occupations (e.g., pre-kindergarten or elementary teaching) both on and off the installation. For example, to be competitive, we have shown that target level CDC caregiving positions (i.e., global work level 5) would need to be paid at GS-6 wage levels; leader level CDC positions (at global work level 7) would need to be paid at GS-7 wage levels, and CDC program technician positions (at global work level 8) would need to be paid at GS-9 wage levels.

While our study revealed a number of strengths of the current NAF system, if the military CDS is to remain the preeminent leader in the field, we strongly suggest some major modifications to the two-band structure. Some specific suggestions follow:

Create separate CC paybands (CC-III and CC-IV) for each non-entry level position within the NAF system.

Retain the current CC-II for the child development program assistant, target position. If the system must be tied to a GS scheduled rates, keep the current minimum (GS-4) and maximum (GS-5) rates for the target level position, but create an additional CC-III payband for the leader level position (minimum equivalent to a GS-5, maximum to a GS-7); and create a new CC-IV payband to accommodate the program technician position (minimum equivalent to a GS-7, maximum to a GS-9). This will permit employers more discretion to set pay within the minimum and maximum rates for each band as needed for their localities. Furthermore, creation of new NAF CC-1702-III and IV standard positions will accommodate highly skilled staff with bachelor's degrees who desire to work directly with children. Most importantly, this will alleviate the compression that exists within the current CC-II-payband/GS-5 structure.

In lieu of the above, reclassify or increase the minimum and maximum salary rates for current NAF CC paybands. Consider eliminating the need to equate NAF positions to the corresponding rates on the GS schedule.

Again, the goal here is to create the flexibility necessary in order to remunerate individuals according to their levels of education and experience. Forcing NAF positions to adhere to the more rigid GS classification standards and pay structure significantly reduces its inherent flexibility and ability to respond to local market conditions and instead saddles it to the cumbersome federal bureaucracy, which, in its current format, is ill-equipped to handle caregiving occupations.

Encourage the appropriate use of part-time positions and develop policies for management of flexible-hour staff.

While a certain amount of flexible part-time labor is inherently necessary in the child care industry to cover such things as split shifts and census fluctuations, (Zellman & Johansen, 1998; GAO, 1999) reliance on part-time staff encourages higher turnover and contributes to a high rate

of daily caregiver instability for children (Zellman & Johansen, 1998). Thus, it is important to ensure that as many direct care staff as possible are given the opportunity to work full-time (35-40 hours), and that employment of part-time staff without benefits does not exceed 25 percent.

That said, a better substitute system is frequently cited as one of the top three workplace items that teachers say would reduce turnover the most (Whitebook & Bellm, 1999). According to Whitebook and Bellm, a stable pool of substitutes or regular flexible care staff is essential for reducing stress among staff, creating smoother transitions when turnover occurs, ensuring adequate break coverage for regular staff, and scheduling vacation, sick leave, and professional development days. Establish a flexible caregiving system that:

- assesses center needs;
- defines whose responsibility it is to schedule substitutes. If necessary, rotate this responsibility and/or provide a monetary incentive to perform same;
- includes funds for flexible-hour staff/substitutes in the center's annual operating budget;
- considers establishing permanent floaters (i.e., regular flexible-hour positions);
- clarifies level of skill and qualifications needed;
- ensures that flexible-hour staff feel welcome, recognized and included in center activities;
- develops a set of orientation and supervision procedures.

Continue to compare "cafeteria" benefits used in industry to the benefits offered in NAF/APF systems.

The provision of an adequate benefits package is a crucial component of compensation for child care staff (Johnson & McCracken, 1994), and improvements in benefits are routinely cited as an important mechanism for reducing turnover (Whitebook & Bellm, 1999). Although the results of our study indicate that, in general, full-time CDC caregivers fare well in this area, flexible-hour employees receive no benefits. Provision of benefits for part-time staff on a pro-rated basis and/or personalized benefit packages for part-time staff members that best meet their needs might help attract and retain a more professional part-time staff.

Non-Recurring Compensation Recommendations

If the salary compression problem cannot be resolved within the classification and pay system (either GS or NAF), address the problem on a non-recurring basis.

Utilize Retention Allowances, Recruitment Bonuses and Relocation Bonuses as needed to augment compensation.

These allowances and bonuses can be an effective means to increase temporarily compensation when grade level and classification cannot be changed. The U.S. Office of Personnel Management has delineated specific guidelines and procedures for each type of allowance.¹⁵ In general, these guidelines are similar for GS and NAF positions, but not necessarily identical.

¹⁵ <http://www.opm.gov/oca/>

Retention allowances may be used if the unusually high or unique qualifications of the employee or a special need for the employee's services make it essential to retain the employee, and the agency determines that the employee would be likely to leave the Federal service without the allowance. Recruitment bonuses may be used in difficult-to-fill positions. Criteria for approval include such factors as recent turnover, labor-market factors, and special qualifications needed in the position. Relocation bonuses may be used to attract employees who must relocate to accept difficult-to-fill positions in a different commuting area.

Establish awards and award programs to reflect the unique culture and mission of the military CDC.

In addition to Retention allowances, Recruitment, and Relocation bonuses, a variety of other tools exist to deal with issues not properly resolved through the classification of positions. In particular, heads of DoD Components are delegated authority to establish awards and award programs for civilian employees within the Department of Defense. The policies for awards and awards programs are outlined in DoD 1400.25-M, Civilian Personnel Manual, Subchapter 451, "Awards."

Appropriate recognition and/or reward of a job well done or of a significant accomplishment can be a powerful motivating tool, contributing immeasurably to improving employee performance, strengthening morale, increasing productivity, promoting creativity, and unlocking workforce potential. Such awards include, but are not limited to, employee incentives that are based on predetermined criteria such as productivity standards, performance goals, measurements systems, award formulas, or payout schedules. Performance based awards include such recognition devices as monetary awards (cash payments that do not increase the employee's rate of basic pay), non-monetary awards (awards of a honorific value); time-off awards (time-off from duty is granted without loss of pay commensurate with the employee's contribution or accomplishment); and quality step increases (a faster than normal within-grade increase used to reward employees at any GS grade level who display exceedingly high-quality performance).

Example: awards in the area of professional development:

- Put into place a system of stipends for attained education or continuing education and profession growth and development, beyond the training programs that are currently in place.
- Either using a performance-based award vehicle or from discretionary cost savings, arrange to provide competitive annual travel grants to staff that would fund attendance at professional conferences or workshops.
- Provide rewards for membership in professional organizations.
- Give stipends or rewards for job tenure.
- Provide stipends for those with higher education (e.g., bachelors degrees even though not required at grade) in order to bridge gap between child caregivers and elementary school teacher salaries.

Quality Improvement Recommendations

Not all incentives aimed at improving child care jobs and quality of child care programs need be financial. While improved pay and benefits remain the number one priority for reducing turnover in the child care field (e.g., Whitebook & Bellm, 1999; Whitebook et al., 2001), our review of the child care literature has identified a number of non-financial incentives or practices that generate considerable employment benefits for child care workers. The bulk of these fall under the rubric of *job satisfaction* and *organizational commitment* as key attitudinal factors that predict intent to leave the child care field. Researchers in this area have looked at identifying factors designed to improve the quality of the work environment as these influence child care workers' affective reactions to different facets of their jobs (i.e., job satisfaction) as well as their degree of organizational commitment (i.e., identification with and involvement in the organization).

The *quality of work life* for the adult caregiving staff is a critical component of any successful program because research suggests that wages alone do not function to predict job satisfaction, turnover, or the quality of care provided for children (Jorde-Bloom, 1996). Aspects such as collegiality among co-workers, supervisor support, the decision making structure, professional growth opportunities, goal consensus, communication, and general working conditions are also important. These intangible dimensions of organization climate do not consume financial resources, yet they are critical components in determining whether staff will decide to stay or leave. While these factors can be controlled directly, creating such positive work environments can be challenging. Perhaps that is why these adult development issues have tended to receive less attention than child development issues (Whitebook & Bellm, 1999).

The following recommendations to encourage caregiver retention are not ours alone: they have been culled from our review of the literature in these areas. Indeed, the DoD has already identified a set of best practices designed to improve the quality of the work environment.

Prioritize professional development

Among those incentives that we recommend highly are those that promote and prioritize professional development, an essential component of ensuring quality child care. Investing in profession development provides two important benefits: not only does it improve the skill and qualifications of child care workers, involvement in professional activities also increases caregiver satisfaction with the work itself (Jorde-Bloom, 1988). Thus, incentives that emphasize professional development may indirectly help reduce turnover and improve program stability.

- Establish career paths whereby training and education allow participants to earn credentials or degrees (Bellm, Burton, Shukla, & Whitebook, 1997).
- Provide opportunities for staff to receive additional training and education, and encourage all staff to take advantage of these opportunities.
- View professional development as an ongoing process. It is important for all early childhood professionals continually update their knowledge and skills (Johnson & McCracken, 1994).

- Provide professional development experiences that clearly link theory and practice, and ensure that they have a coherent and systematic program structure (Johnson & McCracken, 1994).
- Involve staff in the planning and design of their professional development plan. This helps to ensure fit. It also encourages individuals to develop a stronger sense of ownership for their learning and reinforces the notion that professional development is an ongoing professional responsibility (Johnson & McCracken, 1994).
- Consider professional development programs that suit the background, experiences, and present roles of staff members (Johnson & McCracken, 1994).
- Use training and mentoring programs to recruit and train new caregivers as well as to retain experienced workers who participate as mentors. For example, team new workers with experienced child care workers (i.e., mentors) who may or may not receive cash awards or stipends for their participation. Many states have implemented such programs (e.g., California Early Childhood Mentor program) in an effort to improve retention of experienced workers in the child care workforce.

Link compensation with career development

Limited training and career development funds are best spent when linked to salary enhancement and when providing concrete opportunities for career mobility (Bellm, Burton, Shukla, & Whitebook, 1997). When the link between compensation and career development is absent, the investment that centers make in training caregivers is lost, as personnel leave the field for better opportunities elsewhere (Whitebook et al., 1998). Consider the following recommendations:

- Provide access to training opportunities directly linked to financial rewards (such as increased compensation) as well as professional advancement (Bellm et al., 1997; Johnson & McCracken, 1994; LeBoeuf, 1986; Ritchie, 1991; Whitebook et al., 1998).
- Establish career ladders that delineate incremental increases in salary based upon performance and participation in professional development activities (Johnson & McCracken, 1994).
- When linking compensation with career development, avoid imposing a career trajectory that requires teachers to give up their direct work with children. Advancement in early childhood programs has often required teachers to forfeit their direct work with children when they would otherwise prefer not to do so (Johnson & McCracken, 1994).

Create a positive work environment

Factors such as healthy inter-personal relationships among staff, open lines of communication, and a participatory management style have consistently been associated with workplaces that are more satisfying and lower child care turnover (Whitebook & Bellm, 1999). Practices that enhance co-worker relations, (i.e., help the caregiving staff from close relationships with colleagues), as well as supervisor relations (i.e., improve encouragement and helpful support from supervisors) have little financial impact yet have enormous impact in terms of achieving quality work environments that are personally and professionally satisfying.

- Practice shared decision-making. Provide training and exercises to increase problem-solving skills and to foster teamwork and collaboration. For example, solicit input and involve staff in identification and solutions to problems; involve staff in setting budget priorities (e.g., decisions regarding scheduling, purchasing of supplies and equipment, etc.), and in establishing program goals and objectives. Staff members who feel valuable and respected have a greater sense of ownership and commitment to the child care program as a whole because they have been involved in shaping it.
- Hold regular and meaningful staff meetings with the entire child care center staff and allow them to participate in setting the meeting agenda. Use committee or project assignments to groom staff for future administrative positions.
- Provide regular opportunities for open two-way communication with child care staff and a comfortable environment (e.g., furnished staff break rooms) to listen actively to staff needs, complaints, and suggestions. Ensure that staff members feel safe to express themselves.
- Provide child care staff with as much freedom and autonomy as possible to implement child care activities and still ensure high quality delivery of services.
- Provide specific and personalized feedback to staff regarding their progress, development and performance. Ensure that job roles and responsibilities are accurate and clearly defined and that standards are communicated and understood.
- Foster and encourage opportunities that promote social interaction among the staff and fun outside of the center environment. For example, social events such as pot-luck dinners, center picnics (for caregivers and their families), and evenings out can increase cohesion and esprit de corps among the staff that carries over to the workplace.

Foster a sense of affiliation, involvement, and investment

A decreased sense of affiliation and belonging is among the most common reasons child care professionals leave the profession (Hill, 1995). Practices designed to increase professional affiliation, involvement, and investment can be powerful tools against turnover. Particularly important in this regard is communicating center goals:

- Identify and articulate clearly the values and goals of the center to all current and prospective employees (Ritchie, 1991). When asked, employees in centers with low turnover were able to describe the centers' goals in detail. Goal consensus forces staff to compromise and work out differences so they achieve a common vision. Having a common vision for the program is crucial because it affects a center's ability to carry out its mission and to establish priorities. Furthermore, goal consensus may influence the quality of teaching practices and overall program effectiveness by lessening isolation and increasing professional interaction. For example, in discussing instructional objectives, teachers frequently request and offer advice and assistance in helping their colleagues improve (Jorde-Bloom, 1996).
- Implement practices designed to demonstrate appreciation and acknowledgement of hard work (e.g., assigning an 'employee of the month', distributing certificates of achievement for earned accomplishments, offering job-title changes, etc.) (Hill, 1995; LeBoeuf, 1986).

- Encourage employees to invest in the process of mentoring and training new staff, and provide incentives for them to do so (Hill, 1995; Whitebook & Bellm, 1999).
- Provide one-on-one time with staff to obtain their feedback and ideas for improvement of the center (Sheerer & Jorde-Bloom, 1990).
- Ask staff what they believe would reduce turnover most. Listen to their answers. Research and debate the best solutions before making a group decision through consensus (Whitebook & Bellm, 1999).
- Organize annual staff retreats wherein staff may participate in the identification of annual goals for the center (Hill, 1995).
- Create a sense of tradition and history within the center. Reinforce this with regularly scheduled celebrations honoring the center as a whole as well as its staff (Hill, 1995).
- Encourage broader involvement. When involved in child advocacy effort, teachers become a vital part of a larger institution (Neugebauer, 1984).

Make meaning for caregivers

Childcare workers' interactions with children and the pleasure of witnessing the positive child outcomes associated with their work provide their strongest source of satisfaction (Neugebauer, 1984; Whitebook et al., 2001; Whitebook & Bellm, 1999). Therefore, practices that increase the extent to which the job provides intrinsic enjoyment and fulfills a caregiver's needs for recognition, creativity and skill building can be powerful retention incentives in lieu of direct increases to compensation. They help the child care staff to know their work is important, valuable, and worthwhile.

- Provide opportunities to help teachers observe their children's progress over time:
 - For example, use videotapes, display panels/bulletin boards of children's work, digital photos that can be scanned and placed on a center Web site, and/or children's portfolios (Carter & Curtis, 1997).
 - Chronicling the process in addition to displaying children's work benefits children, engages parents and guides teachers. In addition to displaying the process of intellectual growth, the documentation can be a powerful professional development tool to enhance caregivers' learning. By helping caregivers understand how children learn they are better able to chart what their own next move should be to enhance that learning.
 - Documentation can also be used to improve communication with parents and educate the public about the value of caregiving work.
- Provide feedback that helps teachers identify how their work has facilitated positive changes in the children with whom they work (Neugebauer, 1984).
- Allow teachers to work with a consistent group of children over a substantial time-frame. When teachers' responsibilities shift from one group of children to another, they are not able to attribute long-term changes in children to their own efforts (Neugebauer, 1984).

Minimize stress

While stress cannot be completely avoided, it is potentially manageable. Wisniewski and Gargiulo (1997) review a variety of tactics for minimizing stress in a teaching environment that might be readily adapted to the child care setting.

- Establish a peer support system that provides for professional and personal interactions with colleagues. This is particularly important for teachers/caregivers who frequently complain of professional isolation.
- Similarly, create mentorships in which novice caregivers are matched with veteran colleagues who can provide advice and direction in stressful situations.
- Administrative assistance is also important in combating the stresses of a complex work environment, particularly for novice teachers/caregivers. For example, the educational literature strongly suggests that high levels of support from building principals is critical; in the child care setting this may come from the director or other supervisory personnel.
- Try not to assign novice teachers/caregivers to the least desirable locations or age groups since these challenging environments may induce significant stresses and strains. Compared to veteran teachers/caregivers, beginning teachers/caregivers usually lack the experience and skills necessary to cope with challenging assignments.
- Incorporate “stress management” module(s) into professional training and development programs. Provide the caregiving staff with opportunities to recognize potentially stressful situations and train them to generate appropriate adaptive responses. Taking a proactive approach to stress identification and management by ensuring staff receive training in stress reduction techniques and other coping skills will encourage them to remain in the caregiving field.
 - For example, recent research (e.g., Fabes, Hanish, & Martin, 2003; Crockenberg, 2003; Watamura, Donzella, Alwin, & Gunnar, 2003) suggests that during long days in child care, children with inadequate regulatory abilities become increasingly stressed leading them to engage in aggressive or withdrawn behaviors. Similarly, caregivers become tired and stressed and are less likely to respond effectively to these behaviors. Thus, teaching caregivers how to foster regulatory skills in children, how to maintain positive interactions, how to provide opportunities for late afternoon quiet play, and how to reduce activities that involve competition for resources may be a strategy helpful to both care providers and children (Langlois & Liben, 2003).
- If flexible caregiving staff or aids are available for only half a day, consider assigning them to assist in the afternoon, when the regular staff and the children are more likely to be stressed and tired.

Survey and/or interview the military child caregiving workforce

In order to implement more effective retention practices and policies, we need to deepen our understanding of the reasons behind employee turnover. Survey and/or interview the military

child caregiving workforce in order to gain insight into their experiences as employees. One of the best methods to increase such understanding is to go directly to the source. By capturing the perspectives of the child care workers and not just the CDC directors and managers, we can gain first-hand information about where best to invest resources to manage and reduce turnover in the CDC workforce. This strategy has been used very successfully in civilian child care settings (e.g., Whitebook & Bellm, 1999; Whitebook et al., 2001), however, with the exception of the 1998 Rand Report (Zellman & Johansen, 1998) we know of no recent study of military CDCs that has employed this methodology.

Recruitment Recommendations

Hiring practices play an important function in turnover prevention. Taking time to recruit and hire candidates who are skillful, knowledgeable and philosophically compatible with the organization, eliminates some of the major reasons employees leave their jobs (Whitebook & Bellm, 1999). While military spouses may provide a convenient source of labor, military CDCs still must compete with the civilian sector for these employees, including jobs in civilian child care.

- In order to attract the best pool of applicants, have an ongoing strategic recruitment and hiring plan that includes the following elements: an outline of CDC philosophy, an organizational chart, job descriptions, salary and benefits schedule, a recruitment, interviewing and selection process, and an orientation procedure for new staff (Whitebook & Bellm, 1999).
- Make a commitment to remunerate commensurate to education and experience. A sizeable presence of highly-trained staff remains the best predictor of a center's ability to sustain quality improvements over time. In addition, highly skilled and educated staff members are more likely to remain in their jobs when they work with similarly skilled and educated co-workers (Whitebook et al., 2001).
- Advertise to, and recruit from, the right audience. Build relationships with local community colleges and universities, particularly with instructors of ECE. Consider advertising in locations such as local universities/colleges or job information centers at professional organizations, etc. (Johnson & McCracken, 1994; Sheerer & Jorde-Bloom, 1990).
- Consider candidates that are a good fit for both the position and the center. Workplace stability has been found to relate to a center's ability to match positively candidates to available positions (Jorde-Bloom, 1988).
- Recruit teaching staff to assist in the recruitment and hiring process. They have a personal stake in the outcome and first-hand knowledge of what it takes to do the job (Whitebook & Bellm, 1999).
- Match the values and needs of the center to the values and needs of prospective employees in order to maximize the degree of person-environment fit or congruence (Jorde-Bloom, 1988). During the interview process, allow sufficient time to probe about a candidates work style, expectations and goals. Understanding what constitutes their ideal job vis-à-vis the real conditions of the center (role and work environment) can help reduce mismatch and thus promote greater professional fulfillment, job satisfaction and workplace stability (Balfour & Neff, 1993).
- When possible, tailor positions to the unique talents, skills, and job aspirations of individual child care workers (Sheerer & Jorde-Bloom, 1990).

- Examine the motivations of candidates interested in part-time work. Recent research in the civilian sector suggests that part-time workers may be less productive or less ambitious – that is, workers who are not prepared to spend much job effort, and thus self-select into part-time jobs (Mocan, Naci, & Tekin, 2003). Hiring practices that examine the motivations of candidates interested in part-time work will help ensure that a center’s flexible caregiving staff are as motivated and interested in caregiving as a profession/career track as the regular full-time staff.
- Take time to hire the right person. If necessary, hire a long-term substitute to fill in until the right job candidate is located.
- Encourage employees to invest in the process of mentoring and training new staff, and provide incentives for them to do so (Hill, 1995; Whitebook & Bellm, 1999).
- Identify and articulate clearly the values and goals of the center to all current and prospective employees (Ritchie, 1991).
- Do not overlook sources of unpaid labor. Volunteers, retirees, college students, or high school interns can be valuable additions to the regular child care staff.

Conduct effective employment interviews

Good interviewing skills play a critical role in the hiring process. Without them, good candidates can be lost - or worse – the wrong person can be hired for the job. Experienced interviewers employ the following practices:

- Prepare well. Do background research on the job requirements: Understand that an interview is your chance to find out if the applicant is qualified for a particular job, if they are truly interested in the available position and if they fit your center’s culture.
- Think about your interviewing strategy. Do not be tempted to use standard interview questions – they often sidestep what you really need to know – how the person will perform in a specific role. Adopt smart interviewing tactics that uncover the candidate’s abilities, talents, strengths and weaknesses.
- Develop a list of desired skills for the position using information contained in the job description and/or personal characteristics of competent caregivers. You cannot formulate insightful questions until you know what skills to look for.
- Create a list of interview questions that will help you learn more about the candidate. Construct open-ended questions that invite candidates to share information and talk about their experiences. Have a good mix of opinion-based, credential-based, experienced-based, and behavior-based questions that will provide a complete view of the candidate’s background and personality.
- Tell the applicant about the interview format to ensure the candidate is comfortable - you want them to relax, speak freely and provide detailed answers to your inquiries.
- Be prepared for questions. Make sure you have adequate information about the center to answer a candidate’s questions. Sharing a copy of the job description is a good way to

promote discussion about the position including specifics about the essential job functions.

- Take notes. Interviewing requires superb listening skills, but listening is not enough. Capture the details of the interview on paper to jog your memory, noting key actions and outcomes. Taking objective notes and recording responses will help you compare candidates when it is time to make a hiring decision.

Develop a placement service for military caregivers

Although staff turnover at military CDCs is now less than 30% annually (Campbell, Appelbaum, Martinson, & Martin, 2000), much of this turnover is explained by the fact that roughly 66% of child care employees are spouses of military members, who move approximately every two - three years. Given that moving very few years is an inescapable fact of military life, it behooves the military CDS to develop a national (or even international) placement service to ensure that high-quality caregivers who relocate are given priority placement at a new location and poor performers are not recommended for rehire. The establishment of such a placement service would provide multi-faceted benefits. It would:

- serve to increase the overall quality of care in military CDCs by effectively expanding the pool of highly skilled and experienced staff;
- create and sustain a staffing pool of higher caliber which itself promotes stability among qualified staff;
- continue to reinforce the caregiving career track within the military CDS;
- reduce the time and costs associated with recruitment, training, and orientation of new staff;
- ensure that the considerable investment that centers make in training caregivers is not lost;
- help increase spouses' satisfaction with their employment and career opportunities in the military, already a high-priority issue for military policy-makers.

RESEARCH OVERVIEW

INTRODUCTION

As requested by the Office of Military Community and Family Policy, this report compares the compensation packages of Department of Defense (DoD)¹⁶ Child Development Center (CDC) staff to those of employees in occupations similar to child care work in content, experience, compensation, and/or compatibility to the military lifestyle.

According to the regulations of the Military Child Care Act of 1989 (MCCA), caregiver¹⁷ compensation must be competitive. “For the purpose of providing military CDCs with a qualified and stable civilian workforce, employees at a military installation who are directly involved in providing child care and are paid from non-appropriated funds (NAF):¹⁸

- in the case of entry-level employees, shall be paid at rates of pay competitive with the rates of pay paid to other entry-level employees at that installation who are drawn from the same labor pool, and
- in the case of other employees, shall be paid at rates of pay substantially equivalent to the rates of pay paid to other employees at that installation with similar training, seniority, and experience.”

To assess consistency with the requirements of the MCCA and also to assess the level of competitiveness off the installation, we examine the pay and benefits of both military and civilian jobs that draw employees from the same labor pool as CDC caregiving staff. Levels of training, experience, education, and responsibility are considered, and both hourly wage and annual income are used to compare compensation.

Although the military has implemented a model child development system (CDS) for the entire nation, recruiting and retaining qualified caregivers is a continuing challenge (Campbell, Appelbaum, Martinson, & Martin, 2000). Despite the fact that the annual turnover rate for military caregivers is under 30%, which is similar to civilian child care programs (see Table 5), it remains a concern. According to Child Development Program Managers (CDPMs) across the Army, Marine Corps, Navy, and Air Force, high turnover rates and the inability to hire a sufficient number of qualified caregivers represent a problem for the military CDS.¹⁹ The CDPMs are concerned that staff members do not receive competitive wages and benefits, resulting in high turnover and low hiring rates. The result is less than optimal quality of care which directly impacts children’s development. In addition, it is important for the military to meet the child care capacity demands of its members, as specified in the MCCA of 1989 and

¹⁶ Refer to Appendix A for clarification of acronyms.

¹⁷ In our usage, the term “caregiver” embraces a continuum of services ranging from those designed to provide care while parents are at work to those designed to provide an educational experience for young children. As is common in the early care and education field, the terms caregiver, teacher, and provider are used interchangeably throughout this report to include elements of care and education.

¹⁸ Note that since the MCCA’s inception, employees who are directly involved in providing child care can also be paid from General Schedule (GS) funds.

¹⁹ The report authors and the Child Development Program Managers from all Services met together on December 18, 2000, to discuss the issues of child care compensation in the military. Much of the thrust for this report stems from the Program Managers’ concerns and suggestions.

recodified in 1996 as Military Family Programs and Military Child Care Public Law 104-106. Currently, the military provides 176,000 spaces and needs 215,000 spaces to meet its child care needs by the year 2007.²⁰ Thus, a goal of this report is to help CDPMs understand the employers and jobs they are competing with for qualified caregivers.

Organization of the Report

The first section of this report reviews recent studies addressing the issues surrounding staff turnover in the child care profession. Because high turnover rates are a problem, the child care industry has produced several seminal reports, studies, and workbooks on the topic. Information gleaned from these reports is applied to understanding the complexities of turnover in military CDCs.

The second section of this report is a comparative analysis of compensation. Data from various sources are used to compare CDC caregiver positions with both military and civilian jobs—termed benchmark jobs. For military comparisons, we use descriptions of jobs frequently advertised by Department of Defense Education Activity (DoDEA) schools. For civilian comparisons, we use national data sets to *descriptively* compare the content, wages, and qualifications of CDC caregiving positions with selected civilian benchmark jobs. We address five questions regarding child care compensation packages:

1. How do the wages and qualifications of jobs in military CDCs compare to those of DoDEA and civilian jobs featuring similar content?
2. How do the wages and content of jobs in military CDCs compare to those of DoDEA and civilian jobs requiring similar qualifications?
3. How do the content, qualifications, and wages of jobs in military CDCs compare to those of civilian jobs compatible with the military lifestyle?
4. How do the content and qualification of jobs in military CDCs compare to those of DoDEA and civilian jobs with similar wages?
5. How do the benefits of jobs in military CDCs compare to those of civilian jobs featuring similar content, qualifications, and/or wages?

Based on these findings, the last section of this report presents a summary of the findings and specific recommendations for enhancing the compensation packages of CDC caregiving staff. This section also includes general strategies to improve retention and recruitment of child care providers in center-based programs.

²⁰ Personal communication: Barbara Thompson

THE PROBLEM OF CHILD CARE STAFF TURNOVER

High turnover of qualified employees is a challenge faced by the early childhood care and education (ECE) field. Researchers, child care professionals, and child care advocates all acknowledge turnover in child care settings as a problem. Organizational research identifies several job characteristics generally related to turnover, including compensation, work conditions, and job alternatives. *But what is it about caring and educating young children in particular that leads to turnover?* This review attempts to answer this question. Evidence to support the links between staff turnover, program quality, and children's development is also presented. A presentation of successful strategies used by child care professionals to retain a consistent and stable caregiving workforce concludes the section.

Turnover rates in civilian child care centers range from 26% to 45% per year, depending on type of program, and from 20% to 34% per year, depending on National Association for the Education of Young Children (NAEYC) accreditation status (Whitebook, Howes, & Phillips, 1998). Table 5 shows that even in high-quality programs, turnover is extremely high, especially for entry-level teaching assistants.

Table 5
Turnover and Stability by Program Type and Accreditation Status

	Annual Turnover: All Teaching Staff	Annual Turnover: Teachers Only	Annual Turnover: Assistants Only	Teaching Staff Remaining 10+ Years	Teaching Staff Remaining 5 to 10 Years
Program Type					
Independent For-Profit	35%	27%	59%	13%	29%
For-Profit Chain	45%	42%	54%	8%	20%
Independent Nonprofit	28%	27%	34%	18%	39%
Church-related Nonprofit	26%	20%	33%	11%	29%
Accreditation Status					
Non NAEYC-Accredited	34%	29%	40%	12%	29%
NAEYC-Accredited	20%	15%	38%	26%	53%
All centers	31%	27%	39%	14%	32%

Source: Whitebook, M., Howes, C., & Phillips, D. (1998). *Worthy work, unlivable wages: The National Child Care Staffing Study, 1988-1997*. Center for the Child Care Workforce, Washington, D.C.

- There is broad variation in the educational backgrounds of the early child care workforce—from no high school diploma to advanced college degrees (Cassidy, Vardell, & Buell, 1995).

The Issues and Facts Surrounding Turnover

- Child care workers are more educated than the average female civilian labor force worker (Phillips, Howes, & Whitebook, 1991), yet earn an average of \$5,200/year less than other persons of the same gender, education, age, minority status, and location (Morris, 1999).
- Generous benefit packages do not offset the low salaries found among child care employees (Phillips et al., 1991).
- Benefit packages common to many child care workers, such as child care cost breaks and sick leave, promote short-term employment and lack the incentives characteristic of longer-term employment, such as health benefits and retirement plans (Bellm & Haack, 2001).
- Staff in higher positions, and with greater education and training, receive only modestly higher wages than do less advanced and qualified co-workers (Whitebook, Howes, & Phillips, 1990, cited in Phillips et al., 1991).
- From 1988 to 1997, there was a significant increase in public dollars spent on child care. However, this increase in funds did not translate into better wages. In 1997, the highest-paid caregivers averaged \$10.85/hour, or \$18,988/year. Compared with the previous decade, this represented a modest increase of \$1.32/hour (Whitebook et al., 1998).
- From 1988 to 1997, centers that paid better wages experienced less teaching staff turnover; these centers also rated higher in quality (Whitebook et al., 1998).

Before examining turnover in detail, it is useful to review what the research reports about the quality of child care and child development. The issue of quality in early childhood care and education has many dimensions, including political and social dimensions, not all of which lend themselves to research. Research can, however, inform views of best practices by providing information about the consequences of program features in relation to young children's learning, development, and well-being.

DEFINING HIGH-QUALITY CARE

Quality in CDCs is usually indexed by evaluating (1) process indicators such as various aspects of children's experiences, (2) structural characteristics of the setting, (3) caregiver characteristics, and (4) health and safety provisions (Vandell & Wolfe, 2000). Factors affecting the overall quality of child care programs include such things as: staff education and training; experience of directors and administrators; group size; staff-to-child ratios; age-appropriate curriculum and activities; and center accreditation status. For example, in the NICHD Study of Early Child Care, indicators of high-quality care included: safer, cleaner, more stimulating physical environments; smaller group sizes; lower child-to-staff ratios; caregivers who allowed

children to express their feelings and considered their views; and caregivers who provided more sensitive, responsive, and cognitively stimulating care.

One indicator of high-quality care is achieving and maintaining National Association for the Education of Young Children (NAEYC) accreditation (Whitebook, 1996). To early childhood professionals, NAEYC accreditation means: developmentally appropriate curriculum for children; quality interactions among children and staff; a healthy, safe environment for children; a sufficient number of adults per children in group sizes appropriate for children's ages; and strong communication between families and staff. Early childhood professionals in NAEYC-accredited centers can also count on more involvement in decision-making and a commitment to the continual development of their teaching skills.

In a review of studies²¹ looking at accreditation, accredited programs consistently demonstrated higher quality for children as predicted by:

- a staff with more formal education and specialized early childhood training^{22 23 24 25}
- a more developmentally appropriate environment with age-appropriate and child-initiated activities^{18 19 20 21 26 27}
- a child-centered physical environment to promote learning^{18 22 23}
- teaching staff who interacted more sensitively and less harshly with children^{18 19 20 21 22 23}
- stronger staff communication^{18 22 23}
- better health and safety provisions, including nutrition and food service^{18 22}
- better relations with parents^{18 22}

The National Research Council (2001) summarized a number of broadly supported findings from the research literature regarding the components of high quality preschool programs.

- Cognitive, social-emotional and physical development are mutually supportive areas of growth all requiring active attention in the preschool years.
- Responsive interpersonal relationships with teachers nurture young children's emerging abilities.
- Both small class size and low adult-child ratios are associated with more positive program effects.
- Children who attend well-planned, high-quality early childhood programs tend to learn more and are better prepared to master the complex demands of formal schooling.

²¹ www.naeyc.org/resources/eyly/1996/16.htm

²² Jorde-Bloom, 1996

²³ Cost, Quality & Child Outcomes Study Team, 1995

²⁴ Whitebook, Howes, & Phillips, 1989

²⁵ Whitebook, Phillips, & Howes, 1993

²⁶ Harris, Morgan, & Sprague, 1996

²⁷ Howes & Galinsky, 1996

- Young children who are living in circumstances that place them at greater risk of school failure – including poverty, low level of maternal education, maternal depression, and other factors – are much more likely to succeed in school if they attend well-planned, high-quality early childhood programs.
- The professional development of teachers is related to the quality of early childhood programs, and program quality predicts developmental outcomes for children.

PROGRAM QUALITY AND CHILD DEVELOPMENT

The quality of child care has become a national topic of discussion, as findings from rigorous, longitudinal studies have found their way into the news. Both developmental gains in social and emotional functioning, as well as cognitive functioning, are attributed to high-quality child care programs. These studies have addressed questions such as: Will child care attendance be harmful to the child? What benefits do children receive from child care? A brief overview highlighting the results of some of these studies are summarized below.

Enhanced Social and Emotional Development

Peisner-Feinberg et al. (1999)

- These researchers were interested in using longitudinal data from the Cost, Quality and Outcomes Study (Helburn, 1995) to investigate whether early child care experiences, such as the quality of classroom practices and teacher-child relationships, have long-term consequences for child development.
- The social-emotional climates of child care classrooms as well as individual children's relationships with their teachers were identified as important predictors of children's outcomes (such as classroom behavior and peer relations).
- The *first phase* of this study indicated that a majority of children do not have access to the level of child care quality that is currently being recommended by child care professionals. The *second phase* of this study demonstrates that this lack of quality care has negative effects on children's readiness for school and on their development during the early school years.
- From their research results, these investigators concluded that the effects of child care quality are visible at least until second grade and that the quality of child care is important for all children, but may be especially important for children who are considered to be at risk.

Campbell, Lamb, and Hwang (2000)

- These researchers conducted a longitudinal study to examine the effects of early child care experiences on the social development of children who were continually enrolled in child care from the age 1.5 to 3.5.
- Fifty-two children were followed for a period of fourteen years.
- Results from this study indicated that positive early child care experiences lead to enhanced child social competence.
- The positive impact on social development remained stable throughout childhood and early adolescence.

National Institutes of Health, National Institute of Child Health & Human Development, Center for Research for Mothers & Children (2000)

- The NICHD Study of Early Child Care²⁸ is the most comprehensive child care study conducted to date in the U.S. Researchers monitored 1,364 children, from birth to age three, from 10 different locations to ascertain how experiences in child care might relate to socio-emotional development. Indicators of high-quality care included: safer, cleaner, more stimulating physical environments; smaller group sizes; lower child-to-staff ratios; caregivers who allowed children to express their feelings and considered their views; caregivers who provided more sensitive, responsive, and cognitively stimulating care.
- In its assessment of the impact of early child care experiences, this study adjusted for maternal vocabulary score, family income, child gender, quality of home environment, and observed maternal cognitive stimulation.
- In terms of problem behaviors, researchers found that characteristics of the family—particularly the sensitivity of the mother—were stronger predictors of children’s behavior than their child care experience. But when child care characteristics were considered, child care quality was the most consistent predictor of children’s behavior: children in care centers who received more sensitive and responsive attention had fewer caregiver-reported problems at ages two and three.

Take-Home Message: Enhanced Social and Emotional Development

High quality child care—in both center and family/home-based child care settings—facilitates enhanced social and emotional development in children (e.g., Kontos, Howes, Shinn, & Galinsky, 1997; Vandell & Wolfe, 2000). This is particularly apparent for children who are considered to be at-risk for social and emotional difficulties. The developmental gains associated with high quality child care are often stable beyond childhood.

Enhanced Cognitive and Language Development

Boller et al. (2002) The impacts of Early Head Start

- In a large-scale longitudinal study of 17 Early Head Start programs, researchers tracked 2-3 year-old children from 3,001 families for 21 months.
- They found improved scores of cognitive development using the Bayley Scales of Infant Development Mental Development Index (MDI), improved language development using the Peabody Picture Vocabulary Test (PPVT-III), and social-emotional development using an observational checklist and the Home Observation for Measurement of the Environment (HOME).
- Consistently, there were statistically significant, modest, favorable impacts across a range of outcomes when children were 2 and 3-years-old, with larger impacts in several subgroups.

Burchinal, Roberts, Naborts, & Bryant (1996)

- The above researchers explored the relationship between quality of center based child care and infant cognitive and language development for a sample of 79 African-American 12-month-old infants.
- Both *process* and *structural* measures of child care quality were collected by interviewing center directors and by observing infant classrooms.
- Quality of infant care was positively correlated with scores on standardized assessments of cognitive development, language development, and communication skills.

²⁸ For on-line information, visit http://www.nichd.nih.gov/publications/pubs/early_child_care.htm

Research Overview

- After adjusting for the influence of the quality of care in the homes of infants, independent relationships were found between the process measure of quality child care and the cognitive development of infants, as well as between infant-adult ratios in the classroom and the development of infant communication skills.

Peisner-Feinberg & Burchinal (1997)

- These researchers examined the relationships between child care costs, child care quality, and longitudinal outcomes for pre-school age children in full-time care in community child care centers.
- A sample of 757 children was recruited, including children from diverse family backgrounds.
- Child care quality was assessed by observing classroom practices and by using teacher ratings of teacher-child relationships.
- Findings from this study revealed a positive relationship between child care quality and children's cognitive and socio-emotional outcomes.
- The positive effects of child care quality were particularly strong for children from at-risk backgrounds.

Burchinal, Peisner-Feinberg, Bryant, and Clifford (2000)

- These researchers compared the behavior skills of 1,307 at-risk children (mean age 4.3 years) who attended high quality child care centers with those outcomes of children in poorer quality care.
- High child care quality, as assessed by the Early Childhood Environment Rating Scale, was positively related to improved language outcomes.
- Child care quality was found to be especially important for those children experiencing social risk factors.

Peisner-Feinberg et al. (1999)

- These researchers used longitudinal data to investigate whether early child care experiences, such as the quality of classroom practices and teacher-child relationships, had long-term consequences for child development.
- The social-emotional climates of child care classrooms as well as individual children's relationships with their teachers were identified as important predictors of children's outcomes (such as language ability, letter-word recognition, and math skills).
- The authors concluded that the effects of child care quality are long term and that the quality of child care is important for all children, but may be especially important for children who are considered to be at risk.

Howes, Smith, & Galinsky (1995)

- These researchers studied 840 children ranging in age from 10-70 months who were enrolled in full-time, center-based child care in order to investigate whether children's cognitive activities could be predicted by child care quality, positive social interactions with teachers, children's play activities, and attachment security with child care providers.
- In seven of eight sub-samples of children, researchers were able to predict 15-30% of the variation in children's cognitive activities with positive social interaction with teachers, attachment security, and participation in creative play activities.

National Institutes of Health, National Institute of Child Health & Human Development, Center for Research for Mothers & Children (2000)

- In addition to children's social-emotional development, The NICHD Study of Early Child Care described earlier also looked at children's cognitive and language development.

- The quality of child care over the first three years of life was modestly, but consistently, associated with children's cognitive and language development. The higher the quality of child care (more positive language stimulation and interaction between the child and provider): the greater the child's language abilities at 15, 24, and 36 months; the better the child's cognitive development at age two; and the more school readiness the child showed at age three.
- Again, the combination of family income, maternal vocabulary, home environment, and maternal cognitive stimulation were stronger predictors of children's cognitive development at 15, 24, and 36 months.

Campbell, et al. (1999)

- Fifty-seven infants from low-income families were randomly assigned to receive early intervention in a high quality child care setting.
- Fifty-four children were alternatively assigned to a control group.
- Educational activities in this child care setting addressed social, emotional, and cognitive development – particularly emphasizing language development.
- At the completion of the program, children from the intervention group demonstrated significantly higher scores on mental tests than children in the control group. Follow-up cognitive assessments completed at ages 12 and 15 indicated that children from the intervention group continued to have higher than average scores on these indicators.
- Children who received the intervention also scored significantly higher on tests of reading and math ability through middle adolescence.
- At age 21, those who had been assigned to the intervention group continued to demonstrate significantly higher mental test scores than those who had been assigned to the control group. These effect sizes were moderate and considered educationally meaningful. Additionally, individuals from the treatment group were significantly more likely to still be in school at age 21 (40% versus 20%) and 35% had either graduated from or were presently attending a four-year college or university as opposed to 14% of individuals from the control group.
- Based on the results of this study, these investigators concluded that early childhood care and education experiences significantly improve the scholastic success of financially disadvantaged children -- even into early adulthood.

Zill, et al. (2001) Head Start FACES: Longitudinal findings on program performance: Third progress report

- In their assessment of 3,200 children from 40 Head Start programs, they noted children's improvements in language and social development, and heightened levels of school readiness.
- Children showed significant gains in each of these categories as compared to national norms for children of all income levels.

Take-Home Message: Enhanced Cognitive and Language Development

In addition to positive social and emotional outcomes, high quality child care facilitates the cognitive and language development of children (e.g., Burchinal, Peisner-Feinberg, Bryant, & Clifford, 2000; National Institutes of Health, National Institute of Child Health & Human Development, Center for Research for Mothers & Children, 2000). The benefits of high quality child care remained stable in studies that attempted to control for factors such as maternal vocabulary, family income, child gender, quality of home environment, and observed maternal cognitive stimulation. Research findings from longitudinal studies indicate that the benefits of

high quality child care persist over time and are especially salient for children experiencing social risk factors.

Summary

Overall, this literature provides support for the link between child care program quality and later child development outcomes. Although other contextual factors, such as family background, may explain more variation in children's social, emotional, and cognitive development than child care experience, child care quality remains a significant factor even when these highly influential indicators are taken into account. A key finding from this research is that high-quality care is most beneficial to children who are at risk for developmental problems.

Another View: Quantity of Care

Despite the conclusions from the literature just cited, there remains debate regarding the effects of child care on children's development, especially their socioemotional adjustment. The debate centers around the effect of *quantity* of care – that is early, extensive, and continuous care such as care initiated in the first year of life for more than 20 to 30 hours per week –and its association with child outcomes. Recent data from the NICHD Study of Early Child Care (NICHD Early Child Care Research Network, 2003) suggest that cumulative *quantity* of child care across the infancy, toddler, and preschool years accounts for significant variation in child problem behaviors at 4.5 and 5 years of age. That is, the more time children spent in any of a variety of child care arrangements over the first 4.5 years of life, the more aggressive and defiant behavior and conflict with adults they display at 54 months of age and in kindergarten, as reported by mothers, caregivers, and teachers. Although these effects were small, they persisted even when quality, type, and instability of child care, maternal sensitivity and other family background factors were taken into account. However, there are a number of important caveats to this finding.

First, the correlational nature of the longitudinal data does not permit one to conclude that the hours children spend in child care are the cause of problem behaviors: perhaps problem children spend more time in day care because they are problematic (e.g., Scarr & McCartney, 1983). Second, evidence from other recent work suggests that perhaps the problem behaviors are not the result of child care per se, but rather that fact that child care increases the amount of stressful and unregulated peer interactions (Fabes, Hanish, & Martin, 2003; Watamura, Donzella, Alwin & Gunnar, 2003). For many children, being in a large, peer-group environment all day long over long periods may be challenging, particularly for younger children who may not be developmentally ready to interact in larger social groups. Third, three other studies whose results were published at the same time as the NICHD study found no relation between quantity of child care and behavior problems (Love et al., 2003).

Quality, on the other hand, was positively related to positive child behaviors and characteristics. Findings from the Sydney [Australia] Family Development Project (child care of superior quality to most child care in the U.S.); the Haifa [Israel] Study of Early Child Care (child care that is generally lower in quality than that found in the U.S.); and the U.S. Early Head Start program (low-income children in high-quality child care) highlight the importance of geographical location, type of sample, and quality of care. Results suggest that *quality* of care may be an

important moderator of the amount of time in care, particularly when the child care contexts differ from those of the NICHD research. And so the debate continues.

THE ROLE OF STAFF TURNOVER IN PROGRAM QUALITY: LINKS TO CHILD DEVELOPMENT

Thus far, high-quality child care has been linked to positive child development, and it has been demonstrated that higher quality programs have less turnover than lower quality programs. *But what is the process that accounts for this link?* While there is still much to learn about the actual mechanisms by which child care quality impacts child development, one answer may lie in the body of research that examines teacher-child relationships using an attachment framework.

The Concept of Attachment

The term *attachment* is used frequently in the early childhood care and education literature, both in research and in practice. Yet what does it really mean, and how is it associated with children's development? In everyday language, attachment refers to a relationship between two individuals who feel strongly about each other and do a number of things to continue the relationship. In the language of developmental psychology, though, attachment refers to a close emotional bond that infants form during the first year of life to one or more of their adult caregivers. These caregivers are usually mothers and fathers, but they can also be other people with whom the infant often interacts.

Another important principle in contemporary attachment theory is the concept of "security." In *secure attachment*, infants use the caregiver as a secure base from which to explore the environment. In contrast, infants who have an *insecure attachment* either avoid the caregiver, possibly by ignoring the caregiver and failing to seek proximity, or resist the caregiver, for example by clinging but at the same time fighting against the closeness by kicking and pushing away. One reason for individual differences in attachment security lies with the responsiveness and sensitivity of the caregiver to the infant's needs. For example, infants who are securely attached are more likely to have caregivers who are more sensitive, accepting, and expressive of affection toward them than those who are insecurely attached. Many researchers (e.g., Ainsworth, 1979; Sroufe, Egeland, & Kreutzer, 1990) believe that secure attachments have positive effects on the infants' later development whereas insecure attachments have negative effects on later development.

Attachment and Child Care

Infant-caregiver relationships in a child care setting function in many ways like the attachments that infants form to their parents. After infants have interacted regularly with the same caregivers for some time, they seek contact with those caregivers when they are distressed. During play, they may intermittently approach and look at their caregivers or show things to them. These behaviors suggest that the infants view their caregivers as a haven of security and as a secure base for exploration (Barnas & Cummings, 1994). Exploration is important because the

developing child has a natural proclivity to learn, experiment, and explore. Infants learn about their environment through exploration. Exploration, particularly in the context of play and structured activities, can provide opportunities for developing language, reasoning, and social skills that support learning in more academic areas.

From an attachment perspective, confidence in a caregiver's physical and psychological availability appears to lay the groundwork for autonomous exploration and problem solving, coupled with the expectation that help will be forthcoming when needed. This is important for establishment of "internal working models." If the attachment figure has acknowledged the infant's needs for comfort and protection while simultaneously respecting the infant's needs for independent exploration of the environment, the child is likely to develop an internal working model of self as valued and self-reliant. Conversely, if the attachment figure has frequently rejected the infant's bids for comfort or for exploration, the child is likely to construct an internal working model of self as unworthy or incompetent (Betherton, 1992).

Infants can only become attached to caregivers with whom they have interacted frequently for some time. As evidenced, however, in some child care settings, caregivers often shift from one group of children to another, or they leave the field of child care entirely (Whitebook, Howes, & Phillips, 1990). When adults have cared for a group of infants for only one or two months, the infants rarely rely on them for comfort or approach them during play. The quality of infants' interactions with caregivers also affects their attachment to them (Goossens & van IJzendoorn, 1990; Howes & Hamilton, 1992). Infants become securely attached to caregivers who are sensitive and responsive. Infants develop avoidant or resistant insecure attachments to caregivers who are uninvolved or harsh. The stability of the caregiving staff and the quality of the teacher-child relationship is equally important for toddlers and preschoolers as discussed below.

The concept of attachment leads naturally into a discussion of several studies that have linked teacher-child closeness and attachment to children's later development. Indeed, because children prefer consistency in caregivers in day care settings (Cummings, 1980), and because stability of care is an important predictor of children's development (Phillips et al., 1991), it logically follows that children in centers that regularly lose and change staff will have a harder time attaching to new teachers and establishing secure teacher-child relationships.

Attachment and Teacher Stability

The National Child Care Staffing Study (NCCSS) (Whitebook, Howes & Phillips, 1990) looked at 227 child care centers in Atlanta, Boston, Detroit, Phoenix, and Seattle and found that high staff turnover had a negative impact on children's development. In centers with high turnover rates (averaging 57%), children were less competent in language development and social skills. Children in these centers spent more time aimlessly wandering and less time engaged in social activities. Only a small percentage of the children in centers with higher turnover rates were attached to their teachers. Thus, this study revealed a connection between staff turnover, program quality, and children's outcomes.

Rosenfeld (1979) has suggested that as turnover rates increase, caregivers shift from relationship-based to custodial-based care (cited in Fleisher, 1985). There is obviously some

relationship-based features that are lost between teacher and child when young children are exposed to multiple changes in their primary caregivers.

Howes and Hamilton (1992 – 2000) have conducted a series of longitudinal studies addressing the link between teacher-child relationships and later child outcomes. In 1992, they observed 72 children from infancy through preschool. Their research question of interest was, “*Do teacher changes in preschool predict teacher-child attachment or developmental changes in security?*” They found that children who changed teachers between 18 and 24 months had significantly lower teacher security scores at 24 and 30 months, compared to children who did not incur a teacher change. This group effect, however, disappeared at all subsequent assessments. Thus, teacher changes negatively affect relationships with subsequent teachers when changes occur between 18 and 24 months, but the effect is not long term.

Social Competence

In 1993, Howes and Hamilton looked at several types of teacher change: teacher changes within a center; teacher changes between centers; and changes in the teacher-child relationship. In their sample of 48 preschoolers, they found that when children had more changes in teachers—and not more changes in center settings—their behaviors were rated more negatively at four years of age. Specifically, children were rated as lower in gregarious behaviors and higher in social withdrawal and aggression as the number of teacher changes during preschool increased. A more rigorous analysis that took age and the quality of the teacher-child relationship into consideration, found that:

- At average age 24 months, more teacher changes were clearly related to more child aggressive behaviors, regardless of the quality of the teacher-child relationships.
- At all data collection points, children in secure relationships were more withdrawn if they changed primary teachers than if they did not, though they fared better than children who maintained or changed into insecure relationships.
- At 30, 36, and 42 months, children who changed teachers were more gregarious and pro-social when they either continued a secure relationship with a new teacher or changed to a secure relationship from an insecure one, and least gregarious/pro-social when they reestablished an insecure relationship with a new primary teacher.
- At 42 months, among children who maintained secure relationships, children who changed teachers played less competently with their peers than children who did not incur a teacher change. In addition, children who changed from a secure to an insecure teacher-child relationship played less when they changed teachers than when they did not.
- This research supports the idea that teachers follow children as they transfer to other age groups. Indeed, some researchers (e.g., Greenspan, 2003; Langlois & Liben, 2003) recommend that caregivers follow children throughout the child care years rather than have children move to different care providers as they get older. By doing this, care providers would be more familiar and in tune with each child’s needs, personality, and styles of interaction.

Preliminary data from the *National Center for Early Development & Learning* (Cryer, 2002) on continuity of care corroborates this finding. Data were collected on about 40 children for three weeks before a caregiver change and compared to data on the same measures for three weeks after the change in caregiver. Surprisingly, children in typical community child care centers were not always distressed at losing their caregiver. They observed that children appear to be completely without distress when they move from a condition where the caregiver is less positively interactive (lower quality) to a new situation where the caregiver is more positively interactive, and where there are more opportunities for interesting stimulation (higher quality). Thus, to understand the effects of provision of continuity of care on children's social-emotional functioning, it is necessary to consider under what conditions and within what contexts that it does so.

Howes, Hamilton, and Phillipsen (1998) further documented the importance of teacher-child relationship quality to children's social competence in their study assessing the stability and continuity in children's relationship quality from infancy to nine years of age. Using a sample of 55 9-year-old children, they found that children's perceptions of their relationships with their current teachers were best predicted by the quality of their attachment relationship with their first teacher. In other words, children who were more secure with their preschool teachers as toddlers were more positive about their teachers at age nine. In addition, children's perceptions of their friendship quality at age nine were best predicted by considering whether they had close friends at age four as well as the quality of their attachment relationship with their first grade teacher. Thus, children who had secure relationships as toddlers thought of themselves as having better relationships with both teachers and friends at age nine.

The Importance of Classroom Social Emotional Climate

Individual child-teacher relationships, and teachers' perceptions of individual children's behavior problems, are constructed within the context of the classroom social-emotional climate (Howes, 2000). The classroom social-emotional climate consists of: (1) the level of aggression and other behavior problems in the group of children; (2) the nature of child-teacher relationships; and (3) the frequency and complexity of play with peers. In this longitudinal study of 307 preschoolers, Howes explored the connection between the classroom social-emotional climate when children were 4-years-old and children's social competence five years later. Attachment theory as applied to the teacher-child relationship was key in this study; it assumes that if a child feels emotionally secure with his or her teacher, the child can use the teacher as a secure base and a resource for exploring the learning opportunities of the classroom (Birch & Ladd, 1997; Pianta, 1998, cited in Howes, 2000). Here's what they found.

- Higher levels of *teacher-child closeness* in preschool predicted:
 - lower levels of aggression and disruption in second grade;
 - to a smaller degree, high levels of prosocial behavior in second grade.
- Higher levels of *teacher-child conflict* in preschool predicted:
 - higher levels of aggression and disruption in second grade;
 - lower levels of prosocial behavior in second grade.

This and the studies described above provide evidence that teacher-child relationship quality has long-lasting implications for children's social development. The new piece of information coming from this study lies in the concept of the social-emotional environment: not only is individual teacher-child closeness a predictor of children's social development, but global teacher-child closeness in the classroom—as a collective experience—has implications for children's later social development, as well.

In 2001, Peisner-Feinberg and colleagues observed 733 children from ages four to eight using the Cost, Quality, and Child Outcomes sample (Helburn, 1995). Teacher-child relationship closeness was used to predict children's cognitive skills, social skills, and academic achievement.

- Higher levels of *teacher-child closeness* in preschool predicted:
 - higher language scores over time regardless of family background;
 - fewer problem behaviors through second grade; though the magnitude of this association declined over time, there was less decline in children whose mothers were less-educated;
 - higher cognitive/attention scores in second grade;
 - higher ratings of sociability through kindergarten.

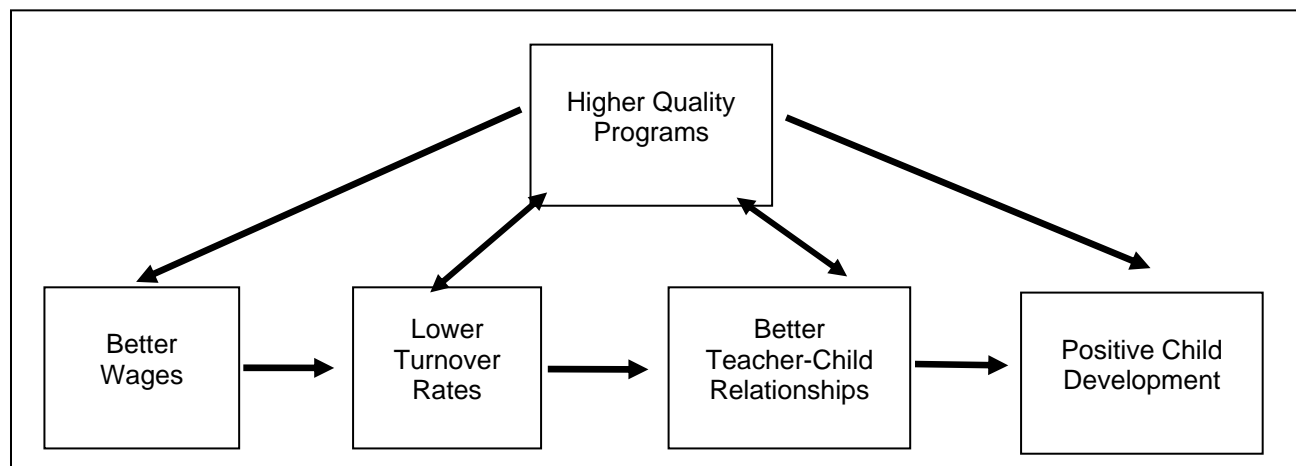
This study replicates findings from previous studies: teacher-child relationship quality predicts children's social development in later years. The exciting piece of this study is the connection established between teacher-child closeness and children's later *cognitive* development. Also, this study examines the role of context in the relationship between teacher-child closeness and child development. Like high-quality child care (e.g., Peisner-Feinberg et al., 1999), the benefits of teacher-child closeness seem to be more profound for children at risk of social and emotional difficulties than for children living in better socio-economic conditions.

Summary

Evidence to support the links between wages, program quality, staff turnover, teacher-child relationships, and child outcomes is provided thus far. Figure 1 graphically depicts these links, with solid arrows indicating links supported by research. These links emphasize the important consequences that child care staff turnover can have for program quality, teacher-child relationships, and ultimately child development.

Figure 1

The Links between Wages, Turnover, Program Quality, Teacher-child Relationships, and Child Development



FACTORS CONTRIBUTING TO TURNOVER

A review of the child care literature indicates a direct link between the quality of child care and the quality of the caregiver’s work environment. The factors affecting the overall quality of child care programs were discussed in the previous section. This section addresses the caregiving work environment. The quality of a caregiver’s work environment is evaluated on such factors as wages and benefits, training and professional development opportunities, frequency of staff meetings, environment safety, and level of support in the workplace. Undoubtedly, the single most important of these factors in recruiting and retaining qualified child care staff is wages and benefits.

Wages

In *Working for Quality Child Care* (Bellm & Haack, 2001), the Center for the Child Care Workforce review a number of influential studies²⁹ on child care staffing. One consistent finding in this literature is that high-quality programs have comparatively high staff wages. With only one exception, these studies³⁰ and the classic *Cost, Quality, and Child Outcomes in Child Care Centers* (Helburn, 1995) find that higher wages separate mediocre programs from good programs. In addition, Phillips et al. (1991) find teachers’ wages to be the most consistent, significant predictor of quality of care among all factors examined; wages predicted both

²⁹ The National Child Care Staffing Study (Whitebook et al., 1990); The National Child Care Staffing Study 1988-1997 (Whitebook et al., 1998); Study of Accreditation in Child Care Centers (Whitebook, Sakai, & Howes, 1997); Then and Now: Changes in Child Care Staffing, 1994-2000 (Whitebook, Sakai, Gerber, & Howes, 2001).

³⁰ With the exception of Howes (1990).

developmental appropriateness of activities and lower child-to-staff ratios. Centers that offered higher wages also provided higher-quality care.

In addition to direct links between compensation to program quality, evidence documents that teachers with higher salaries and benefits also have stronger qualifications and more formal education and specialized training than teachers with low salaries (Barnett, 2003). Numerous studies indicate that teachers' formal education and specialized training in early childhood care and education impacts child care quality (e.g., NICHD Early Child Care Research Network, 2000). Those who contribute the most to rapid turnover are those who have little or no college-level experience or specialized early childhood training.

Most important, however, is the fact that higher wages help attract and retain a competent child care workforce (e.g., Appelbaum, 2001; Whitebook et al., 2001). *“Turnover is directly related to teacher compensation, and preschool programs with the lowest pay have the highest turnover.”* (Barnett, 2003, p.2).

Although large, reputable studies have uncovered direct links between wages and turnover, there is not a clear understanding of the complex process by which wages and other job and personal characteristics affect turnover. This process is rarely clear-cut, even for wages. Although certain factors are particularly relevant for understanding turnover, the measurement of these factors is not consistent in the research literature. Also, this research often focuses on job outcomes other than turnover, such as commitment and satisfaction.

Job Commitment and Satisfaction with Pay

Low wages have been targeted as the main and obvious reason for caregiver turnover rates. However, the associations between wages and turnover have been rather weak. For example, Phillips et al. (1991) found that wages only accounted for 3% to 17% of the variance in turnover for teachers and assistants, respectively. In spite of these low associations, wages were the most important predictor of turnover and job satisfaction. Thus, there must be other significant predictors, or perhaps the relationship between wages and turnover is an indirect one. For example, job commitment might “moderate” or affect the relationship between wages and turnover. If job commitment moderated this relationship, then wages would predict turnover for workers demonstrating low commitment, but not for those demonstrating high commitment.

Findings from Jorde-Bloom (1988) support this idea of job commitment as a moderator. She surveyed 629 early child care center workers from 25 states. She found that actual wages were only weakly related to satisfaction with pay and promotion opportunities, but strongly related to commitment to the organization.

Stremmel (1991) also found a strong connection between job commitment and turnover. Surveying child care workers from 223 centers located in metropolitan areas of Indiana, he found that job commitment explained almost half of the variance (49%) in *intended* job turnover. Satisfaction with pay, promotional opportunities, and perceived availability of job alternatives explained small but significant amounts of variance in intended turnover as well (3% and 1%, respectively). In a more descriptive study, Whitebook et al. (2001) found that teachers who stayed at their center care jobs from 1996 to 2000 earned significantly higher wages than did

teachers who left. This was not true for center directors or teacher assistants, highlighting the importance of distinguishing among center positions when analyzing survey data to predict job turnover.

In contrast, Phillips et al. (1991) found a contradictory relationship between job commitment and both intended and actual turnover. In their study of 1,307 center-based staff, slightly less than half (45%) indicated being ‘very likely’ or ‘somewhat likely’ to leave their job, even when they reported high levels of career commitment. Six months following this survey, 37% of these employees left their job, with only one-third of those who left remaining in the child care profession. According to Phillips et al. (1991), this is evidence that child care workers are satisfied with the intrinsic nature of child care work but dissatisfied with the more extrinsic aspects of compensation and social status.

Perhaps these studies find different relationships between wages, turnover, and job commitment because these variables were measured in different ways, using different populations. Sometimes actual wages were used, other times satisfaction with pay was used; sometimes commitment to the current job was used, other times commitment to the profession was used; and sometimes teacher and assistant positions were combined, whereas other times they were separated. The important information to come away with is that wages do seem to be related to caregiver turnover, in both direct and indirect ways, whereas commitment to one’s job might play another significant role in determining a caregiver’s decision to stay or leave their job.

Although wages are a concern among child care workers, they do not independently account for high turnover rates. Phillips et al. (1991) found that benefits, working conditions, and job satisfaction each contributed to the variation in turnover. Moreover, Fleischer (1985) found that satisfaction with salary was actually higher among 46 child care workers who left their centers than it was among 36 child care workers who were actively working. Perhaps, as Phillips et al. (1991) suggest, it is the reality of low wages, as opposed to satisfaction with wages, which seems to attract child care workers to alternative, higher-paying jobs.

Stress and Burnout

Feeling tired and stressed are common complaints voiced by child care providers. As the day proceeds and the stress levels increase, teachers are less likely to meet the standards for high-quality interactions with colleagues and/or children. Furthermore, occupational stress and the “burnout” that follows have also been shown to influence a caregiver’s commitment to remain in the classroom and the child care or teaching profession (Wisniewski, & Gargiulo, 1997). Because stress is so prevalent in the caregiving environment, it is worthwhile to examine it in more detail.

What are the sources of stress?

The literature provides substantial information about the variables that contribute to the complexity of the work environment and about those specific variables that teachers, in general, report as stressful. In the absence of research about the impact of stress on teachers of young children in the context of the child care setting, research in special education and early childhood

care and education has been analyzed for clues about the links between stress, burnout and turnover in child care centers.

Organizational Structure

One major source of stress is organizational structure and working conditions, in particular *role conflict* and *role ambiguity* (Crane & Iwanicki, 1986 cited in Wisniewski & Gargiulo, 1997). For example, organizations such as child care centers clarify caregivers' expectations by articulating their organizational goals and objectives. A caregiver role is defined, and a supporting structure is provided. Role conflict occurs when the organization provides relevant information about caregivers' roles and responsibilities that conflicts with the realities of daily professional life. Role ambiguity occurs when an educator has insufficient information to carry out professional responsibilities. Specific sources of stress, summarized below, highlight the difficulties that caregivers experience relative to their professional roles and responsibilities.

- Insufficient planning time and long hours necessary to meet either instructional objectives or student needs
- Demands for accountability and excessive paperwork that interfere with classroom responsibilities
- Inadequate instructional support, materials and resources
- Lack of professional satisfaction and opportunities for professional growth
- Limited programmatic structure and options and inadequate program facilities for students with special needs
- Loss of teacher control for designing and implementing curricular practices and other curricular innovations
- Lack of participation and influence in decision making

Professional Interactions

Professional interactions that caregivers develop with other teachers, administrators, and parents are valuable sources of stimulation. These interactions can also be a significant source of stress (e.g. Platt & Olson, 1990 cited in Wisniewski & Gargiulo, 1997). The types of interpersonal interactions caregivers engage in and the environmental supports that they receive will influence their belief that they can directly control the environment for their students. For example, teachers who attribute their own efforts and abilities for the events that occur develop positive attributional patterns and a sense of perceived control – that is, they believe they can influence outcomes. In contrast, teachers who develop negative attributions may attribute what happens as due to factors beyond their control. For example, caregivers or teachers may attribute a child's failure to acquire specific skills to inadequate educational materials, a large class size, or other constraints that interfere with their ability to teach. A perceived sense of being powerless and the excessive controls that may be imposed by the organization lead teachers to question their ability to affect the decision-making process and cause them to question their professional judgment. A supervisor's management style can influence these attributions (see strategies) and can be major sources of stress or a significant factor in the prevention and management of stress.

The types of interpersonal interactions that can serve as sources of stress are as follows:

- Lack of or inconsistent support from school personnel to implement curricular innovations
- Concerns that one is legally responsible for programmatic shortcomings
- Lack of recognition by administrators for a job well done
- Professional isolation and limited opportunities for professional interactions with service providers
- Stressful professional interactions with general educators to bring about inclusion
- “Hassles” and difficulties with administrators involving service delivery issues
- Poor quality of feedback and supervision that addresses teacher concerns
- Stressful interactions with parents and a general lack of parental support
- Parent conferences involving placement decisions

Interactions with Children

Caregivers are not the only ones feeling more stressed as the day progresses. Findings from recent research (e.g., Watanabe, Donzella, Alwin, & Gunnar, 2003) indicate that children in full-day, center-based child care show rises in cortisol, a stress-sensitive hormone, across the day, as compared with home-reared children, who show the typically expected fall in cortisol levels during the day. This increase appears to be age related. Specifically, increases in cortisol appear to emerge over the infancy period, peak in the toddler period, and decrease until they are no longer seen by the early school years. Although 3- and 4-year olds showed the same level of rising stress-sensitive hormone pattern as toddlers, the magnitude of the increase was greater for toddlers. The research also shows that this pattern bears some relation to children’s social behavior and temperament – children who show more frequent and more complex play with peers (i.e., more social competence) are less reactive, whereas children who are more socially fearful relative to age-mates are more reactive. This has important implications for caregiving staff: as children’s stress levels go up, this puts additional strain on teachers to manage the situation. If caregivers understand that being in peer group all day may be stressful and challenging for young children in general, but particularly for children who are shy and anxious, they may be better prepared to deal with it. In turn, they may be more successful at reducing their own stress levels which should promote more responsive and sensitive caregiving.

How does stress lead to burnout?

Stress, real or perceived, is an event that an individual interprets as taxing – an event that is viewed as a hassle. A *stressor* is defined as “the particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (Lazarus & Folkman, 1984, p.19). In complex child care environments, there are a great number of stressful events. Most caregivers are able to cope with the stresses and consequent strains of professional life. However, some caregivers are unable to structure the environment and moderate the sources of stress. For these staff, frequent and prolonged periods of stress produce feelings of emotional exhaustion, a reduction in personal accomplishment, and a sense of professional failure. These symptoms define a condition often referred to as “burnout.”

Three features have emerged in the study of burnout (Maslach & Jackson, 1981 cited in Wisniewski & Gargiulo, 1997): *emotional exhaustion* - the teacher feels there is nothing left to give to others on an emotional or psychological level; *depersonalization* – the experience of psychological detachment and social distancing that disrupts both personal and professional life. For example teachers may distance themselves from their students, develop callous attitudes towards students, parents and colleagues, and develop cynical attitudes towards professional events. Reduced *personal accomplishment* results occur when teachers feel that they are no longer effective in their professional responsibilities. The loss of personal self-esteem or well-being that results frequently lead to reduced professional commitment and a desire to leave the caregiving profession.

How to recognize signs of stress in the caregiving environment

Otto (1986) describes stress as a lack of fit between the external demands of the situation, the external resources and constraints, the internal demands of the individual and the internal resources and constraints perceived by the individual. This emphasizes that stress/burnout is composed of factors within the individual (i.e., personal characteristics) and factors within the organization and nature of the work place (i.e., job setting characteristics). For a review of the findings regarding job setting characteristics related to burnout, see Townley, Thornburg, & Compton, 1991.

Job setting characteristics related to burnout in teachers of young children include:

- low staff-child ratios
- long hours of direct work with children
- lack of regular, meaningful staff meetings
- lack of structure in the program itself
- the novelty and uncertainty of each day
- frustration with barriers that block the road to goals
- pressure to achieve
- continuous separation and loss as children and families move on
- poor compensation
- inadequate training that fosters unrealistic expectations
- unclear methods of evaluation
- demanding scope of the job
- lack of professional standards that promote job security
- perceived inadequacy of space and materials with which to work

Personal characteristics related to burnout in care of young children include:

- stress-tolerance level

- coping and adaptation ability
- Type A behavior pattern (impatient, rushed, competitive, hostile, overcommitted to work)
- stress-prone diet
- level of education

In their sample of 353 early childhood teachers from child care centers in metropolitan areas, Townley and her colleagues (1991) found that teachers who had more education, negative relations with their students' parents, and worked more hours reported higher levels of burnout. Lower wages were not related to burnout, but higher wages were related to feelings of job competence.

Also examining characteristics related to burnout in teachers of young children, Stremmel, Benson, and Powell (1993) surveyed 544 child care staff members from 123 licensed centers in Indiana. They found that lower job satisfaction with work conditions and the work itself could predict burnout in both teachers and assistants (but not directors), and that job satisfaction with compensation was not a predictor of burnout. The key finding in this study is the importance of good communication - staff meetings in particular played a major role in increasing job satisfaction and reducing job stress in these caregivers.

Kelly and Berthelsen (1995) investigated stress among a group of preschool teachers using reflective journals over a two-week period. Common themes on sources of stress included (in order of importance): time pressures (the numerous demands on teachers' time and interruptions to planned time); children's needs (e.g., responding to children with special needs, taking care of sick children, managing behavior, supporting development); non-teaching tasks (e.g., answering phones, doing paper work, purchasing supplies, cleaning, etc.); conflicts between maintaining early childhood philosophy and practice; the sacrifice of personal needs ("being all things to all people"); issues with parents (particularly with changing family structures and employment patterns); interpersonal relationships (see above); and, attitudes and perceptions about early childhood programs (i.e., the dilemma of status). One of the notable features of this study was the clear differentiation between the internal demands which teachers placed upon themselves and the external demands from organizational and social pressures.

PUTTING IT ALL TOGETHER: THE TURNOVER PROCESS

The most definitive study of turnover among child care staff to date captures the turnover process in high-quality child care centers. *Then & Now: Changes in Child Care Staffing, 1994-2000* (Whitebook et al., 2001) followed 75 child care centers in three California communities for 6 years. Centers were NAEYC accredited, seeking accreditation, or were rated high in quality using the nationally recognized ECERS. Although not representative of all child care in the United States, this study is an excellent comparison source for the military as 95% of military child care centers are NAEYC accredited (Campbell, et al., 2000). The following excerpts are taken directly from the study's highlights:

Stability of Teaching Staff

In general, the teaching staff workforce is extremely unstable, even among teachers in high-quality programs. Year-to-year turnover and the inability of centers to replace staff also add to instability. Despite recognition that higher wages contribute to greater staff stability, compensation has not kept pace with the cost of living. The vast majority of teachers cited the improvement of wages as essential to stemming turnover. High staff turnover among colleagues negatively affects teachers' ability to do their jobs, and for some, even contributes to their decision to leave. In spite of the instability and low wages, teaching staff members derive a great deal of satisfaction from their jobs.

Stability of Center Directors

Director turnover is exceedingly high, and even with impressive experience and training, their wages are notably low. The staffing crisis negatively affects directors' job satisfaction and their ability to do their jobs.

Changing Characteristics of the Center-based Workforce

New teaching staffs as a whole were significantly less well-educated than those they replaced. They were also less likely to live in households that met the self-sufficiency standard for their communities. There were no differences in professional backgrounds between former and new directors. When teaching staff and directors leave their centers, only half continue to work in child care. On average, teaching staff working in non-child care related industries earned significantly higher wages (approximately \$4/hour or \$8,000/year more) than those who accepted new child care jobs.

Retaining Skilled Staff

Centers paying higher wages are better able to retain qualified teachers and directors. Highly skilled and educated teaching personnel are more likely to remain at their jobs if they earn higher than average wages, and work with a higher percentage of well-trained teaching staff that also remains on the job.

Sustaining Quality

The proportion of highly trained teaching staff in 2000 is the strongest predictor of whether a center can sustain quality improvements over time. Wages also constitute a significant predictor.

NAEYC-accredited programs, as a group, continue to demonstrate higher overall quality than other non-NAEYC-accredited programs. However, NAEYC-accredited programs did not experience significantly lower turnover among teaching and administrative staff than non-accredited programs in their sample.

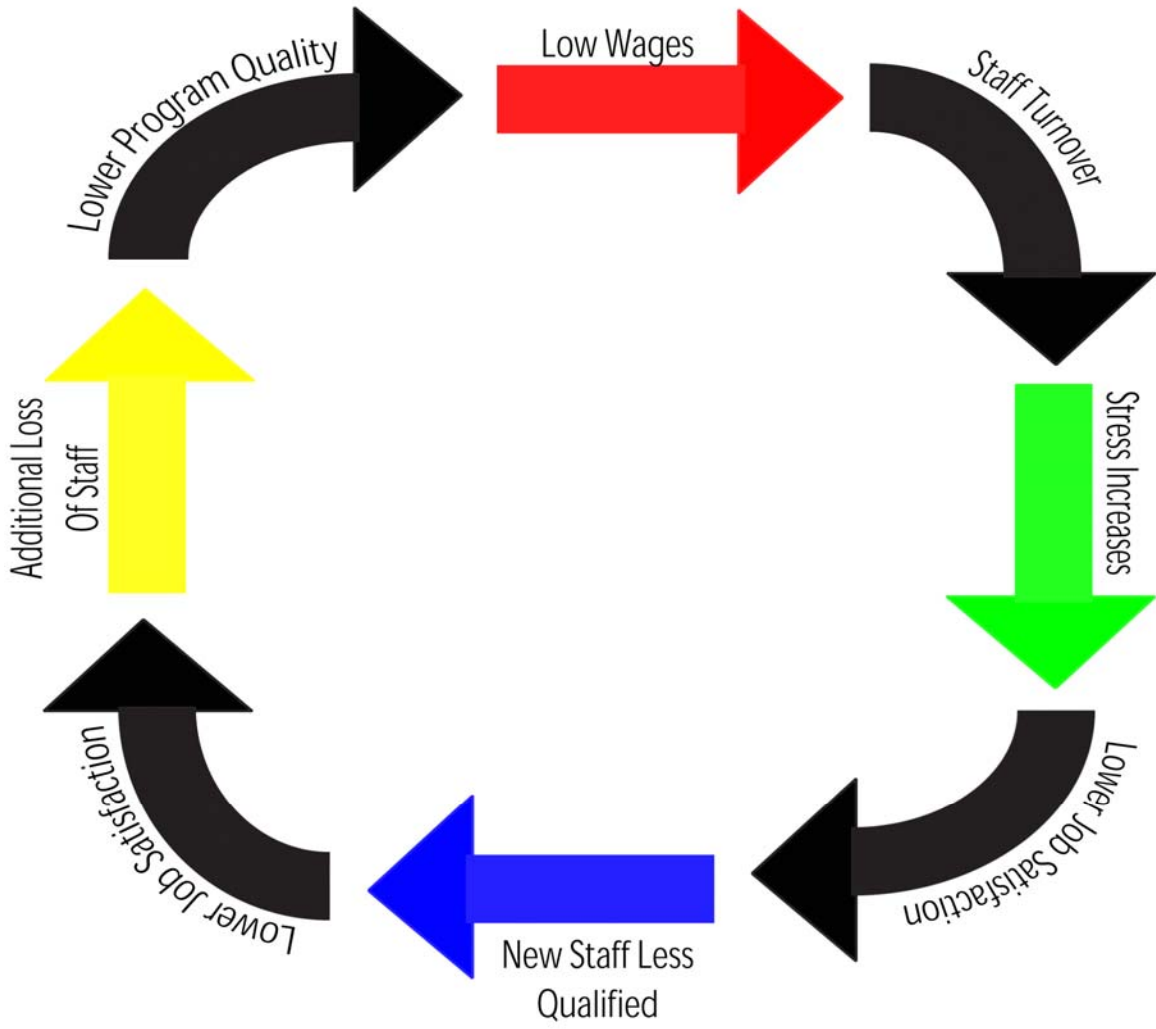
The findings from this study seem to suggest that once started, turnover in child care centers is difficult to control. In this sense turnover might be said to operate in a circular manner where:

- low wages lead to turnover in qualified employees,

Research Overview

- turnover of colleagues leads to job stress for remaining employees,
- job stress leads to lower job satisfaction,
- the hiring of lower-qualified employees further decreases job satisfaction,
- low job satisfaction leads to turnover in remaining qualified employees.
- turnover leads to lower program quality

Figure 2
The Turnover Cycle



COMPARATIVE ANALYSES

COMPENSATION IN MILITARY CDCS

This section of the report concerns itself with the compensation of child care staff in DoD's CDCs. Because the MCCA requires competitive compensation, it is important to compare CDC caregiving positions to military and civilian jobs that are similar in terms of content, qualifications, lifestyle, wages, and benefits. Using available national data, we identified jobs to use as "benchmarks" for CDC positions. In the following sections, we identify the processes used to select benchmark jobs. We then present the results of our comparisons, for military and civilian benchmark jobs, separately. Prior to examining the compensation packages offered by these military CDCs, however, it is helpful to understand the source of funding for military CDCs and the staffing structure they maintain.

Pay Structure and Funding Sources for Caregiving Positions in CDCs

Funding for Military Child Care

Military CDCs are one of four main components of a comprehensive DoD Child Development System (CDS). The other components include Family child care (FCC), School-age care (SAC) and Resource and Referral programs (R&R). Funding for each component comes from two sources: (a) appropriated funds (APFs) authorized by the Congress of the United States; and (b) non-appropriated funds (NAFs) generated from child care fees paid by users of child care services provided at military CDCs that are based on total family income (TFI).

According to Military Family Act, Public Law 104-106 (Feb 10, 1996), "it is the policy of Congress that the amount of APFs available during a fiscal year for operating expenses for military CDCs shall be not less than the amount of child care fee receipts that are estimated to be received by DoD during that fiscal year." APFs account for approximately 60% of total center program costs and cover such items as civilian pay and benefits, travel, training, supplies, equipment, and contracts. NAFs account for almost 40% of total program costs while covering compensation and benefits of child care employees who are directly involved in providing child care and food-related expenses not paid by USDA or DoD APFs and consumable supplies. Child care employees who work in military CDCs are civilian employees of the DoD, regardless of whether they are paid from APFs or NAFs.

General Schedule (GS) Employees

Caregiving staffs paid from APFs are governed by the provisions set forth by Title 5, United States Code (U.S.C.) for GS positions in the Federal service. The GS system is a classification and pay system covering most white-collar civilian Federal employees in professional, administrative, technical, clerical and protective occupations. Salary rates for most GS positions are based on surveys of private sector salary rates conducted by the U.S. Department of Labor (DoL). The laws governing APF GS employees are administered by the U.S. Office of Personnel Management (OPM), which deals with all aspects of civilian personnel management and administration in the Federal sector. OPM develops standards by which GS jobs are classified and administers retirement, health, and life insurance programs, and adjudicates position classification appeals. The *Handbook of Occupational Groups and Series* defines each

occupational group and series established by the OPM. Position classification standards provide guidance and criteria for determining the proper classification for positions in specific occupations. OPM standards cover primary characteristics that are common to all kinds of work such as:

- nature and variety of the work;
- difficulty of the work;
- extent of supervisory controls over the work;
- qualifications required to do the work.

Positions in the GS are defined by *occupational group*, a group of related occupations; *series*, subdivisions of occupational groups based on similarity of work and qualifications; and *grade*, a numerical designation, GS-1 through GS-15, that identifies the range of levels of difficulty, responsibility, and qualification requirements. Occupational series in the GS are normally divided into two categories – those covering one-grade interval work and those covering two-grade interval work. For example, the typical grade range for one-grade interval occupations is GS-2 through GS-8. Two-grade interval series follow a two-grade interval pattern up to GS-11 (i.e., GS-5, 7, 9, 11). The use of grades GS-6, GS-8, and GS-10, while not prohibited in two-grade interval series is unusual and not in the normal grade pattern for such work. Some series, however, are a mix of duties and responsibilities and include both one- and two-grade interval work, as noted below.

Each GS grade has 10 steps. Within-grade increases (WGIs) or step increases are periodic increases in a GS employee's rate of basic pay from one step of the grade of the position to the next higher step of that grade. By law,³¹ three requirements are necessary to earn WGIs: (a) the employee's performance must be at an acceptable level of competence; (b) the employee must have completed the required waiting period for advancement to the next higher step; and (c) the employee must not have received an equivalent increase in pay during the waiting period. Advancements from step 1 through to step 4 require 52 weeks of creditable service in each step (e.g. advancement from step 3 to step 4 requires 52 weeks of creditable service in step 3). Advancement from step 4 through step 7 requires 104 weeks of creditable service in each step, and advancement from step 7 through step 10 requires 156 weeks of creditable service in each step.

At this time, there is not a specific caregiving position in the GS system. Instead, GS caregivers fall into the generic 1702 series described in the *Handbook of Occupational Groups and Families*. A complete position Classification Flysheet for this series can be found in Appendix B. A brief description follows:

³¹ www.opm.gov/oca/pay/html/wgifact.htm

GS-1702 – Education and Training Technician Series

This series includes positions that involve nonprofessional work of a technical, specialized, or support nature in the field of education and training when the work is properly classified in this group and is not covered by a more appropriate series. The work characteristically requires knowledge of program objectives, policies, procedures, or pertinent regulatory requirements affecting the particular education or training activity. Employees apply a practical understanding or specialized skills and knowledge of the particular education or training activities involved, but the work does not require full professional knowledge of education concepts, principles, techniques, and practices.

The 1702 Education and Training Technician Series is an example of an occupational series that includes both one- and two-grade interval work. Those positions that involve the performance of one-grade interval work are covered under Clerical and Administrative Support qualification standards; those that involve the performance of two-grade interval work are covered under Administrative and Management qualification standards. One of the major differences between the two standards is the amount of education and/or experience required to qualify for positions covered by each standard. For example, a GS-5 position covered under Clerical and Administrative Support standards does not require a bachelor’s degree whereas a GS-5 position covered under Administrative and Management standards does.

To compensate for the lack of precision in defining caregiver positions, the services have created their own job descriptions and standards following the guidelines of the GS-1702 series. Refer to Appendix C for an example of the Navy’s adaptation of the GS-1702-4 Education Technician position for GS caregivers. All GS employees are eligible to receive benefit packages except for temporary employees, whose appointments are limited to 1 year or less or who are expected to work less than 6 months in each year, and intermittent employees, or non-full time employees without a regularly scheduled tour of duty.

NAF Employees

NAFs generated by child care fees are government funds that are separate and apart from funds that are recorded in the books of the Treasurer of the United States. As outlined in the *Personnel Policy Manual for Nonappropriated Fund Instrumentalities*,³² these funds are used for the collective benefit of military personnel, their dependents, and authorized civilians who generated them. NAF employees are Federal employees within the DoD. As such, all recruitment, selection, placement, promotion, and other staffing NAF personnel actions must comply with applicable employment laws and regulations. This includes Equal Employment Opportunity (EEO) requirements and provisions of the Fair Labor Standards Act. Employment policies, position classification, pay, and allowances for NAF personnel can be found in the *DoD Civilian Personnel Manual*.³³

The DoD NAF payband system is the biggest single difference in the APF and NAF rules governing employee classification and pay. Pay banding involves the establishment of several

³²Office of the Assistant Secretary of Defense (Force Management and Personnel) December, 1988

³³ Office of the Under Secretary of Defense for Personnel and Readiness; DoD 1400.25-M, 1996

broad salary ranges. Pay Systems for DoD NAF child care employees are covered under a separate Child Care (CC) Payband System implemented in consonance with Chapter 88 of 10 U.S.C. “Military Family Programs and Military Child Care” and DoD Instruction 6060.2 “Child Development Programs.” Unlike GS caregiving positions, all NAF positions have a standard description and set of requirements common to all Services. The CC Payband system covers NAF Child Development Program Assistants, Leaders, and Technicians. There are two pay bands or grade levels, CC-I and CC-II. The range in pay for CC-I child caregiving positions is equal to the hourly rate of pay for a GS-2, Step 1, through GS-3, Step 10, whereas the range in pay for CC-II child caregiving positions is equal to the hourly rate of pay for a GS-4, Step 1, through GS-5, Step 10. Pay rates prescribed for GS child caregiving positions also apply. The complete classification and pay system for these positions can be found in Appendix D.

Several categories of employment exist within the NAF system. Regular NAF employees serve in continuing positions (i.e., positions without specific time limitations) and have a regular schedule of not less than 20 hours per week. All regular full-time (RFT) caregivers are eligible to participate in NAF health, retirement, insurance, and other benefit programs and receive the same training package standard to GS employees. Regular part-time (RPT) caregivers serve in continuing positions on a scheduled basis for 20-39 hours a week. RPT caregivers are also eligible to participate in benefit plans and accrue annual and sick leave. Flexible employees serve in either continuing or temporary positions and are usually hired on an “as-needed” basis. Flex caregivers are not eligible to receive benefits, and, although they are required to receive the same training as regular caregiving staff, it may take them longer to complete the required orientation and training modules due to their working fewer hours.

Currently, about one third of all CDC caregivers are classified as GS employees, and about two-thirds are classified as NAF employees). About 60% of all caregivers receive benefits; this includes all GS employees and regular NAF employees. Thus, about 40% of all CDC caregiving staffs—paid with NAFs—do not receive benefits. These NAF employees are most likely flex workers.³⁴

DoD NAF Employee Wage Plan

The NAF employee wage plan implemented in response to the MCCA of 1989 was designed to decrease staff turnover and to enhance the quality of staff in military CDCs. Entry-level employees are to be paid at rates of pay competitive with other entry-level employees at that installation drawn from the same labor pool. Rates of pay for other CDC employees are to be substantially equivalent to other installation employees with similar training, seniority, and experience.

Pay increases and promotions are tied to completion of training, which is a condition of employment. It is DoD policy that training, education, and experience shall influence progression from entry level to positions of greater responsibilities. To this end, each CDC is responsible for implementing a training program for all caregiving personnel. These training programs are directly linked to wages and promotion. They include, orientation, initial training (36 hours to be completed with 6 months of beginning work), and ongoing annual training

³⁴ Reference annual report OCY referred to in personal communication dated May 10, 2002.

consisting of various employee training modules. These modules are based on the Child Development Associate (CDA) Credential competencies in 13 functional areas. An example of the Army Child Development Center Foundation Training Topics for Entry Level Staff can be found in Appendix E.

Summary of differences between GS and NAF systems

In sum, competitive service or GS positions are very different from NAF positions. The 1998 Rand report does an excellent job of capturing the flavor of these differences (Zellman & Johansen, 1998). Since GS and NAF positions fall under different administrative entities, hiring, working conditions, promotions, and retentions in these jobs must comply with different rules. In particular, the GS system rewards education, training and experience differently than the NAF system. Overall, NAF positions are less well paying than GS positions, and the NAF system is less bureaucratic than the GS system. NAF positions allow employers a good deal of flexibility in hiring, firing, scheduling, and promotions, but they also can contribute to high turnover rates among employees. GS positions generally pay better, provide more benefits and greater job security. One of the results of this security, however, is that it can be very difficult to dismiss poor performers since they must go through the normal civilian grievance procedure, which can be a lengthy process. Use of GS employees generally results in a more motivated, professional and stable workforce, however. Another difference is the way that the two systems handle raises - GS employees receive automatic raises based on job tenure; NAF employees should receive automatic raises based on job turnover, however this requirement is not consistently applied across installations.³⁵

CAREER COMPARISONS:

MILITARY CHILD CARE VERSUS MILITARY BENCHMARK JOBS

As all DoD employees are paid according to the GS level their job occupies—including NAF employees—this comparison between DoD jobs focuses on job content and employee qualifications. The information presented in this section will enable you to answer such questions as, “Do CDC caregivers classified as GS-3 employees have jobs requiring similar training, knowledge, and tasks as other DoD GS-3 positions?”

Selection of Military Benchmark Jobs

The DoD jobs most comparable to CDC caregiving positions are those occupied by employees of the Department of Defense Dependents Schools (DoDDS). DoDDS employees are responsible for caregiving, monitoring, teaching, and/or maintaining the welfare of children. In all, we selected the following DoDDS benchmark jobs:

- monitor
- lead monitor

³⁵ Personal communication dated January 8, 2004 with Barbara Thompson, Senior Program Analyst, DoD Office of Child and Youth.

Comparative Analyses

- health aide
- health technician
- education aide
- library technician
- education technician
- school support assistant (a)
- pre-kindergarten and kindergarten teachers

Appendix F contains detailed descriptions of all DoDDS benchmark positions.

Military Data Sources

Job descriptions and qualifications for DoDDS positions were gathered from several sources. The DoDEA classification and compensation section of the Personnel Center³⁶ was used to provide the job details for most benchmark positions (Nelson & Gould, 2001). Job information for substitute teachers was obtained by a report from the American Federation of Teachers.³⁷ Additionally, we collected details from job announcements using the search engine in USA Jobs.³⁸ Job announcements for these DoDDS positions helped to confirm descriptions and qualifications. Job announcements also helped to confirm pay for those not tied to the GS pay system (i.e., Pre-kindergarten/Kindergarten teachers and substitute teachers).

Assignment of Global Work Levels

In addition to comparing the content and qualifications of both CDC and DoDDS positions, we compare the overall occupational level—or “global work level.” The DoL and the Bureau of Labor Statistics (BLS) have created a way to measure the global work level, or status, of a job. They use a standard set of criteria to rate over 1,000 specific occupations on nine job factors, including:

1. Knowledge
2. Supervision received
3. Guidelines
4. Complexity
5. Scope and effect
6. Personal contacts
7. Purpose of contacts
8. Physical demands
9. Work environment

³⁶ <http://www.odedodea.edu/pers/classcomp/pds.htm>

³⁷ <http://www.aft.org/research>

³⁸ <http://www.USAjobs.com>

For a detailed description of each job factor and its ratings, see Appendix G. Points are assigned according to criteria listed above to arrive at an overall global work level. There are 15 possible global work levels. Overall, lower global work levels (e.g., 1 through 5) are found in lower-paying occupations and higher global work levels (e.g., 6 through 15) are found in the higher-paying occupations. Child care global work levels range from 1 to 8 in the 2002-03 edition of the *Occupational Outlook Handbook*.³⁹

We rated each CDC⁴⁰ caregiver and DoDDS⁴¹ position on the nine job factor criteria, based on descriptions of responsibilities and requirements. These ratings were entered into a program on the BLS web site⁴² that calculated the overall work level for each position. The nine job factors are differently weighted, and the final score—or global work level—reflects the occupational status of the position. Appendix H features a table listing each NAF caregiver position and its ratings on job factors and global work levels; Appendix I features the same information for each DoDDS position. These global work levels allow a more macro-comparison between jobs.

GS-2 Level Comparisons

The *Child Development Program Assistant, Entry-Level* position is compared with the DoDDS position of *Monitor*. Refer to Table 6 for brief descriptions of these positions.

Although the work of both CDC caregivers and Monitors can be characterized as simple and routine at the GS-2 level, entry-level CDC caregivers were assigned an overall occupational work level rating of 1 whereas Monitors were assigned an overall occupational work level rating of 2. In other words, the GS-2 caregiver position is rated slightly lower in occupational status than the GS-2 Monitor position. In terms of the 9 job factor criteria that determine the global work levels, CDC caregivers were rated a “1” for “supervision received” which represents the lowest level indicating that they are very closely monitored; Monitors received a rating of “2” which suggests that they are able to handle on-going assignments on their own with the supervisor making decisions. The only other criteria on which these positions were rated differently was “purpose of contacts”. Here again, CDC caregivers received the lowest rating of “1” reflecting a fairly limited degree of responsibility in this area which is merely to obtain or deliver information. In comparison, Monitors received a slightly higher rating reflecting their planning and coordinating responsibilities. On the other hand, CDC caregiver education/experience requirements are a bit more stringent than those for Monitor; caregivers are required to have a high school diploma and to complete on-the-job-training program, whereas Monitors are given the option to apply with either a high school diploma or three months experience.

In sum, although the tasks are simple and routine for both positions at the GS-2 level, it would appear that the Monitor position requires some specialized knowledge or skill whereas as no

³⁹ U.S. Department of Labor, Bureau of Labor Statistics, 2003-03 edition. See <http://www.bls.gov/oco/>

⁴⁰ Ratings were assigned by Barbara Thompson, Senior Program Analyst, DoD Office of Child and Youth.

⁴¹ Ratings were assigned by the authors, with the help of DoDEA personnel.

⁴² Refer to the public data query for the National Compensation Survey at:
<http://146.142.4.24/labjava/outside.jsp?survey=nc>

previous experience is required for the CDC caregiver position. Supervision of GS-2 caregivers is highly emphasized in their job description, whereas it is less apparent in the description for Monitor. Finally, Monitors are required to function at slightly higher levels than CDC caregivers in the area of communications.

GS-3 Level Comparisons

The *Child Development Program Assistant, Intermediate-Level* position is compared with the DoDEA positions of *Lead Monitor* and *Health Aide*. Refer to Table 6 for brief descriptions of these positions.

CDC caregiver work, which may be less routinized than that of the DoDDS positions, requires less education and experience and more on-the-job training. CDC caregivers rated the same in global work level compared to the GS-3 benchmark position of Lead Monitor but lower in work level compared to Health Aide. The lower education requirements of CDC caregivers compared to these DoDDS employees most likely contribute to this lower global rating. Although caregivers require less education and experience than these DoDDS positions, they require more on-the-job training.

As for the nature of job tasks, CDC caregivers seem to perform less routinized work than these benchmark DoDDS positions; they are able to have some creative freedom in their daily tasks, drawing on their knowledge and skills. Although Health Aides perform more step-by-step tasks, they require more technical knowledge than CDC caregivers to do these tasks.

The CDC intermediate-level caregiver position and the position of Health Aide are comparable in that they both are support positions performed under strict supervision. In addition, these two positions do not appear to come with supervisory tasks. In contrast, the Lead Monitor position is characterized by more supervisory duties, such as scheduling and assigning the work of other monitors and assisting with various personnel issues. Lead Monitors also do not appear to receive as much direct supervision.

In sum, at the GS-3 level, CDC caregivers and Lead Monitors would appear to function at similar levels of overall responsibility but with different job tasks. Health Aides are rated higher than caregivers at the GS-3 level mostly as a result of more responsibility for knowledge required and fewer guidelines received.

GS-4 Level Comparisons

The *Child Development Program Assistant, Target-Level* position is compared with the DoDEA positions of *Health Technician*, *Education Aide*, and *Library Technician*. Refer to Table 6 for brief descriptions of these positions.

When the target-level CDC position is compared with the GS-4 benchmark positions, results vary along with their technical nature. While three of the four GS-4 Level positions are rated at global work level 5, the Health Technician is rated at global work level 4. This would seem appropriate given that the CDC target level position is rated higher than the Health Technician in complexity, scope and effect and physical demands. However, both the Health Technician

position and the Library Technician position require more technical knowledge and expertise than CDC target level caregivers. In addition, both appear to emphasize more responsibility and autonomy than the CDC position. Finally, while Library Technicians require more experience *or* more education than CDC caregivers, they are not required to possess both. However, the Library Technician interfaces less with the public than does the CDC target level caregiver as indicated by the Library Technician's lower ratings in personal and purpose of contacts.

The duties and requirements of an Educational Aide are the most similar to those of caregivers in a CDC. The job description of CDC target-level caregivers includes minor supervisory duties over lower-graded employees, but this same level of supervision is not apparent for the Education Aide. In addition, the CDC position is rated higher than the Education Aide in scope and effect (i.e., the work of the caregiving position affects the entire program operation versus the work of the Educational Aide which just impacts future processes). As well, the caregiving position is rated higher in work environment (i.e., indicating they are exposed to moderate as opposed to everyday risk).

In sum, for 2 of the 3 DoDDs position at the GS-4 level, CDC caregivers are rated as equal in overall occupational level. They are rated higher than the DoDDs Health Technician position mostly due to the more complex nature of their jobs and to the degree of physical exertion required.

GS-5 Level Comparisons

The *Child Development Program Assistant, Leader-Level* position and the *Child Development Program Technician* position are both compared with the DoDEA positions of *Education Technician* and *School Support Assistant (A)*. Refer to Table 6 for brief descriptions of these positions.

The two CDC positions in this category form part of a child care career ladder. That is, a requirement for the leader-level caregiver position is to have 12 months experience that is equivalent to target-level caregiver work (see GS-4 section). Building from this, a prerequisite for the caregiver technician position is to have 12 months experience equivalent to leader-level caregiver work. Thus, although both of these CDC positions are classified within the same GS-5 grade level, the caregiver technician position rates higher in overall occupational level compared with the leader-level caregiving position.

Although the CDC positions in this category generally require more education and/or experience than the DoDDS benchmark positions, these positions all share the same pay level and (when taking into account both leadership role and technical expertise) require a similar amount of responsibility and autonomy. Within the GS-5 grade level, the leader-level caregiver position rates lower in global work level than the DoDDS Education Technician benchmark position, whereas the higher-rated caregiver technician position rates the same as the Education Technician and higher than the School Support Assistant (A). While the first comparison position, that of the Education Technician, specifies the same experience requirement as the Child Development Program Assistant, Leader Level (12 months experience at least equivalent to the GS-4 level), the Child Development Program Assistant position requires an Associates of Arts degree in addition to this experience requirement. In contrast, the experience requirement of

the Education Technician is lower than that of the Child Development Program Technician position, which requires 12 months experience equivalent to a GS-5 (leader level) work.

The leader-level caregiver position and the first DoDDS benchmark position (Education Technician) require a similar amount of experience. However, the leader-level caregiver position requires more education, specifying the need for an Associates of Arts degree. On the other hand, the higher-rated caregiver technician position requires more education *and* experience than the Education Technician benchmark position.⁴³

Unfortunately, the education and experience requirement information that we were able to obtain on the second DoDDS benchmark position (School Support Assistant (A) was quite vague, stating only that "knowledge and skill to perform duties" is required. Such vague wording may imply a great deal of flexibility in the requirements for this position. However, without more detailed information, it is impossible to make specific comparisons with the child care positions using this particular comparison criteria (i.e., education/experience requirements).

The job descriptions of the CDC positions in the GS-5 grade level describe more leadership-oriented tasks than those of the comparison positions. On the other hand, the DoDDS comparison jobs appear to require specialized technical knowledge. Taking these issues into consideration, the on-the-job expectations of CDC Program Assistant, Leader Level and the DoDDS School Support Assistant (A) position appear to be rather comparable in their overall level of responsibility and level of technical expertise required. However, the Child Development Program Technician position would appear to have more supervisory responsibilities, more autonomy, and greater responsibility for the design, implementation, and day-to-day functioning of an overall program than the DoDDS Education Technician position.

In sum, wider disparity between the occupational level ratings exists at the GS-5 level than at lower levels. The lower leader-level CDC caregiver position is rated as equal in overall occupation level to the DoDDS School Support Assistant A (both are rated as "7"), which appears consistent with our analysis of these positions. However, the higher level CDC technician position is rated as equal in overall occupational level to the DoDDS Education Technician position (both are rated as "8"), which seems inconsistent based on the higher level functioning of the CDC position.

Additional GS-5 Level Comparisons

The *Child Development Program Technician* position is compared with the DoDEA positions of *Teacher (Pre-kindergarten)* and *Teacher (Substitute)*. The CDC program technician position was chosen for these comparisons and not the leader-level CDC program assistant position (although both are classified as GS-5) since it reflects the highest overall occupational level in the child care career ladder. Refer to Table 6 for brief descriptions of these positions.

⁴³ While the Educational Technician position specifies that four years of education beyond high school may be substituted for the 1 year experience requirement, this is a substitution option and not a primary requirement of the job.

Child Development Program Technician and Teacher (Pre-kindergarten)

Both the CDC caregiver position and the pre-kindergarten position fall under the GS Education Group occupational series. However, the caregiving position is classified as a GS-1702 Education and Training Technician Series whose qualification standards are covered under Clerical and Administrative Support Positions whereas the pre-kindergarten position is classified as a GS-1701-General Education and Training Series whose qualification standards are covered under Professional and Scientific Positions. Thus, in terms of basic minimum or entry-level educational requirements for all grades, the pre-kindergarten position requires the successful completion of a Bachelor's degree from an accredited college or university with a major in the appropriate field (e.g., ECE) compared to the CDC position which requires an Associates of Arts degree in ECE (i.e., 2 years above high school). In other words, the pre-kindergarten position requires full professional knowledge of the subject whereas the CDC positions involve nonprofessional education or training work. Most DoDDS teacher positions also require a valid professional certificate or state teaching license. The difference in educational requirements is probably the reason why the DoDDS position has a higher global rating for knowledge (i.e., a rating of 5) than the CDC position (which is rated as a 4).

It is difficult to directly compare experience between the two positions. The CDC position requires 12 months experience equivalent to the CDC Program Assistant, Leader level (which in turn requires 12 months experience equivalent to Target level-GS-4 work) in addition to the educational requirement. For the pre-kindergarten position, 2 years of full-time experience teaching pre-kindergarten can substitute for 3 semester hours of the required ECE course work. And, in addition to the 4-year bachelor's (or higher) degree, according to most teacher positions advertised in the Department of Defense Education Activity(DoDEA)/Domestic Dependent Elementary and Secondary Schools (DDESS) system, educators receive credit for up to 5 years teaching experience for nonfederal schools and receive credit for all teaching experience with DoDDS schools. Compensation is based on experience/degree and is in accordance with the DDESS Teacher Salary Schedule, which provides different pay "lanes" beginning with the bachelor's degree and progressing up to the doctorate degree level. For example, typical advertised annual salary ranges for teacher positions are as follows:

- Bachelors degree: \$31,059 - \$60,818;
- Masters degree: \$35,539 - \$65,299;
- Doctorate degree: \$45,592-\$75,352.

Compare this to the entry level (GS-5, step 1) and maximum earning potential (GS-5, step 10) for the CDC program technician position, which is \$10.89/hour or \$22,651/year and \$14.16/hour or \$29,453/year (2002 rates) respectively. Similar parallels can be found in the civilian sector (e.g., preschool teachers earn less than kindergarten teachers who earn less than elementary school teachers).

A comparison of job factors for the two positions indicates that, in addition to education, the pre-kindergarten position received higher global ratings in "complexity" (5) than the CDC caregiver position (4), particularly with respect to solving problems and making decisions without precedent. However, the CDC caregiving position received higher global ratings for "work environment" than the pre-kindergarten position (2 vs. 1) suggesting that work at a military CDC

requires more risk involving special safety precautions than does work in a pre-kindergarten setting. The caregiving position also was rated higher in “supervision received” (4) than the DoDDS pre-kindergarten position (3) suggesting that CDC caregivers have slightly more autonomy in defining deadlines and planning tasks. However, according to the major duties and responsibilities listed for each position, it would appear that the pre-kindergarten teacher emphasizes more overall independence with respect to developing and implementing lesson and/or activity plans than does the caregiving position although the tasks defined for each position are remarkably similar. On the other hand, the caregiving position may involve more supervision and training of lower level staff than the pre-kindergarten position.

The Overall Global occupational level rating for the DoDDS pre-kindergarten teacher position is rated as a 9 (the published national rating ranges from 5 to 9) compared to the CDC program technician position, which is rated as an 8. Note, too, that GS-5 is the maximum grade for CDC caregiving positions but the entry grade for teacher position descriptions (see Professional and Scientific Position Qualification Standards). Educators with graduate-level education or an appropriate combination of education and experience can qualify for positions at higher grade levels (GS-7 through GS-11).

Child Development Program Technician and Teachers (Substitute)

Currently, the DoDEA classification and compensation section does not list a separate educator standard position description for substitute teacher. Thus, within the Educator Positions, the substitute position is classified as a teacher (GS-1710 -Education and Vocational Training or GS-1701-General Education and Training Series) with qualification standards falling under Professional and Scientific Positions. As such, the minimum qualifications required are a bachelor’s degree (in education) from an accredited college or university. Most advertised positions also require that the applicant be certified or eligible for certification. As a result, the substitute teacher position global rating for knowledge is 5, identical to that of the pre-kindergarten position and higher than that of the CDC program technician position, which is rated as a 4.

Although the substitute position does not differ from the teacher position in series and grade, it does differ in terms of compensation. Substitute teachers are paid on an hourly basis and are considered as part-time, temporary positions. As such, they are paid only for hours worked. Although they are entitled to overtime, they are not eligible for the benefit package that regular employees enjoy. That is, they are not eligible for holiday pay or retirement coverage and/or health and life insurance (unless prior employment has been in a covered position and there has not been a break in service of more than 3 days), nor do they accrue annual or sick leave. They are subject to Social Security and Medicare deductions. Rather, the employment status of substitute teachers is considered “intermittent”; they are considered local hire appointments whose employment is contingent upon availability of manpower spaces, funds, and management needs at the beginning of the school year. The job postings for substitute teacher positions as of March, 2003 indicate that the salary ranged from a low of \$7.50/hour to a high of \$13.00/hour with the majority of the positions paid at the midpoint of this range (i.e., \$10.50).⁴⁴

⁴⁴ In 1 of 7 job postings, the salary ranged from \$7.50 - \$10.00 according to level of education attained: High School Diploma or GED (\$7.50 per hour); Associates Degree (\$9.38 per hour) or Bachelor’s Degree (\$10.00 per hour).

Because of the temporary nature of the position, the substitute teacher is rated at the lowest global work level (1) for the job factor “scope and effect” and considerably lower than the CDC caregiver position which is rated at a work level of 4. This indicates that their work has little impact beyond the immediate organization whereas the work of CDC caregivers (and pre-kindergarten teachers) impacts a much broader audience and affects activities and operations that extend to other establishments. Substitute teachers are also rated lower in “supervision received” compared to CDC caregivers (2 vs. 4), which further reinforces that these positions lack any responsibility for decision-making and planning. The Overall Global occupational level rating reflects these lower work level ratings and currently, the DoDDS substitute teacher position is rated as a 7, which is less than the 8, accorded to CDC caregivers.

In sum, comparisons between the DoDDS pre-kindergarten position and the highest level child care position in a military CDC give the edge to the pre-kindergarten position. The higher professional knowledge requirements, more complex decision-making and greater independence of the pre-kindergarten position supports its higher occupational status and attests to the different roles and patterns of responsibility in the two working environments. Equally justified is the lower occupational rating given to the DoDDS substitute teacher position compared to the CDC caregiver technician position given its very narrow operating responsibilities and limited scope.

Table 6
Comparative Job Features of CDC Child Care and DoDDS Benchmark Positions

	Global Work Level	Education and/or experience	Knowledge required/Major duties
GS-2			
Child Development Program Assistant, Entry Level.....	1	<ul style="list-style-type: none"> • High school diploma AND • Completion of mandatory training 	The entry-level Child Development Program Assistant performs simple and routine child care tasks following step-by-step instructions. Little or no previous training experience is required. Work is reviewed in detail while in progress, and upon completion, to ensure and assess trainee’s progress and to evaluate attainment of training objectives and readiness for further training. Training will be of a progressively more responsible and specialized nature associated with the child care and development operations. These duties are performed to increase knowledge of the child care duties and responsibilities and to develop skills for advancing to higher level positions.
Monitor.....	2	<ul style="list-style-type: none"> • High school diploma OR • 3 months experience 	The Monitor performs simple and repetitive lunchroom, recess, classroom, and bus monitoring duties in a DoDDS school. In performing some or all of these duties, the safety and welfare of the students are the primary concern. The monitor identifies and reports known or suspected problems, issues, or concerns to the appropriate staff, faculty member, or other official (e.g., military police) in accordance with established policies and procedures. Within this position, some specialized knowledge and skill (e.g., behavior control techniques and non-physical discipline practices) is required.

Table 6, cont'd...

	Global Work Level	Education and/or experience	Knowledge required/Major duties
GS-3			
Child Development Program Assistant, Intermediate Level.....	3	<ul style="list-style-type: none"> 6 months experience, and completion of 3 child development modules OR 15 semester hours in child care or related field OR Completion of secondary vocation program in child care 	The intermediate level Child Development Program Assistant performs major target-level duties and responsibilities, while working under the close supervision of the supervisor or other qualified higher-graded employees who make assignments of specific basic tasks, provide detailed initial instructions, and are available for guidance and advice on all aspects of the work to be accomplished.
Lead Monitor.....	3	<ul style="list-style-type: none"> 6 months experience OR High school diploma plus 1 year of education beyond high school (30 semester or 45 quarter hours) 	In addition to regular Monitor duties, the Lead Monitor is responsible for setting the work pace for other monitors, scheduling and assigning work, instructing on several basic routine tasks, approving short periods of leave, providing input to performance appraisals, and resolving minor complaints. Extending beyond the specialized knowledge and skill requisite of Monitors, Lead Monitors must also possess the knowledge and abilities required to perform the tasks described above.
Health Aide.....	4	<ul style="list-style-type: none"> Knowledge and skill to perform duties 	The Health Aide performs routine and emergency first aid in support of the school nurse. They must perform their assigned duties in addition to helping other staff. Tasks may include washing wounds and other established Red Cross first aid procedures. This individual maintains student health records and assists with student "sick call." They also administer students' medications provided by the parents, assist with supply management, arrange health-related presentations, and perform various other support-tasks related to the job. This position requires knowledge and skill to perform the above tasks.

Table 6, cont'd...

	Global Work Level	Education and/or experience	Knowledge required/Major duties
GS-4			
Child Development Program Assistant, Target Level	5	<ul style="list-style-type: none"> 6 months experience equivalent to intermediate level work and completion of child development modules OR <ul style="list-style-type: none"> 30 semester hours above high school, including at least 15 hours in child development or directly related field 	The target-level Child Development Program Assistant performs duties under the direct supervision of a leader or supervisor. Assistance and guidance is available at all times, and work is reviewed in terms of results and adherence to established standards and procedures. All CDC caregivers must have high school diploma or GED
Health Technician.....	4	<ul style="list-style-type: none"> Knowledge and skill to perform duties 	The Health Technician provides continuing health care program coverage for a small school, as medical personnel are not usually located in the immediate vicinity and may be 30-45 minutes away. The Health Technician performs the same major duties as the Health Aide; however, they must be fully-qualified typists. This employee performs routine and emergency first aid, including washing wounds and other established Red Cross first aid procedures. They also maintain student health records, run student "sick call," administer students' medications provided by the parents, monitor supplies, arrange health-related presentations, and perform various other support-tasks related to the job. This position carries a great responsibility, requiring an ability to interact effectively with local health professionals as well as the knowledge and skill necessary to perform the above tasks.
Education Aide	5	<ul style="list-style-type: none"> High school diploma plus 6 months to 1 year of general experience OR <ul style="list-style-type: none"> 1 to 2 years of education beyond high school 	The Education Aide assists school faculty with record keeping, routine filing, and in keeping the classroom neat and orderly. This employee also provides assistance to students in reading, math, and makeup work; supervises small study groups and committees, testing situations, and children's individual research projects; accompanies teachers and students on field trips; maintains classroom order; enforces and upholds school regulations and discipline; and monitors students on the playground, in hallways and restrooms, during study hall, during lunch, and in bus loading areas. This position requires knowledge of educational practices, clerical procedures, and skill in working with children.

Table 6, cont'd...

	Global Work Level	Education and/or experience	Knowledge required/Major duties
GS-4			
Library Technician	5	<ul style="list-style-type: none"> • 1 year full-time general experience OR <ul style="list-style-type: none"> • 2 years of education beyond high school (60 semester or 90 quarter hours) 	The Library Technician offers technical and clerical assistance to a school Library-Media Specialist by providing everyday library services to students, teachers, and other patrons; inventorying equipment and library supplies; locating and securing materials from outside sources for loan or purchase; and in-processing and circulating books and audio-visual (AV) materials. In-processing and circulation functions are performed using the Columbia Library System (CLS) software program being installed throughout DoDDS. This position requires knowledge of the Columbia Library System cataloging and circulation programs; knowledge of Library Media Center services, practices, procedures, terminology, content, and classification scheme; knowledge of circulation procedures; and ability to operate a personal computer and type 40 words per minute.
GS-5			
Child Development Program Assistant, Leader Level.....	7	<ul style="list-style-type: none"> • 12 months experience equivalent to target level work AND <ul style="list-style-type: none"> • Associates of Arts degree in ECE or current CDA 	In addition to the duties of the target level assistant, the leader level assistant serves as a leader of Child Development Program Assistants, with responsibility for the operation of the activity and program in accordance with applicable regulations. This individual performs duties under the direct supervision of a program leader or supervisor. Assistance and guidance are normally available at all times, and work is reviewed in terms of results and adherence to established standards and procedures.
Child Development Program Technician.....	8	<ul style="list-style-type: none"> • 12 months experience equivalent to leader level work OR <ul style="list-style-type: none"> • BA 	The primary function of the Child Development Program Technician is to provide appropriate, specialized developmental care and instruction for children in the DoD Child Development Facilities. Duties are performed under the general supervision of the Facility Director or other designated supervisor. Assistance and guidance are available, but the employee has a great deal of flexibility in selecting, altering, and improving activities. The employee is expected to use initiative and creativity in accomplishing goals and objectives. Work is reviewed in terms of results and adherence to established standards and procedures.

Table 6, cont'd...

GS-5			
School Support Assistant (A).....	7	<ul style="list-style-type: none"> • Knowledge and skill to perform duties 	<p>The level 'A' School Support Assistant provides school support services in a larger school alongside a higher-graded School Support Assistant. This employee performs a variety of support-level, supply-management tasks (such as preparing, editing, and submitting orders via electronic data transfer for purchasing supplies and equipment), in addition to performing light maintenance/repair work and other duties as assigned. This position requires a military drivers license; ability to clearly speak, read, and write in English; ability to operate a personal computer; knowledge of standard DoD supply support system and established supply regulations, policies, and procedures.</p>
Education Technician....	8	<ul style="list-style-type: none"> • 1 year full-time specialized experience (at least equivalent to the GS-4 level) <p style="text-align: center; margin: 5px 0;">OR</p> <ul style="list-style-type: none"> • 4 years of education beyond high school (120 semester or 180 quarter hours) 	<p>The Education Technician provides total communication support services and instructional assistance facilitating the educational programs of hearing impaired students. The Education Technician provides thorough translation and interpretation of class lectures, films, presentations, assemblies, etc.; serves as a student tutor; and performs general administrative tasks and other tasks relating to the job. This position may require physical exertion and specialized knowledge/responsibility.</p>
GS Level 5 to 11			
Pre-Kindergarten Teacher	9	<ul style="list-style-type: none"> • Major in ECE or a degree in ECE with 24 semester hours of ECE classes <p style="text-align: center; margin: 5px 0;">OR</p> <ul style="list-style-type: none"> • 2 years full time experience teaching may substitute for 3 semester hours of ECE coursework 	<p>The Pre-Kindergarten Teacher interacts with students, co-workers, and parents in order to help their students achieve optimum development of skills and mastery of knowledge by conducting assigned subject matter or grade level instruction in the school system. To do this, the Pre-Kindergarten Teacher must possess an instructional plan that is compatible with the school and system-wide curricular goals. They are required to follow a plan for professional development, and are expected to perform non-instructional duties as assigned and/or needed. The Pre-Kindergarten Teacher must have taken coursework in the following areas: a) methods of teaching emerging literacy, and b) methods of teaching mathematics for early childhood, kindergarten, or pre-kindergarten.</p>
Substitute Teacher	7	<ul style="list-style-type: none"> • Bachelor's degree (in education) from an accredited college or university 	<p>The substitute teacher replaces the classroom teacher. The substitute teacher plans, organizes, and presents information and instruction which helps students learn subject matter and skills that will contribute to their educational and social development; has an instruction plan which is compatible with the school and system-wide circular goals; interacts effectively with students, co-workers, and parents; carries out non-instructional duties as assigned and/or as needed; adheres to established laws, policies, rules, and regulations; and follows a plan for professional development. The substitute teacher reports to and is supervised by the building principal.</p>

CAREER COMPARISONS: MILITARY CHILD CARE VERSUS CIVILIAN BENCHMARK JOBS

Selection of Civilian Benchmark Jobs

Sustaining the competitiveness of child care compensation packages clearly emerges as a priority for CDCs. Using benchmark jobs for comparison allows decision-makers to perform side-by-side evaluations of child care positions and other jobs competing for employees within the same labor pool. These comparisons can guide the DoD in designing competitive compensation packages, resulting in the recruitment and retention of high-quality caregivers.

Identifying jobs with similar content

To help identify civilian content benchmarks, the *Occupational Outlook Handbook* was used. In this handbook, descriptions of occupations include examples of related jobs, based upon the nature of the work and sometimes on qualifications. For example, the following section describes the occupation of ‘Preschool Teachers and Child Care Workers’:

Child care work requires patience; creativity; an ability to nurture, motivate, teach, and influence children; leadership, organizational, and administrative skills. Others who work with children and need these aptitudes include teacher caregivers, children’s tutors, kindergarten and elementary school teachers, early childhood program directors, and child psychologists.

For our comparison group of benchmark jobs, we used the jobs listed above if they had a specific occupation code that would allow us to gather compensation data. We additionally selected jobs requiring behavior similar to that of child care work. In all, we selected the following jobs:

- child care workers
- household child care workers (i.e., family day care, babysitters, nannies)
- early childhood teachers’ assistants
- teachers’ aides
- pre-kindergarten and kindergarten teachers
- elementary school teachers
- substitute teachers
- nursing aides
- health aides
- animal caretakers
- and social workers

Identifying jobs requiring similar qualifications

We used level of education as an index of qualification. According to the Current Population Survey (CPS), jobs that match the average educational attainment of child care workers include:

- teachers' aides
- early childhood teachers' assistants
- nursing aides
- health aides
- animal caretakers
- correctional institution officers
- bank tellers
- data-entry keyers
- file clerks
- receptionists
- electricians
- hair dressers and cosmetologists

Identifying jobs similar in military lifestyle and widely available in the military

Some jobs identified as competitors of military child care work by CDPMs (see Footnote 18) did not match child care work based on content, education level, or pay. Thus, these particular jobs were selected as military lifestyle benchmarks:

- cashiers
- food counter and related occupations
- cooks
- supervisors of food preparation and service occupations⁴⁵
- secretarial/administrative occupations
- and dental hygienists

⁴⁵ In the meeting with the CDPMs, the jobs of waitress and barmaid—in reference to employment at casinos—were mentioned specifically as competitors for CDC caregiver positions. Unfortunately, the accuracy of reported wages for these occupations is limited due to the under-reporting of tips.

Identifying jobs offering similar wages

According to the CPS, jobs that match the average hourly earnings of child care workers include:

- teachers' aides
- nursing aides
- health aides
- animal caretakers
- cooks
- supervisors of food preparation and service occupations
- attendants of amusement and recreation facilities
- and textile sewing machine operators

Appendix J contains detailed descriptions of all jobs.

Civilian Data Sources

The 2002 General Schedule Salary Table identified wages for CDC caregiver positions. For civilian estimates, the following data sources were used.⁴⁶

Current Population Survey (CPS)

The BLS and the Bureau of the Census (BC) jointly conduct this survey. Respondents are scientifically selected to be highly representative of both regions and the nation. Data from the 1999, 2000, and 2001 March Supplements were used, and wages were converted to 2002 dollars.⁴⁷ Information about hourly wages, education level, weekly work hours, and general benefits are provided for 84 child care workers and 5,167 workers in benchmark jobs. As defined, the occupation “child care workers, except private household, N.E.C.” excludes kindergarten, and pre-kindergarten teachers and teacher’s aides. Refer to Appendix J for more details.

National Compensation Survey (NCS)

The DoL and the BLS jointly conduct this survey. It uses a randomly selected, regionally and nationally representative sample of workers in over 480 individual occupations. Tables 2-4 from the year 2000 *National Bulletin* were used; wages are converted to 2002 dollars. This table includes data on hourly wages and weekly work hours by global work level for both civilian

⁴⁶ Our methodology differs from the demand-based approach used by *Estimating the Size and Components of the U.S. Child Care Workforce and Caregiving Population* (Burton, Whitebook, Young, Bellm, Wayne, Brandon, & Maher, May 2003). They include teacher staff of center-based programs, including Head Start programs, pre-kindergarten programs, nursery schools, and community-based private and public child care centers; family child care providers; and nannies and other paid in-home caregivers.

⁴⁷ Inflation factors were applied as follows: 1999 data = 1.0792; 2000 data = 1.0441; 2001 data = 1.0152. See <http://data.bls.gov/cgi-bin/cpicalc.pl>.

child care workers and the benchmark occupations identified by the CPS. Only the number of workers represented by the survey, by occupation group, is given for the NCS.

Child care workers are classified in the service occupation group; this data represents 17,263,800 service employees in both private and state/local government industries. A total of 25,666,400 employees provide data for blue-collar benchmark jobs; 45,750,900 employees provide data for white-collar benchmark jobs.

National Study of the Changing Workforce (NSCW)

The Families and Work Institute conducted this survey in 1997; wages are converted to 2002 dollars. Employees were randomly selected from stratified regions. We accessed this public data set to obtain data on employment status and benefits for civilian benchmark occupations ($n = 277$) identified by the CPS. Unfortunately, there were too few child care workers in this data set to use for estimating benefits and so only data for benchmark occupations are reported.

Overview of civilian data set features

Following are the summaries of the number of employees used to provide data, and the features of each data set.

Features	CPS	NCS	NCSW
<u>Number of child care workers</u>	84	*	0
<u>Benchmark workers</u>	5,251	*	277
Job characteristics	X	X	X
Global work level.....		X	
Education level.....	X		
Wages.....	X		
Benefits	X		X

**Note:* Only the number of workers represented by the survey, by occupation group (e.g., service, blue-collar, white-collar), is given for the NCS. See text above for more information.

Overview of Civilian Comparisons

The following section contains data from the 1999, 2000, and 2001 March Supplements of the Current Population Survey. Four tables with data are presented. Each table compares child care work with benchmark jobs based on:

1. job content
2. education
3. level military
4. lifestyle wages

Each table presents a myriad of information on these jobs. The information you will find includes:

- the average hourly wage
- the average weekly work hours
- a calculated annual income based on hourly wage and weekly work hours
- a calculated full-time annual income based on a 40-hour work week
- the average education level

In addition, the frequencies of full-time employees (compared to part-time employees) and hourly employees (compared to salary employees or employees paid by the day, etc.) are given. Finally, general benefits for these occupations are reported. These include the percent of employees who use their employer's health plan and who are offered a pension plan.

Methodology: Military Comparisons

In addition to comparing civilian child care with civilian benchmark jobs, we include military child care. To do this, an average hourly wage for all five CDC positions was constructed. Using the 2002 General Schedule, hourly wages were averaged using the minimum and the maximum rates of entry, intermediate, target, and leader/program technician levels. The average hourly wage for CDC caregivers, calculated in this manner, is \$10.67.⁴⁸ Note that this figure represents an unweighted rate – that is, it does not attempt to adjust for size of population in each of the five CDC positions. If the majority of CDC staff are not at the GS-4/5 level, this figure may be unrealistically high.⁴⁹ We used the average number of weekly-work hours for civilian child care workers (22.1 hours) and this average hourly wage of \$10.67 to estimate an annual income of \$12,262 for CDC caregivers. We also estimated a full-time annual income of \$22,194 based on a 40-hour work-week.⁵⁰

Following each table are three figures that present the data graphically. The first figure presents the average (i.e., mean) wage, education level, and number of weekly work hours for civilian child care workers and benchmark jobs. Within the graph, the orange, vertical line that runs through the civilian wage bars represents the average hourly wage for CDC caregivers. The entire range of CDC caregiving wages, from entry-level Child Care Assistant to Program Technician, is represented in the graph as a yellow vertical band that runs behind the civilian

⁴⁸ The civilian benchmark averages are weighted in order to be able to generalize to the entire U.S. labor force. However, the effects of weighting in the civilian data sets are relatively small. For example, the range of the difference (i.e., weighted/unweighted) for hourly wage was .96% (minimum = correctional institution officers) to 4.86% (maximum = civilian child care workers, private household). The range of the difference for actual annual income was: .95% (minimum = food counter) to 4.54% (maximum = teachers' aides). The range of the difference for full-time annual income was: .96% (minimum = correctional institution officers) to 4.91% (maximum = civilian child care workers, private household).

⁴⁹ An additional set of analyses used weighted rates for CDC GS employees based on the number of caregivers at each GS level. Since the effect of weighting resulted in no change to the majority of our analyses, only the unweighted results are reported. For more detail on these analyses, please contact the authors.

⁵⁰ Some studies estimate full-time using a 35 hour per week figure (e.g., Estimating the Size and Components of the U.S. Child Care Workforce and Caregiving Population (Burton, Whitebook, Young, Bellm, Wayne, Brandon, & Maher, May 2003).

wage bars; this range is from \$7.95 (GS-2, Step 1) to \$14.16 (GS-5, Step 10). The second figure presents both the actual annual income and the estimated full-time annual income for military CDC caregivers, civilian child care workers, and civilian benchmark jobs. The third figure presents frequencies of employment characteristics and benefits for civilian child care workers and benchmark jobs.

Content Benchmark Results

Table 7 contains information on civilian child care and civilian jobs similar in content. Below is a summary of the compensation data contained in Table 3. The summary also includes a comparison between military CDC caregiving wages and civilian wages.

Civilian Child Care

Hourly wages appear to increase as education levels increase. Hourly wages for child care workers and jobs featuring similar content seem to be positively related to education level (see Figure 3). Civilian child care workers rank 5th in education, but drop to 7th in wages among these 10 benchmark jobs. According to the data, child care workers routinely work the fewest number of hours per week; less than half (41.9%) of all civilian child care workers have full-time positions.

Fewer work hours lead to a comparatively low annual income for civilian child care workers. Because child care workers routinely work few hours, it is important to understand how this impacts their annual income. Hourly wages were converted to annual income for all occupations (see Figure 3). Civilian child care workers earn just under \$10,000/year based on their average 22.1 weekly work hours, making them the second to the lowest paid group of workers among jobs similar in content. If child care workers did work full-time (40 hours/week) on average, their annual income would nearly double to \$17,824, increasing their rank by two among jobs similar in content. From the perspective of annual income, as opposed to hourly wage, civilian child care workers fall far beneath their earning potential.

As for benefits, it is interesting to note that more child care workers are offered pension plans than seems typical based on the high percentage of hourly and part-time workers (see Figure 5). Across most occupations, it is quite common to have a pension plan made available through an employer, but less common for employees to actually use medical coverage provided through their employer.

Military Child Care

CDC caregivers earn higher average wages per hour than all civilian benchmark jobs featuring similar content that require similar or lower education levels. On average, CDC caregivers earn \$2 more per hour than do civilian child care workers (refer to the orange line in Figure 3). The only time these caregivers have comparatively lower wages is when measured against workers in occupations requiring a higher level of education (e.g., pre-kindergarten and kindergarten teachers, elementary school teachers, and social workers).

Because we know the minimum and maximum hourly wages a CDC caregiver can earn along the GS career ladder (see the yellow band in Figure 3), we can see how they fare compared to civilian benchmark wage averages. The hourly wages available to CDC caregivers encompasses the averages for civilian child care and most benchmark jobs. Only private household child care workers and early childhood teachers' assistants earn below the minimum GS step of CDC caregivers (\$7.95/hour); elementary school teachers and social workers occupy the only benchmarked jobs that pay above the maximum GS step of CDC caregivers (\$14.16/hour).

Although full-time CDC caregivers' average hourly wages are higher than those of most jobs featuring similar content, part-time CDC caregivers drop in rank considerably when annual income is the unit of comparison. Using the average number of weekly work-hours for civilian child care workers, part-time CDC caregivers earn \$12,262/year on average, or a little more than half of their full-time earning potential (\$22,194/year based on a 40-hour work week). The average CDC caregiver earns roughly the same hourly wage as a teachers' aide, yet earns \$4,375 less per year. Only civilian child care workers (both center and private household) and early childhood teachers' assistants earn lower annual incomes than CDC caregivers based on a low number of work hours (see Figure 3).

Other research (e.g., Blau, 1993) supports this finding. For example Blue (1993) found that child care workers on average work 11 fewer weeks per year and 6 fewer hours per week than other workers. As a result, child care workers average annual earnings are less than one-third the average earnings of other workers. Selectivity seems to be an important factor in determining why child care workers voluntarily choose to work less hours. Research has consistently found that the number of preschool children is a significant predictor of part-time work (Blank, 1989). One study found that child care workers average .45 children of preschool age compared to .26 for other workers (Blau, 1993). Another study found that more than 19% of part-time employed mothers with children under 5 years of age would choose to work more hours if satisfactory child care were available at reasonable cost (Presser, 1986). Thus, part-time employment may be viewed as an alternative to not being employed, and caregiving work may be classified as "more convenient" than other work – that is, more easily combined with child care responsibility (Connelly, 1992). However, recent research also suggests that worker attributes such as ambition and effort may be associated with self-selection into part-time child care work (Mocan & Tekin, 2003).

Table 7
Child Care Work and Benchmark Occupations Based on Job Content

Occupation	N	Hourly wage	Actual annual income	Full-time annual income	Educa-tion level	Weekly work hours	Employment		Using health plan through employer	Offered pension plan by employer
		M	M	M	M	M	% FT	% Hourly	% Yes	% Yes
2002 GS:										
Average for CDC caregivers.....		10.67	12,262*	22,194						
Civilian child care workers, n.e.c...	84	8.57	9,734	17,824	39.5	22.1	41.9	74.8	25.9	56.5
Civilian child care workers, private household.....	90	6.91	9,266	14,374	38.2	23.5	39.7	67.4	11.2	3.4
Early childhood teachers' assistants.....	158	7.28	10,632	15,138	39.1	27.9	48.9	84.2	18.0	30.2
Teachers' aides.....	217	10.02	16,637	20,833	40.2	31.8	54.3	74.3	44.4	74.9
Pre-kindergarten and kindergarten teachers.....	150	13.78	26,899	28,664	41.4	36.9	81.9	52.3	54.3	50.6
Elementary school teachers.....	549	18.67	39,147	38,843	43.2	40.1	88.8	13.6	71.4	85.5
Nursing aides, orderlies, and attendants.....	562	9.15	16,819	19,039	39.1	35.1	72.6	88.7	43.1	47.4
Health aides, except for nursing.....	109	9.31	16,495	19,356	39.2	33.5	66.9	86.5	49.9	59.1
Animal caretakers.....	30	8.35	14,834	17,378	39.2	32.4	63.1	86.8	30.5	29.9
Social workers.....	224	15.50	31,724	32,238	42.3	39.2	92.6	39.3	74.4	74.3

* Estimated using the average work hours of civilian child care workers

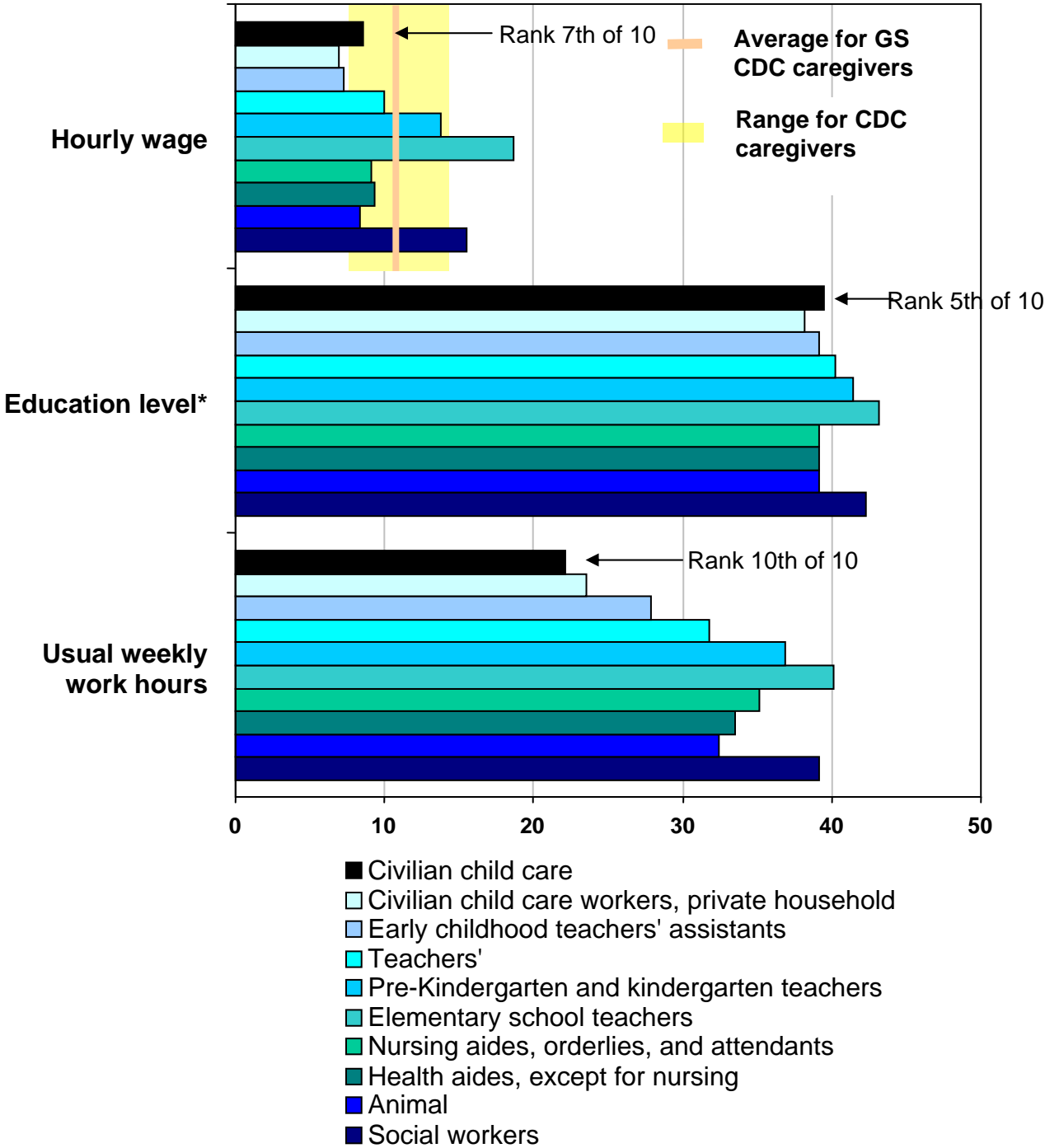
N = Number of workers in sample. M = Mean. n.e.c. = "Not elsewhere classified." FT = Full-time employed.

Civilian hourly wages are based on 2000 data, converted to 2002 dollars.

Education levels are coded as follows:

- | | | |
|-----------------------------|--|--|
| 35 = 9 th grade | 38 = 12 th grade no diploma | 41 = Associated degree—Occupation/Vocation |
| 36 = 10 th grade | 39 = High school diploma | 42 = Associated degree—Academic program |
| 37 = 11 th grade | 40 = College but no degree | 43 = Bachelor's degree |

Figure 3
Averages for Child Care Workers and Benchmark Jobs Based on Job Content



*Education Level
 35 = 9th grade
 36 = 10th grade
 37 = 11th grade

38 = 12th grade no diploma
 39 = High school diploma
 40 = college but no degree

41 = Associated degree-Occupation/Vocation
 42 = Associated degree-Academic program
 43 = Bachelor's degree.

Figure 4
Average Annual Incomes for Child Care Workers and Benchmark Jobs Based on Job Content

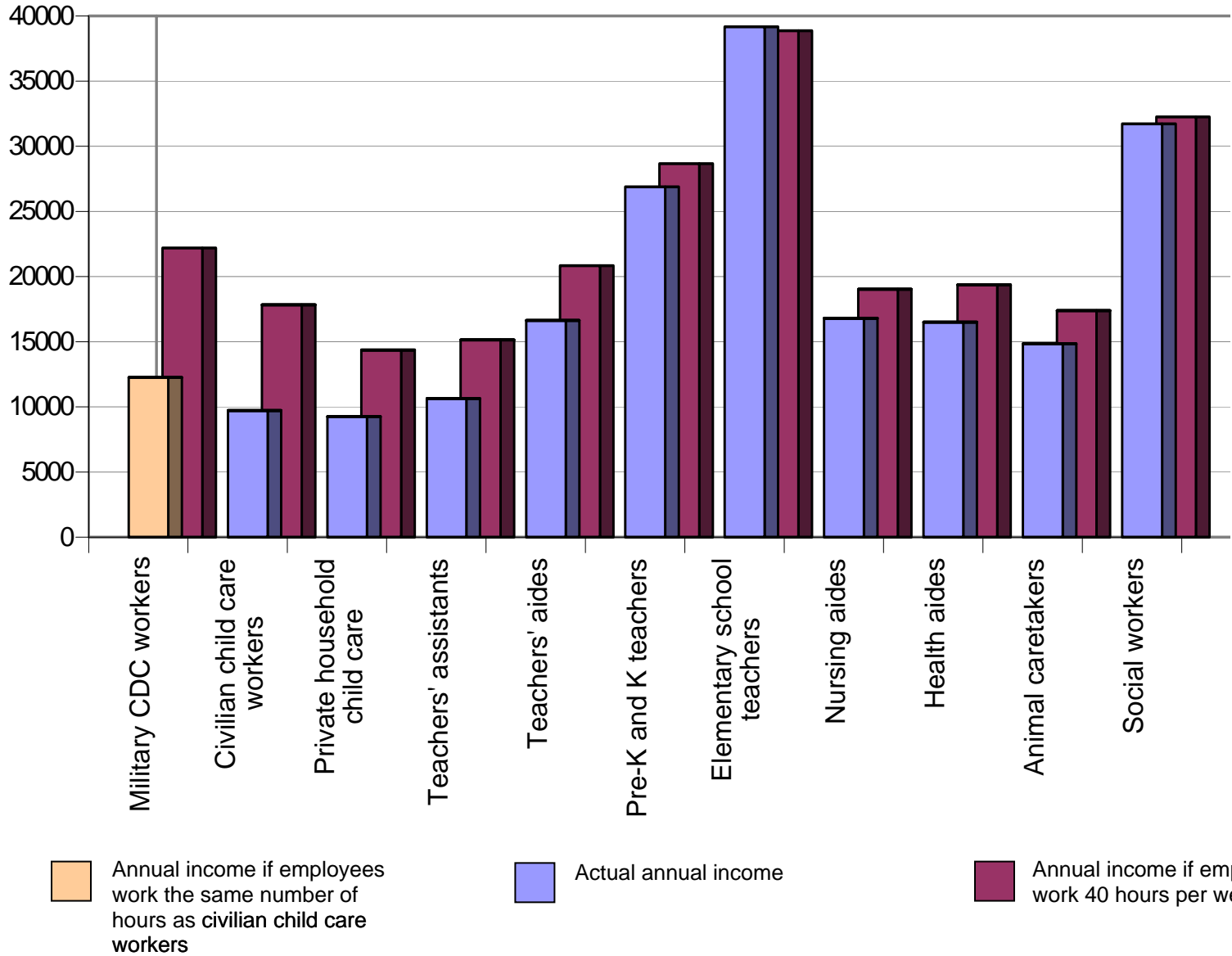
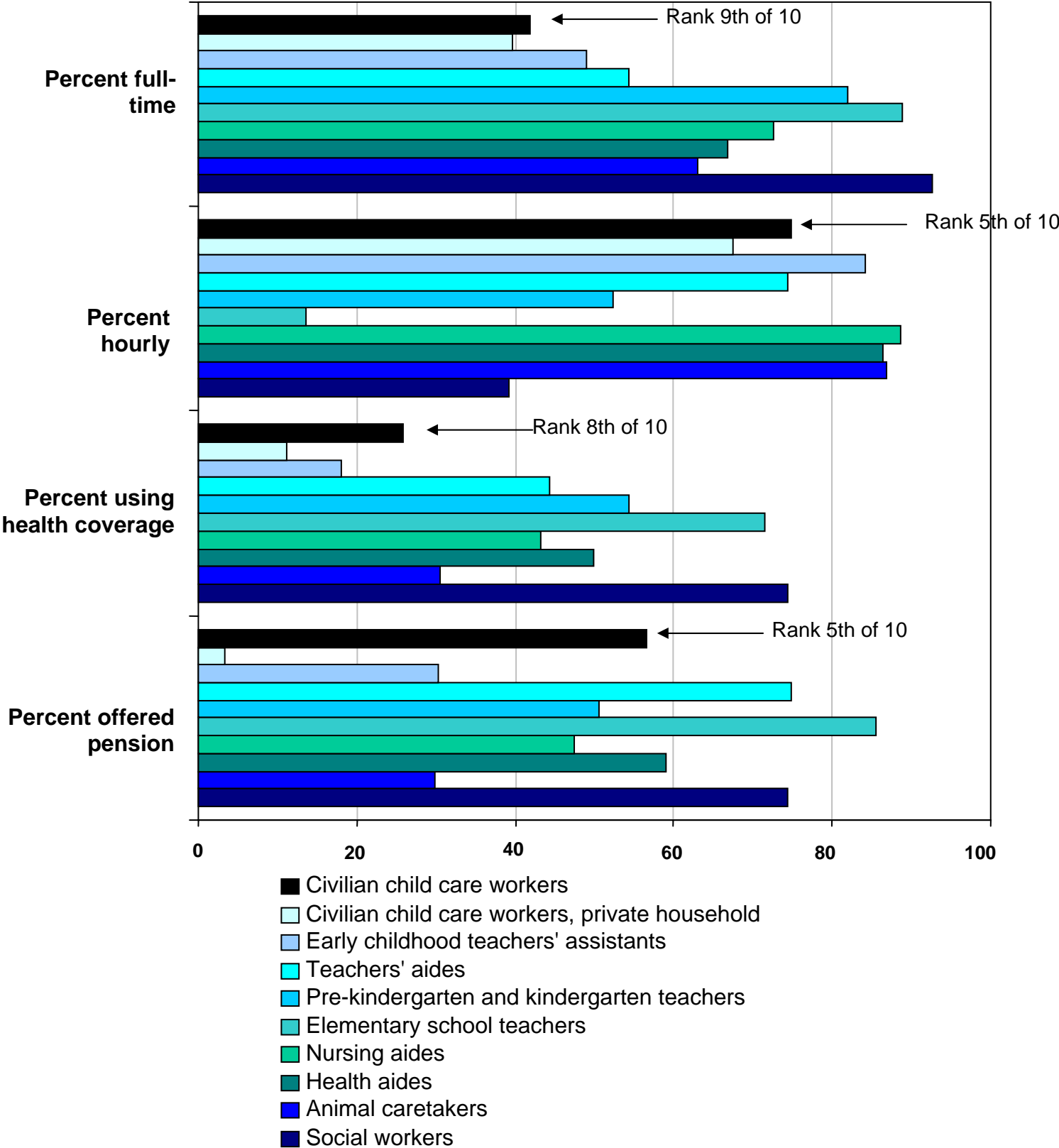


Figure 5
Frequencies for Child Care Workers and Benchmark Jobs Based on Job Content



Education Benchmark Results

Table 8 contains information on civilian child care and civilian jobs requiring similar education levels. Below is a summary of the compensation data contained in Table 4. The summary also contains a comparison between military CDC caregiving wages and civilian wages.

Civilian Child Care

When education level remains constant, civilian child care workers' hourly wages are at the lower-end of the wage spectrum. According to the data, civilian child care workers earn hourly wages similar to those of animal caretakers, health aides, and nursing aides (see Figure 6); electricians and correctional institution officers earn the highest wages for their level of education.

Civilian child care workers earn the lowest annual income of employees in all benchmark jobs requiring similar education levels. Based on the average number of hours that civilian child care providers work, which is approximately 22.1 hours per week, they earn between \$898 and \$5,100 less per year than early childhood teachers' assistants and animal caretakers. This is significant because early childhood teachers' assistants and animal caretakers earn the lowest hourly wages of these benchmark jobs—\$1.29 and \$0.22 less per hour, respectively—than civilian child care workers. Yet employees in these same, lower-paying jobs earn more than civilian child care workers—\$898 and \$5,100 more per year, respectively—when annual income is the unit of comparison (see Figure 7).

As shown in Figure 8, a smaller percentage of child care workers are employed full-time compared to other occupations featuring similar education levels, and a smaller percentage are paid by the hour. For example, 74.8% of child care workers are paid by the hour compared to 53.7% for correctional institution officers and 37.5% for hairdressers. The majority of the remaining occupations in this benchmark category are hourly workers (i.e., the percentages are all above 80%).

All occupations similar to child care work in education level have a larger percentage of employees using health care benefits, with the exception of early childhood teachers' assistants. These statistics might be misleading, however, because the nature of the question captures only those who actually access the health care, not those who are offered health care benefits. In addition, over half of all child care workers are offered pension plans according to these data.

Military Child Care

CDC average hourly wages are higher than those for most civilian benchmark jobs featuring similar educational requirements. Average CDC caregiver wages resemble most closely those of hairdressers and cosmetologists. Only correctional institution officers—who most likely face increased job hazards—electricians, and data-entry keyers earn more than the average military child care provider does. The span of wages obtainable by CDC caregivers—from GS-2 to GS-5—encompasses all but the two highest civilian wage averages.

When annual income is considered, part-time CDC caregiver wages substantially drop in competitiveness with jobs featuring similar educational requirements. Although CDC caregivers earn hourly wages higher than those of most jobs requiring educational levels similar to civilian child care, part-time CDC caregivers drop in rank considerably when annual income is the unit of comparison (see Figure 7). When CDC caregivers are compared with animal caretakers who earn \$2.32 less per hour but work 10 more hours per week, CDC caregivers still fall behind in annual income by \$2,572. Only civilian child care workers (both center and private household) earn lower annual incomes than CDC caregivers based on their part-time work schedule.

Table 8
Child Care Work and Benchmark Occupations Based on Education Level

Occupation	N	Hourly Wage	Actual annual income	Full-time annual income	Education Level	Weekly Work Hours	Employment		Using health plan through employer	Offered pension plan by employer
		M	M	M	M	M	% FT	% Hourly	% Yes	% Yes
2002 GS:										
Average for CDC caregivers.....		10.67	12,262*	22,194						
Civilian child care workers, n.e.c....	84	8.57	9,734	17,824	39.5	22.1	41.9	74.8	25.9	56.5
Early childhood teachers' assistants	158	7.28	10,632	15,138	39.1	27.9	48.9	84.2	18.0	30.2
Nursing aides, orderlies, and attendants	562	9.15	16,819	19,039	39.1	35.1	72.6	88.7	43.1	47.4
Health aides, except for nursing.....	109	9.31	16,495	19,356	39.2	33.5	66.9	86.5	49.9	59.1
Animal caretakers	30	8.35	14,834	17,378	39.2	32.4	63.1	86.8	30.5	29.9
Correctional institution officers	87	13.96	29,389	29,044	39.8	40.6	96.5	53.7	83.3	84.0
Bank tellers	122	9.69	16,767	20,155	39.8	32.6	60.7	75.3	54.1	69.7
Data-entry keyers.....	216	11.51	22,398	23,940	39.9	36.4	82.4	82.6	52.0	62.3
File clerks.....	133	9.68	15,476	20,143	39.5	29.0	57.1	83.4	38.2	55.0
Receptionists.....	321	9.60	16,530	19,966	39.6	31.9	62.1	84.2	43.5	53.8
Electricians	207	17.69	37,696	36,788	39.6	41.1	98.2	86.6	73.5	71.0
Hair dressers, cosmetologists.....	141	10.49	19,154	21,815	39.4	34.7	64.1	37.5	26.9	20.1

* Estimated using the average work hours of civilian child care workers

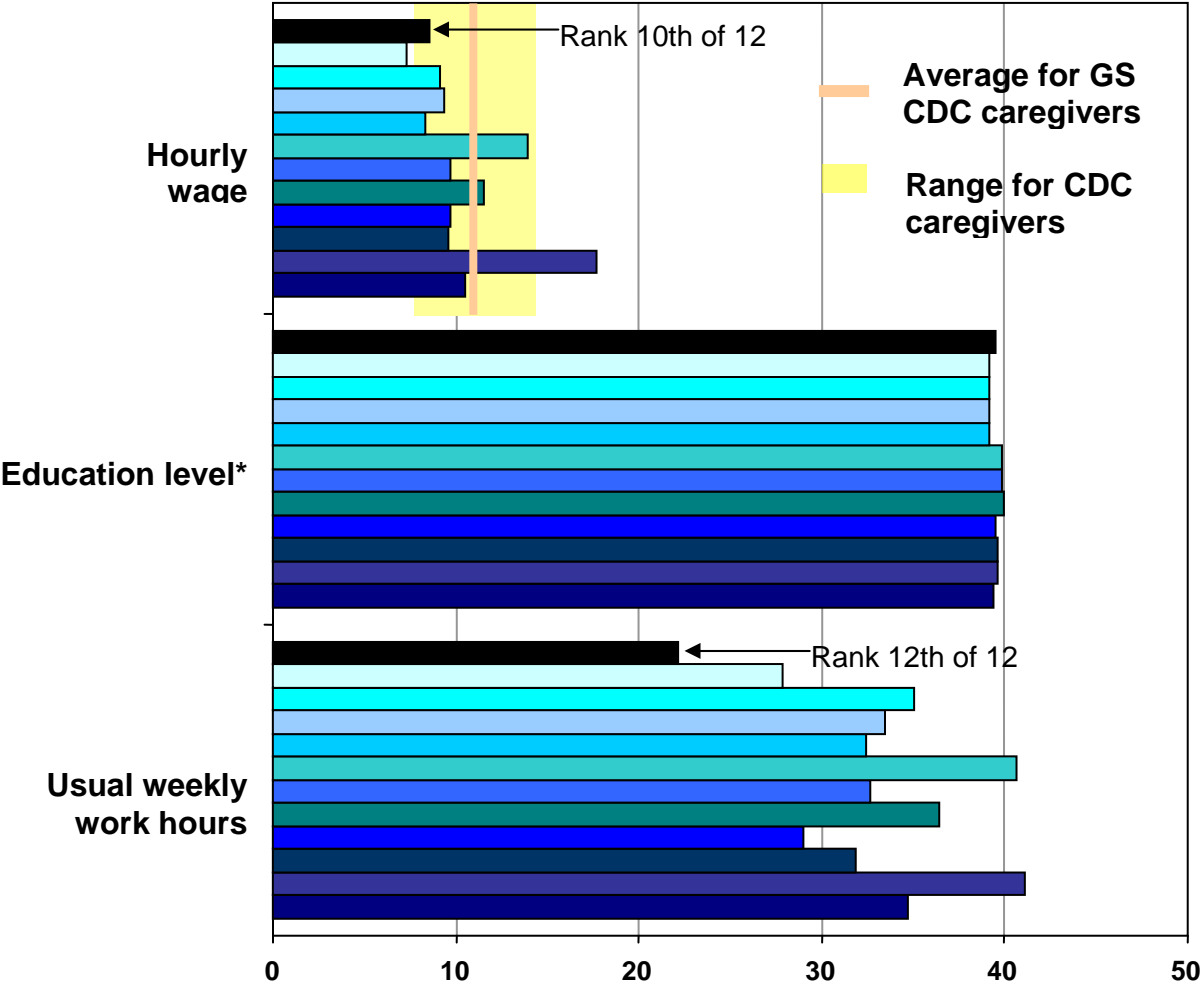
N = Number of workers in sample. M = Mean. n.e.c. = "Not elsewhere classified" FT = Full-time employed.

Civilian hourly wages are based on 2000 data, converted to 2002 dollars.

Education levels are coded as follows:

- 38 = 12th grade no diploma 40 = Some college but no degree
- 39 = High school diploma 41 = Associated degree—Occupation/Vocation

Figure 6
Averages for Child Care Workers and Benchmark Jobs Based on Education



- Civilian child care workers
- Early childhood teachers' assistants
- Nursing aides, orderlies, and attendants
- Health aides
- Animal caretakers
- Correctional institution officers
- Bank tellers
- Data-entry keyers
- File clerks
- Receptionists
- Electricians
- Hair dressers, cosmetologists

*Education Level
 35 = 9th grade
 36 = 10th grade
 37 = 11th grade

38 = 12th grade no diploma
 39 = High school diploma
 40 = college but no degree

41 = Associated degree-Occupation/Vocation
 42 = Associated degree-Academic program
 43 = Bachelor's degree.

Figure 7
Average Annual Incomes for Child Care Workers and Benchmark Jobs Based on Education

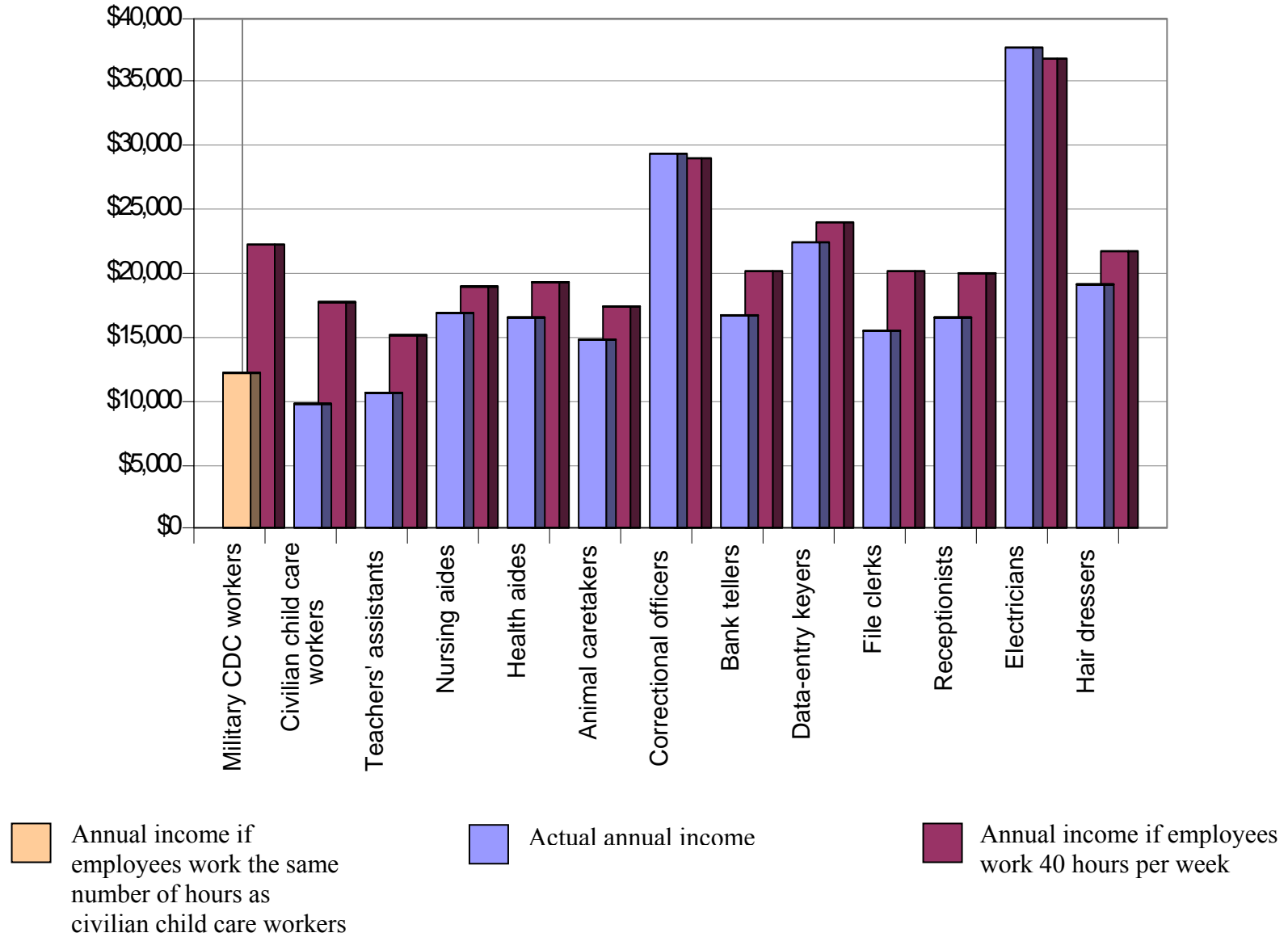
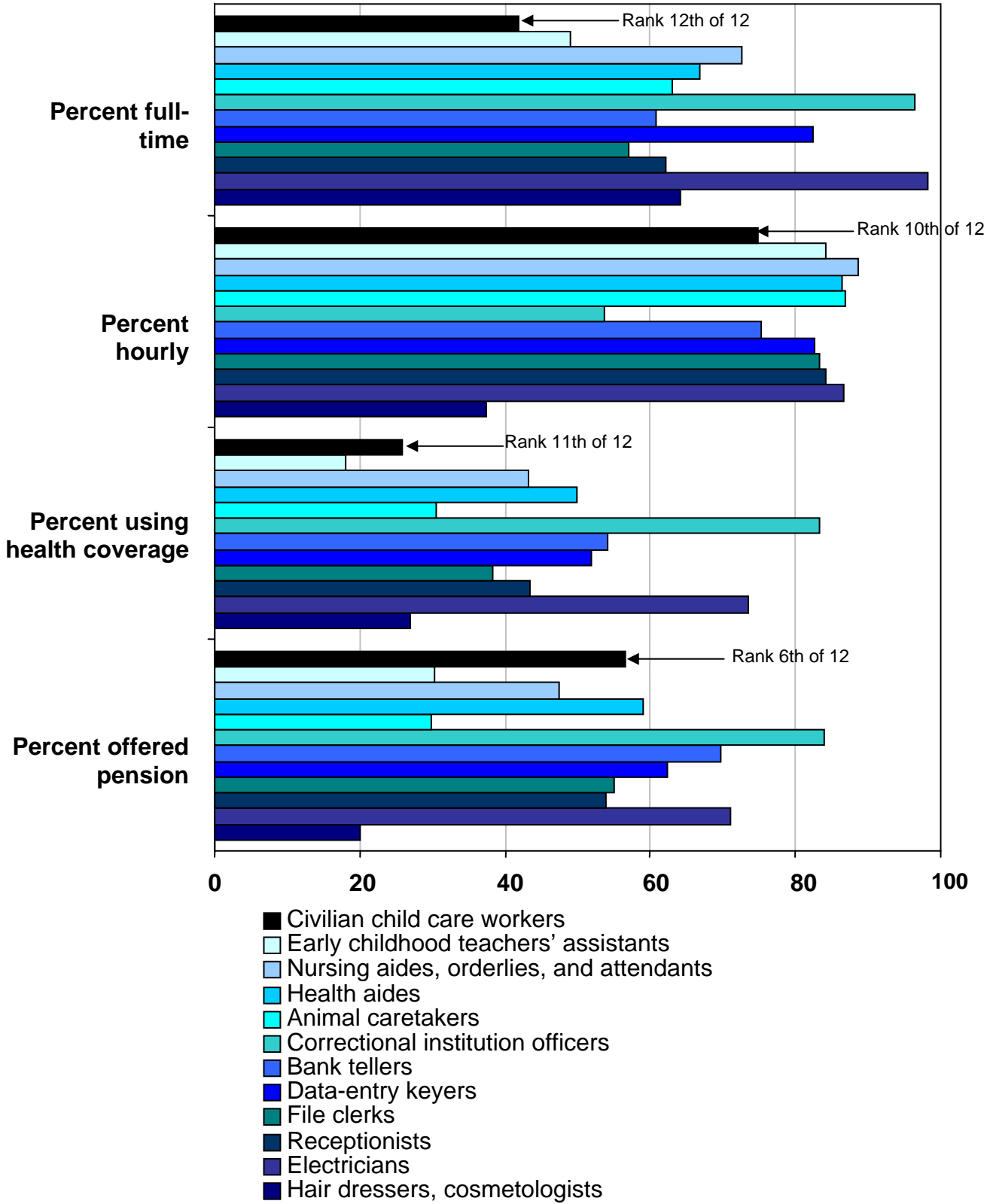


Figure 8
 Frequencies for Child Care Workers and Benchmark Jobs Based on Education



Military Lifestyle Benchmark Results

Table 9 contains information on civilian child care and civilian jobs similar in military lifestyle. Below is a summary of the compensation data contained in Table 5. The summary also contains a comparison between military CDC caregiving wages and civilian wages.

Civilian Child Care

Of the civilian jobs deemed most available to military spouses, child care work offers competitive hourly wages, but falls below average wages paid to dental hygienists and secretaries. As shown in Figure 9, civilian child care work ranks 3rd of 7 (43rd percentile) in hourly wages of jobs convenient to military spouses. Child care workers also rank 3rd of 7 (behind dental hygienists and secretaries) in the probability of being offered a pension plan (see Figure 11). Educational attainment of child care workers while on a par with secretaries falls slightly below that of dental technicians, who general have some college. However, compared to the remainder of the service positions, child care workers have earned a high school diploma, on average, whereas employees in these other occupations have not.

Civilian child care work offers the second to the lowest annual income of jobs deemed most available to military spouses. Civilian child care workers' relatively high hourly wage does not compensate for the income limitations placed by their low number of work hours. When average work hours are considered, cooks, food service supervisors, and cashiers earn higher annual incomes than civilian child care workers—from \$1,583 to \$4,773 more per year (see Figure 10).

Military Child Care

Except for dental hygienists and secretaries, CDC caregivers earn hourly wages higher than all benchmark civilian jobs identified as being widely available to military spouses, including civilian child care. CDC caregivers earn, on average, anywhere from \$2 to \$4 more per hour than the other service occupations competing for the same labor pool as CDCs. CDC caregivers' hourly wage falls just slightly below (\$0.77) that of secretaries, however, the average hourly wage of dental hygienists (\$26.75) is approximately 2-1/2 times more than that of CDC caregivers. Aside from dental hygienists and secretaries, the average civilian wage (\$7.63) is roughly the starting wage (\$7.95) for an entry-level child care position in the military. CDC wages also increase to double that of the average civilian wage.

When annual income is considered, CDC caregiver wages lose their competitive edge with jobs widely available to the military spouses. Although CDC caregivers earn the 3rd highest hourly wage of jobs deemed most available to the military lifestyle, their projected low number of work hours (based on civilian child care work) earns them roughly the same annual income as cashiers and food service supervisors. Military CDC caregivers earn almost \$3 more per hour than the average cook, yet work 12 hours less per week, resulting in \$2,245 less per year (see Figure 10). CDC caregivers would earn the same annual income as cooks if they worked just 26 hours/week. If CDCs cannot offer military spouses more hours than the typical civilian child care center—and military spouses desire more work hours—then they lose the advantage afforded to them by their higher hourly wage.

Table 9
Child Care Work and Benchmark Occupations Based on Military Lifestyle

Occupation	N	Hourly wage	Actual annual income	Full-time annual income	Educa-tion level	Weekly work hours	Employment		Using health plan through employer	Offered pension plan by employer
		M	M	M	M	M	% FT	% Hourly	% Yes	% Yes
2002 GS:										
Average for CDC caregivers		10.67	12,262*	22,194						
Civilian child care workers, n.e.c. ...	84	8.57	9,734	17,824	39.5	22.1	41.9	74.8	25.9	56.5
Cashiers	843	7.52	11,317	15,647	38.4	27.9	44.1	94.3	22.0	36.2
Food counter, fountain, and related occupations	119	6.29	7,390	13,083	37.4	21.9	23.7	98.0	6.7	29.3
Cooks	602	7.94	14,507	16,518	38.1	34.1	69.2	86.7	26.0	28.5
Supervisors, food preparation and service occupations	122	7.83	12,942	16,281	38.5	29.7	58.2	89.3	22.9	36.1
Dental Hygienists	29	26.75	41,852	55,645	41.9	30.0	42.3	83.8	42.1	62.0
Secretaries	678	11.44	21,921	23,795	39.9	36.1	82.1	62.4	57.4	62.6

Estimated using the average work hours of civilian child care workers. CDC caregiver hourly wage ranged from \$7.95 (minimum @GS-2) to \$14.16 (maximum @ GS -5).

N = Number of workers in sample. M = Mean. n.e.c. = “Not elsewhere classified.” FT = Full-time employed.

Civilian hourly wages are based on 2000 data, converted to 2002 dollars.

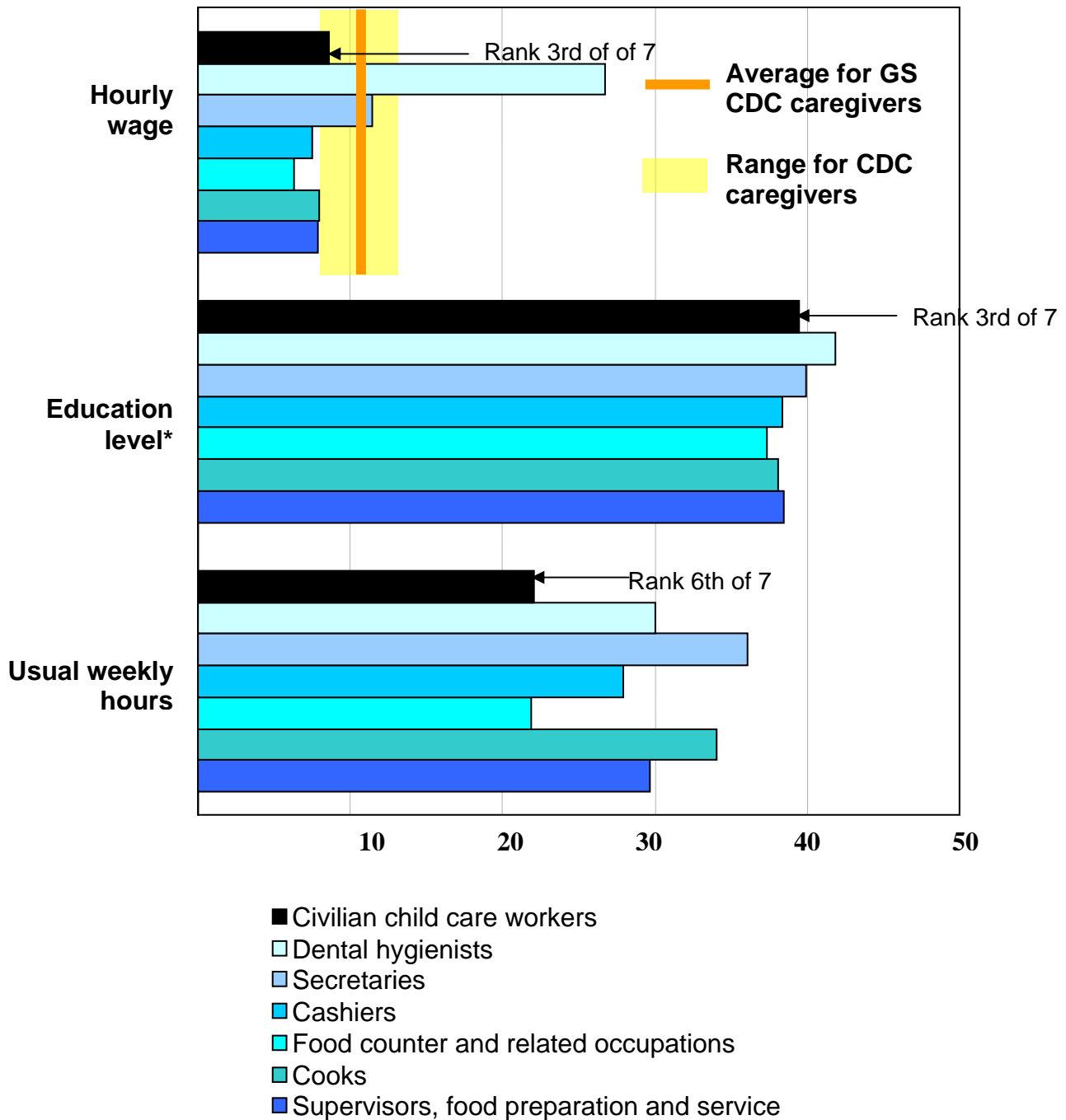
Education levels are coded as follows: 37 = 11th grade

38 = 12th grade no diploma

39 = High school diploma

40 = Some college but no degree

Figure 9
Averages for Child Care Workers and Benchmark Jobs Based on Lifestyle



*Education Level
 35 = 9th grade
 36 = 10th grade
 37 = 11th grade

38 = 12th grade no diploma
 39 = High school diploma
 40 = college but no degree

41 = Associated degree-Occupation/Vocation
 42 = Associated degree-Academic program
 43 = Bachelor's degree.

Figure 10
Average Annual Incomes for Child Care Workers and Benchmark Jobs Based on Lifestyle

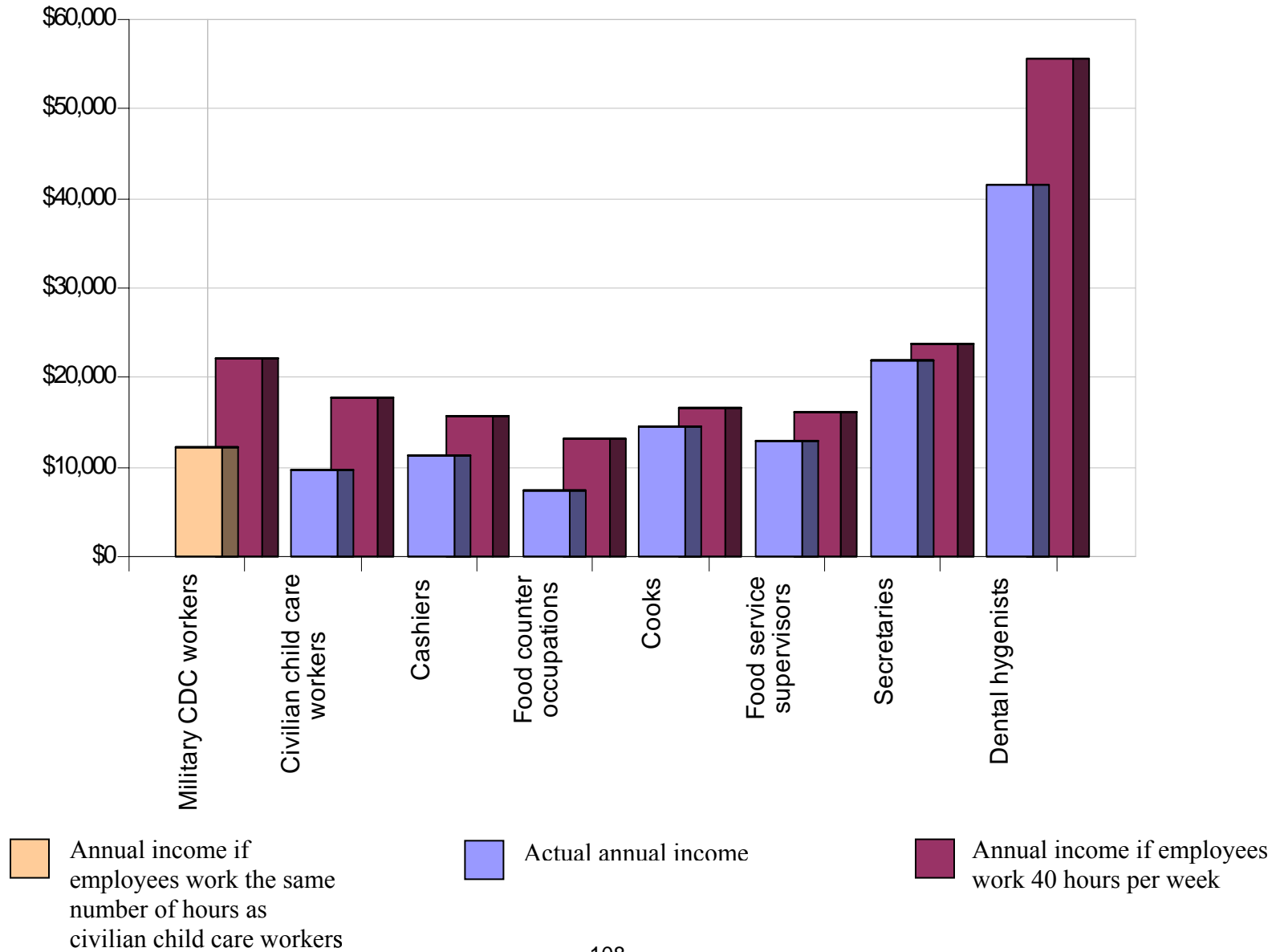
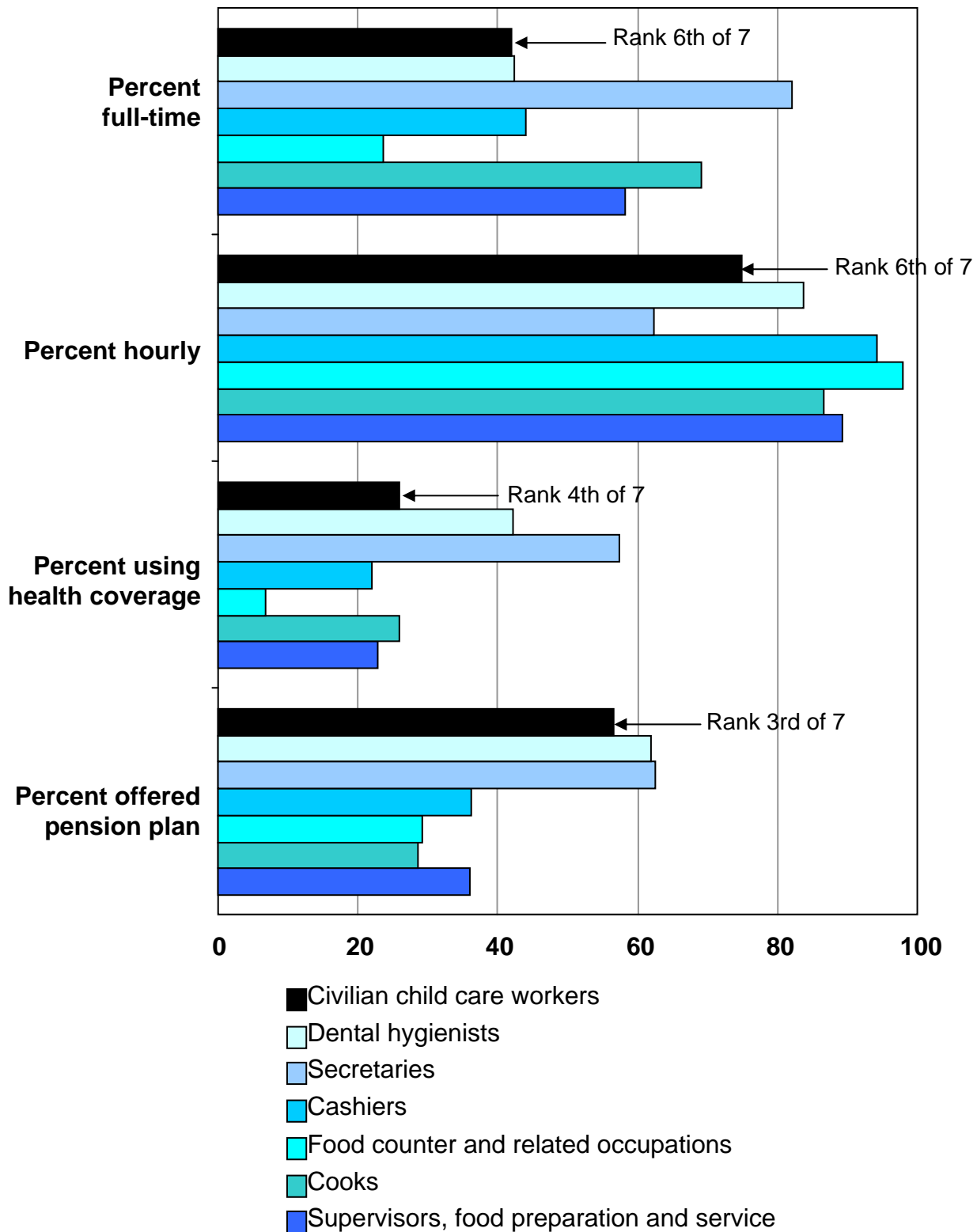


Figure 11
Frequencies for Child Care Workers and Benchmark Jobs Based on Lifestyle



Wage Benchmark Results

Table 10 contains information on civilian child care and civilian jobs similar in hourly wage. Below is a summary of the compensation data contained in Table 6. The summary also contains a comparison between military CDC caregiving wages and civilian wages.

Civilian Child Care

Civilian child care workers are the most educated employees in benchmark jobs offering similar pay. The average civilian child care worker has a high school diploma. About half of the remaining jobs with similar hourly wages have employees who, on average, have a high school diploma (e.g., nursing aides, health aides, animal caretakers, amusement and recreation park attendants); the remaining jobs have employees who, on average, have not earned their high school diploma (e.g., cooks, food service supervisors, and sewing machine operators). Again, child care workers are employed for the fewest number of hours among these jobs (see Figure 12).

Among civilian employees who earn similar hourly wages, child care workers come away with the lowest annual income. Again, child care workers' low work hours limits them from maintaining the income pace set by their similarly paid counterparts (see Figure 13). Although civilian child care workers earn roughly the same amount per hour than animal caretakers, cooks, food service supervisors, and amusement park attendants, they earn from \$2,264 to \$5,100 *less* per year than employees in these occupations. The average sewing machine operator earns \$8,525 more per year than the average child care worker does.

Compared with other employees who are paid similar hourly wages, civilian child care workers are less likely to work full-time or to be paid by the hour (see Figure 14). And again, fewer child care workers use an employer's health plan, whereas many are offered a pension plan.

Military Child Care

CDC caregivers earn higher hourly wages than do workers in civilian child care and all benchmark occupations with similar wages. As noted in Table 6, CDC caregivers, on average, earn nearly \$2 more per hour than do civilian child care workers and workers in similarly paid jobs. Considering the span of hourly wages obtainable by CDC caregivers through the various GS steps, military child care workers fare very well compared to workers in these civilian jobs.

With low weekly work hours, competitive hourly wages do not translate into competitive annual wages for CDC caregivers working part-time. Although CDC caregivers earn nearly \$2 more per hour than nursing aides, health aides, animal caretakers, and sewing machine operators, they earn between \$2,245 and \$5,997 less per year. Working the same number of hours as the civilian child care worker (22.1 hours/week), the average CDC caregiver earns roughly the same annual income as the average amusement park attendant who works 4.7 more hours per week (or 26.8 hours/week).

Table 10
Child Care Work and Benchmark Occupations Based on Hourly Wage

Occupation	N	Hourly wage	Actual annual income	Full-time annual income	Educa-tion level	Weekly work hours	Employment		Using health plan through employer	Offered pension plan by employer
		M	M	M	M	M	% FT	% Hourly	% Yes	% Yes
2002 GS:										
Average for CDC caregivers.....		10.67	12,262*	22,194						
Civilian child care workers, n.e.c...	84	8.57	9,734	17,824	39.5	22.1	41.9	74.8	25.9	56.5
Nursing aides, orderlies, and attendants	562	9.15	16,819	19,039	39.1	35.1	72.6	88.7	43.1	47.4
Health aides, except for nursing.....	109	9.31	16,495	19,356	39.2	33.5	66.9	86.5	49.9	59.1
Animal caretakers	30	8.35	14,834	17,378	39.2	32.4	63.1	86.8	30.5	29.9
Cooks	602	7.94	14,507	16,518	38.1	34.1	69.2	86.7	26.0	28.5
Supervisors, food preparation and service occupations	122	7.83	12,942	16,281	38.5	29.7	58.2	89.3	22.9	36.1
Attendants, amusement and recreation facilities.....	68	8.08	11,998	16,804	39.0	26.8	57.8	90.8	29.8	47.4
Textile sewing machine operators .	97	8.98	18,259	18,679	38.1	38.6	89.1	83.3	56.2	54.0

* Estimated using the average work hours of civilian child care workers

N = Number of workers in sample. M = Mean. n.e.c. = “Not elsewhere classified.” FT = Full-time employed.

Civilian hourly wages are based on 2000 data, converted to 2002 dollars.

Education levels are coded as follows:

37 = 11th grade

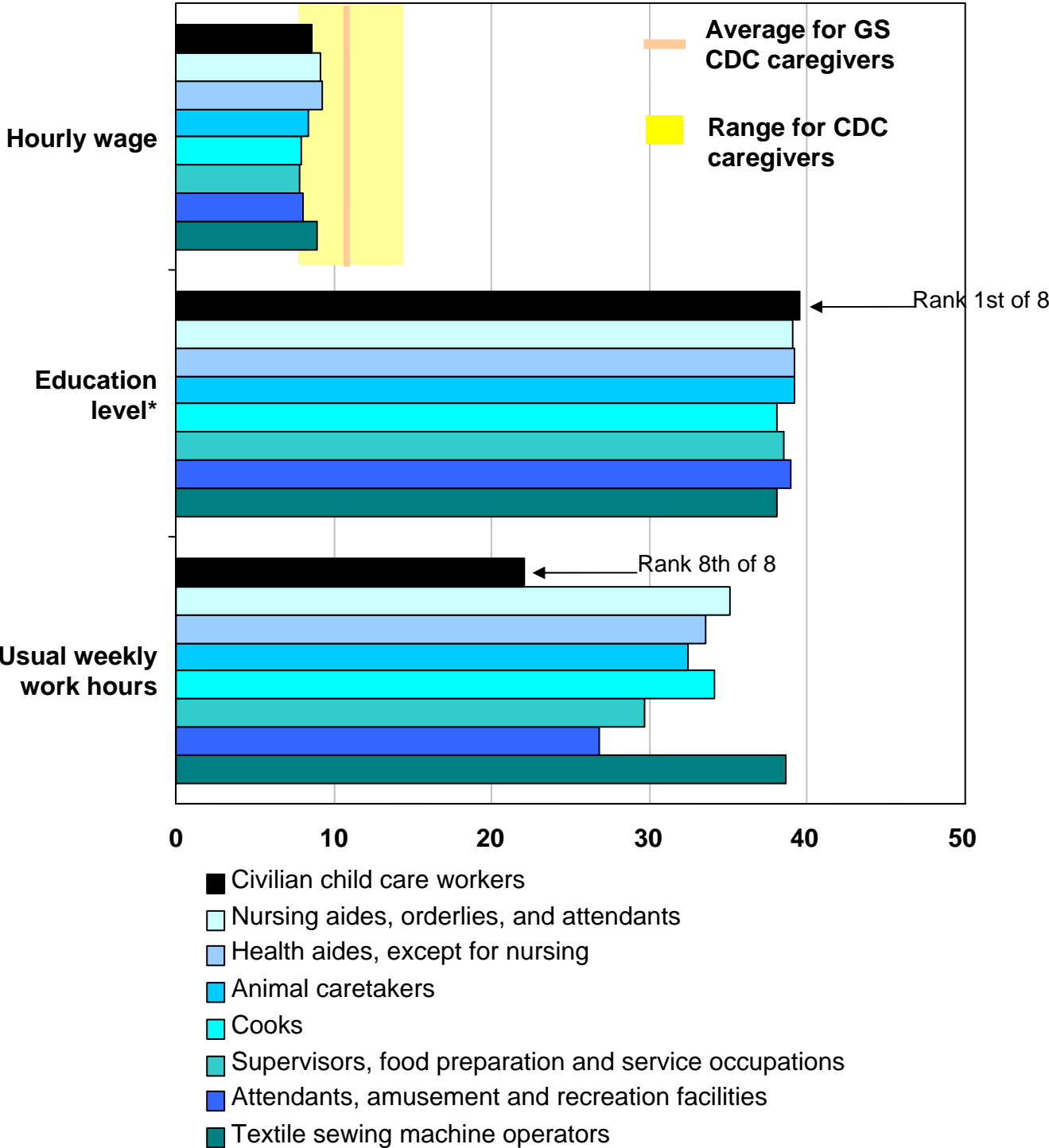
38 = 12th grade no diploma

39 = High school diploma

40 = Some college but no degree

41 = Associated degree—Occupation/Vocation

Figure 12
Averages for Child Care Workers and Benchmark Jobs Based on Hourly Wage



*Education Level
 35 = 9th grade 38 = 12th grade no diploma 41 = Associated degree-Occupation/Vocation
 36 = 10th grade 39 = High school diploma 42 = Associated degree-Academic program
 37 = 11th grade 40 = college but no degree 43 = Bachelor's degree.

Figure 13
Average Annual Incomes for Child Care Workers and Benchmark Jobs Based on Hourly Wage

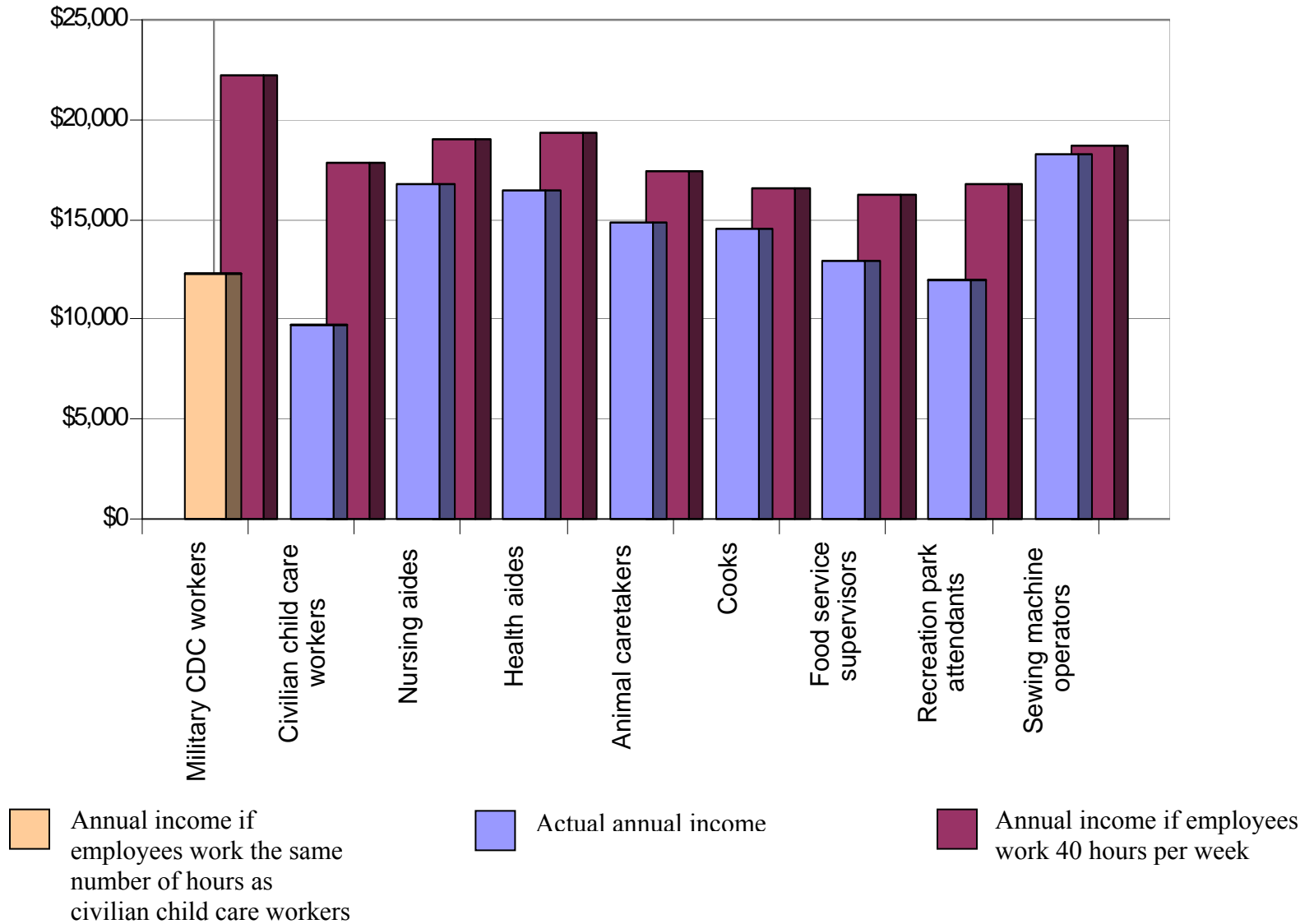
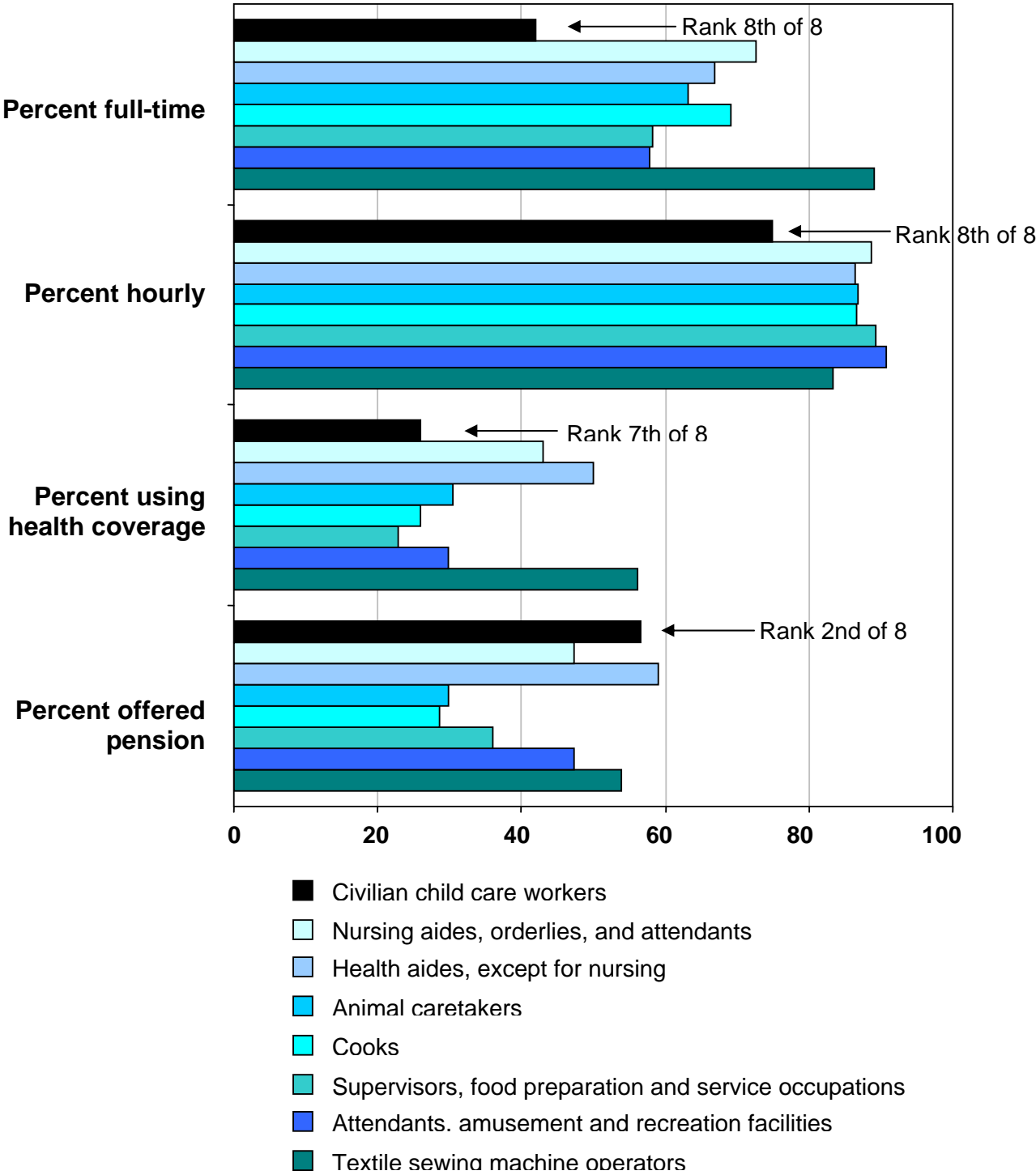


Figure 14
 Frequencies for Child Care Workers and Benchmark Jobs Based on Hourly Wage



CAREER LADDERS: WAGE BENCHMARKS AND GLOBAL LEVELS

Whereas the first set of data from the CPS was used to compare the wage, education, work hours, and use of benefits for the average worker in each occupation, this second set of data is used to compare the hourly wages of the average worker in each *occupation level* – or “global work level.” Data from the NCS were used to compare the hourly wages of military and civilian child care workers, and those of identified benchmark occupations, based on global work level.⁵¹ For civilian estimates, 2000 data were used to estimate 2002 dollars.⁵² For military wages, the 2002 GS salary table was used.

As described earlier, the occupational leveling process ranks and compares all occupations that are selected using the same criteria throughout. When an occupation is leveled, it is slotted into 1 of 15 work levels based on an analysis of nine leveling factors (the 10th is experimental) drawn from the U.S. Office of Personnel Management’s Factor Evaluation System which is the underlying structure for evaluation of GS Federal employees. BLS researchers have determined that several of these occupational leveling factors, most notably knowledge and supervision received, have strong explanatory power for wages. That is, as levels within a given factor increase, wages also increase.

Following are five tables, each specific to a global work level. Average hourly earnings and weekly work hours are presented for all civilian benchmark jobs—including child care—by global work level. These data are provided for private industry as well as state and local government jobs. The first item presented in each table is the minimum and maximum wages of each CDC caregiving position. These data are then displayed graphically for clearer comprehension.

In general, it appears that state and local governments offer higher hourly wages than private industry for child care work and all other identified benchmark occupations. In this data set, unlike the previous data set, child care workers appear to be working more hours; only those workers in entry-level child care positions work part-time or less. On average, beginning with global work level 5, child care providers work full-time, or 35 hours per week or more. This finding highlights the value of comparing child care work and similar occupations by global work level.

Global Work Level 1 Results

Civilian Child Care

The average civilian child care wage appears to rank in the middle among other entry-level civilian benchmark jobs in global work level 1 (see Table 11 and Figure 15).

⁵¹ No levels were reported by the NCS for the occupation of Dental hygienists.

⁵² An inflation factor of 1.0441 was applied to the 2000 data. See <http://data.bls.gov/cgi-bin/cpicalc.pl>.

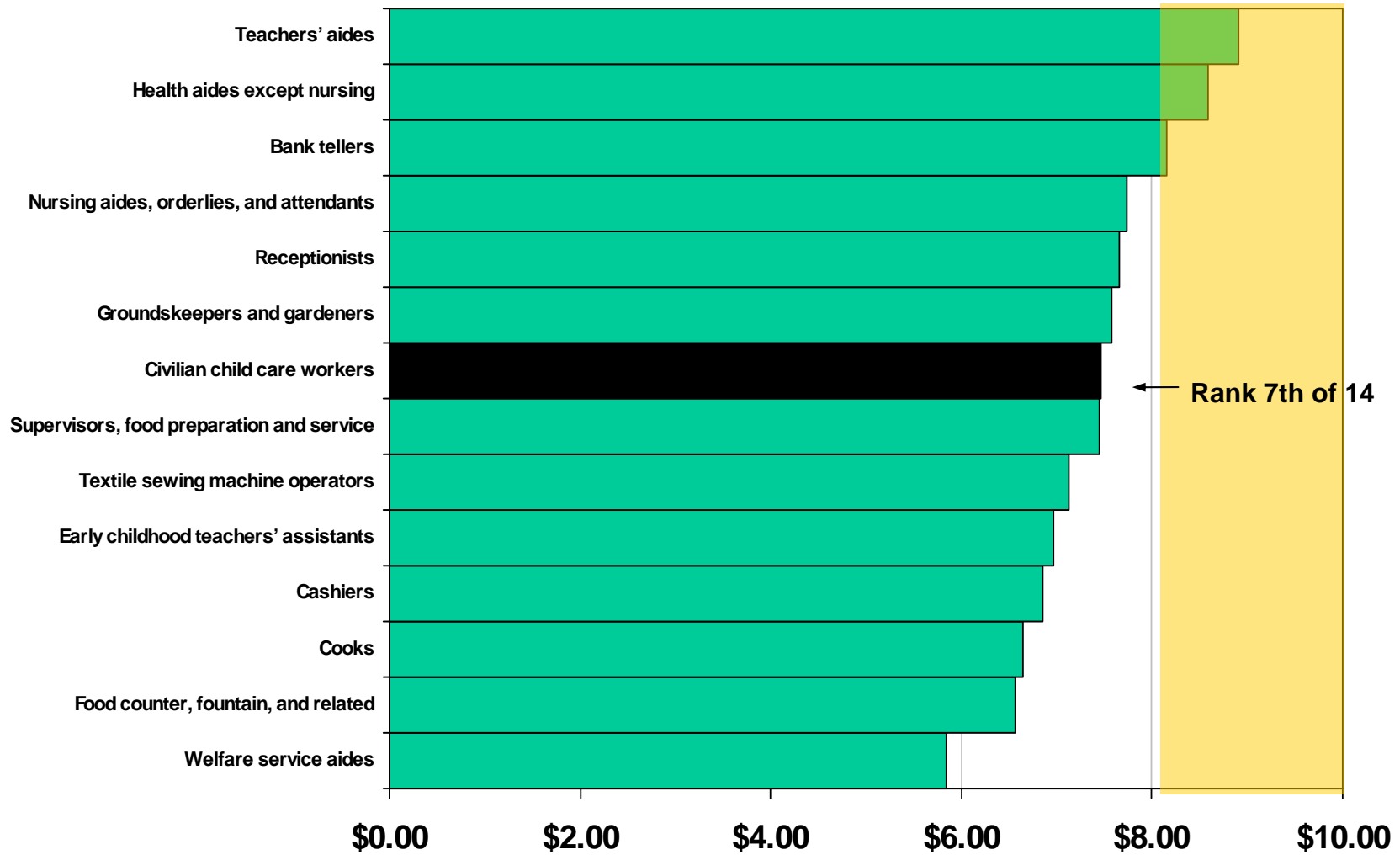
Military Child Care

Entry-level hourly wages for CDC caregivers are highly competitive. The yellow “GS-wage band” in Figure 15 illustrates entry-level CDC caregivers to start as some of the highest paid employees in global work level 1. In fact, the lowest step of the GS-2 wage schedule is higher than almost all benchmark job averages, including that of civilian child care work.

Table 11
Average Wages and Hours for Global Work Level 1

Occupation category		Total			Private industry			State and local government		
		Hourly earnings			Hourly earnings			Hourly earnings		
		Mean	% Error	Mean weekly hours	Mean	% Error	Mean weekly hours	Mean	% Error	Mean weekly hours
Global Work Level 1										
CDC Entry level, Step 1	GS-2	7.95	-	-	-	-	-	-	-	-
CDC Entry level, Step 10.....	GS-2	10.00	-	-	-	-	-	-	-	-
Civilian child care workers	Service	7.47	2.6	17.7	7.38	3.2	19.3	7.76	4.8	13.9
Early childhood teachers’ assistants	Service	6.97	5.0	24.5	6.54	5.3	24.6	9.17	5.1	23.8
Welfare service aides	Service	5.84	3.3	24.8	5.76	3.1	24.2	-	-	-
Health aides except nursing.....	Service	8.59	3.4	30.1	8.72	3.3	30.0	-	-	-
Nursing aides, orderlies, and attendants	Service	7.73	3.8	29.7	7.45	3.8	29.2	9.23	5.5	33.4
Food counter, fountain, and related.....	Service	6.57	2.1	24.7	6.55	2.1	24.8	8.10	4.7	21.9
Cooks	Service	6.64	3.9	29.8	6.43	3.1	29.7	9.82	7.1	31.1
Supervisors, food preparation and service.....	Service	7.45	4.7	20.4	7.45	4.7	20.4	-	-	-
Attendants, amusement and recreation facilities	Service	6.49	3.0	20.1	6.40	2.7	20.1	7.30	7.8	20.0
Teachers’ aides.....	White collar	8.91	2.7	27.3	-	-	-	9.00	2.9	30.2
Cashiers.....	White collar	6.85	1.2	25.7	6.85	1.2	25.7	7.28	4.5	24.4
Receptionists	White collar	7.65	3.1	27.6	7.64	3.2	27.7	8.30	4.1	25.1
File clerks.....	White collar	7.81	5.1	30.8	7.82	5.2	30.9	-	-	-
Bank tellers	White collar	8.15	5.8	24.3	8.15	5.8	24.3	-	-	-
Data entry keyers.....	White collar	9.29	6.0	27.1	8.47	2.8	22.2	-	-	-
Textile sewing machine operators.....	Blue collar	7.13	5.5	39.7	7.13	5.5	39.7	-	-	-
Groundskeepers and gardeners	Blue collar	7.57	6.5	35.7	7.33	6.6	35.8	8.81	4.9	34.9

Figure 15
Hourly Wage Averages of Jobs Rated at Global Work Level 1



Note. The yellow band covers GS-2 wages, from step 1 to step 10.

Global Work Level 3 Results

Civilian Child Care

Civilian child care hourly wages appear to fall in rank from global work level 1 to global work level 3 (see Table 12 and Figure 16). Among entry-level positions, child care wages rank 7th of 14 (50th percentile); among intermediate-level positions, child care wages rank 13th of 17 (76th percentile).

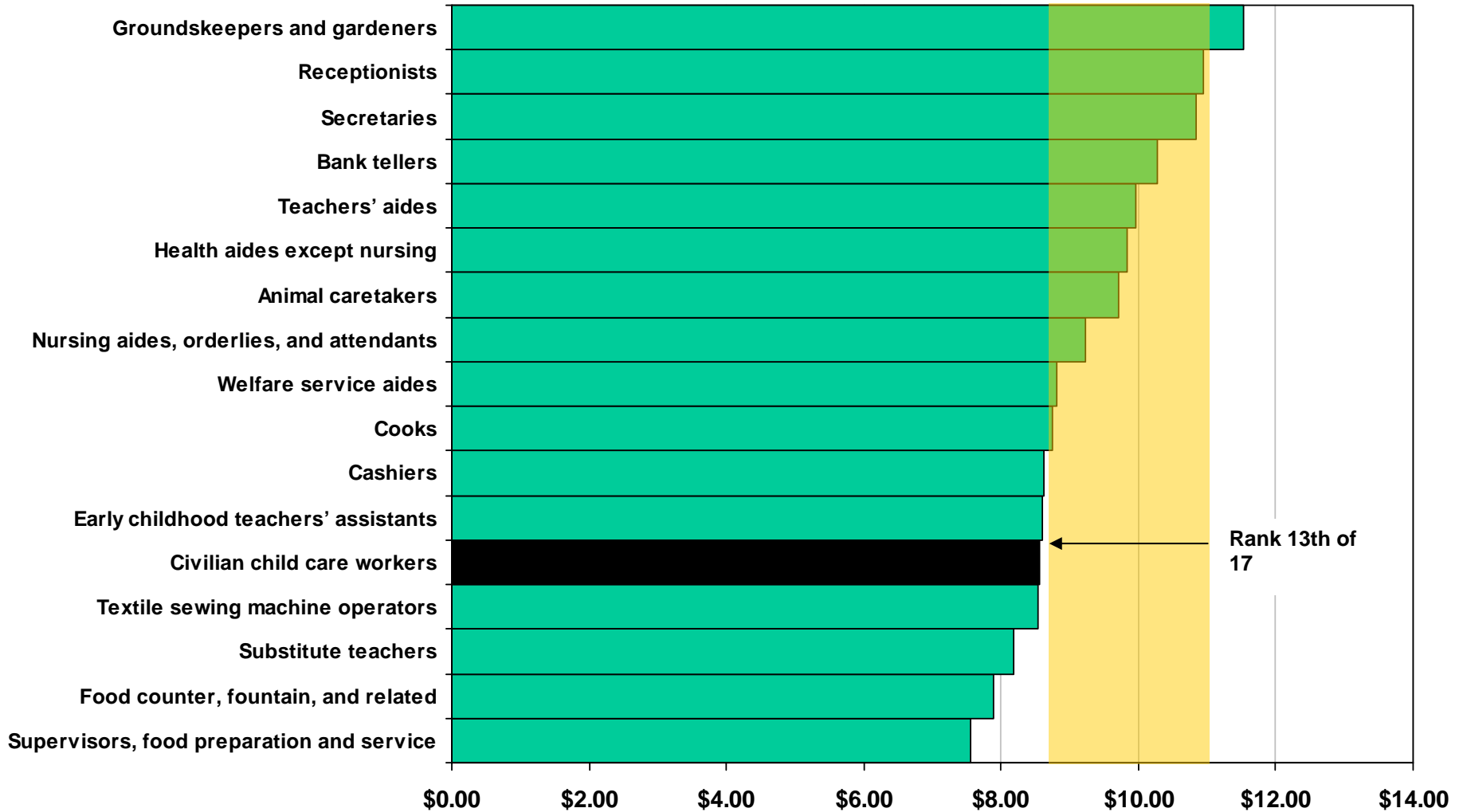
Military Child Care

Intermediate-level hourly wages for CDC caregivers remain competitive. The yellow band in Figure 16 shows Child Development Program Assistants in the intermediate-level position (GS-3) to begin their pay slightly above the average civilian child care wage, and increase to subsume the average wages of all but one benchmark job in global work level 3. Among intermediate positions, only groundskeepers and gardeners earn a higher hourly wage, on average, than the top (step 10) GS-3 caregiver. However, the position of the yellow, GS-wage band also shows the competitiveness of GS-3 wages to wane from those of GS-2 wages.

Table 12
Average Wages and Hours for Global Work Level 3

Occupation category		Total			Private industry			State and local government		
		Hourly earnings		Mean weekly hours	Hourly earnings		Mean weekly hours	Hourly earnings		Mean weekly hours
		Mean	% Error		Mean	% Error		Mean	% Error	
Global Work Level 3										
CDC Intermediate level, Step 1	GS-3	8.67	-	-	-	-	-	-	-	-
CDC Intermediate level, Step 10	GS-3	11.27	-	-	-	-	-	-	-	-
Civilian child care workers.	Service	8.55	4.8	33.2	8.20	5.3	36.2	9.60	8.9	26.7
Early childhood teachers' assistants.....	Service	8.60	7.8	31.8	7.91	13.1	31.1	9.82	4.3	33.0
Welfare service aides	Service	8.81	4.4	31.7	8.66	4.8	31.5	9.86	10.9	33.5
Health aides except nursing.....	Service	9.84	2.5	31.1	9.31	2.3	30.2	12.12	4.1	35.6
Nursing aides, orderlies, and attendants	Service	9.22	1.6	32.8	8.91	1.5	32.3	11.19	3.0	36.7
Food counter, fountain, and related.....	Service	7.89	5.7	27.2	7.85	6.2	27.6	8.26	9.4	23.3
Cooks	Service	8.74	3.8	33.9	8.62	4.1	33.8	10.21	2.2	34.4
Supervisors, food preparation and service	Service	7.55	6.1	33.2	7.51	6.1	33.1	-	-	-
Attendants, amusement and recreation facilities	Service	7.96	6.8	29.5	7.92	7.9	30.5	8.14	5.5	25.1
Hairdressers and cosmetologists	Service	11.03	9.4	25.8	11.03	9.4	25.8	-	-	-
Teachers' aides	White collar	9.97	2.2	33.3	8.52	7.9	28.1	10.03	2.3	33.6
Substitute teachers.....	White collar	8.18	7.8	8.5	-	-	-	8.18	7.8	8.5
Cashiers.....	White collar	8.62	1.1	32.0	8.55	1.2	32.0	12.02	9.9	32.3
Receptionists	White collar	10.95	2.8	36.7	10.94	2.9	36.7	11.47	6.8	36.5
File clerks.....	White collar	9.91	2.5	34.4	9.88	2.7	34.4	10.32	4.4	34.9
Bank tellers	White collar	10.27	3.5	32.9	10.27	3.5	32.9	-	-	-
Data entry keyers.....	White collar	11.24	3.8	37.8	10.95	4.4	37.8	12.98	4.0	38.3
Secretaries	White collar	10.83	1.8	35.2	10.67	2.2	34.8	11.47	2.6	37.2
Textile sewing machine operators.....	Blue collar	8.53	8.1	38.7	8.53	8.1	38.7	-	-	-
Groundskeepers and gardeners	Blue collar	11.54	1.9	35.5	11.53	2.1	34.0	11.54	4.0	39.4
Animal caretakers.....	Blue collar	9.72	21.2	38.3	10.09	26.3	38.5	-	-	-

Figure 16
Hourly Wage Averages of Jobs Rated at Global Work Level 3



Note: The yellow band covers GS-3 wages, from step 1 to step 10.

Global Work Level 5 Results

Civilian Child Care

Civilian child care hourly wages increase in rank by a small amount from the preceding global work level (see Table 13 and Figure 17), but fail to regain the lead held at the lowest global work level.

Military Child Care

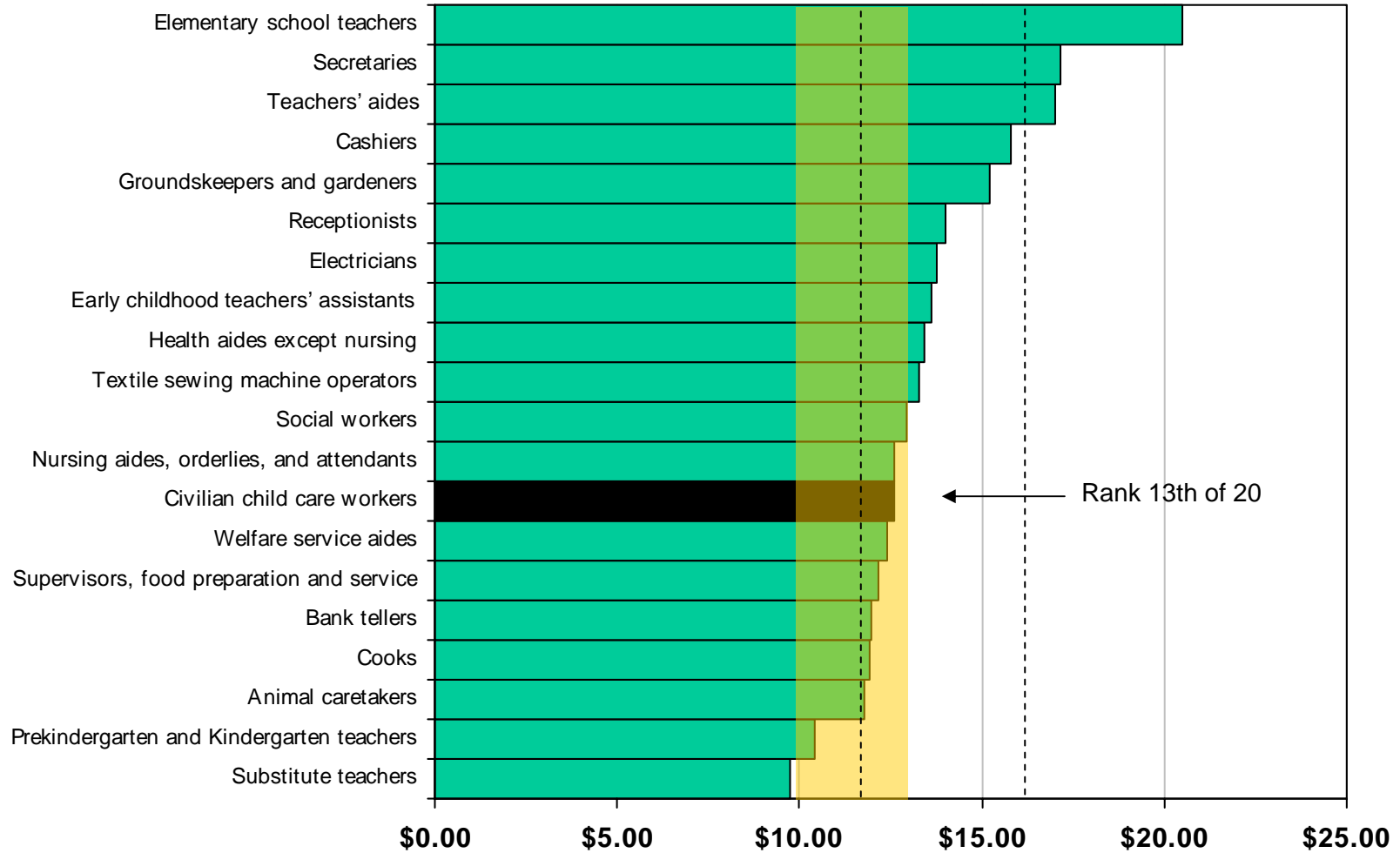
Target-level hourly wages for CDC caregivers are no longer competitive. Child Development Program Assistants in the target-level position, classified at global work level 5, do not have the same wage advantage as CDC caregivers in Global Work Levels 1 and 3 (see Table 9 and Figure 17). As the yellow GS-4 wage band in Figure 17 illustrates, target-level wages begin at \$2.84 less per hour than the average civilian child care wage, and maximize at the average wage of civilian child care. These GS-4 employees start at the average wage of civilian substitute teachers—the lowest wage average in global work level 5. Wages of CDC caregivers continue to fall in rank as global work level increases.

Thus, from an occupational work level perspective, these CDC caregiver positions are no longer competitive in the marketplace. Consequently, military policymakers may want to consider various alternatives for increasing wages. One of these alternatives might be to examine the classification structure of the caregiver positions. For example, as the dashed lines in Figure 17 illustrate, GS-6 wages are competitive with civilian child care work, and all other benchmark jobs, in global work level 5, with the exception of Elementary school teachers. A long-term goal, therefore, might be to incrementally reclassify all non-entry level caregiving positions.

Table 13
Average Wages and Hours for Global Work Level 5

Occupation category		Total			Private industry			State and local government		
		Hourly earnings			Hourly earnings			Hourly earnings		
		Mean	% Error	Mean weekly hours	Mean	% Error	Mean weekly hours	Mean	% Error	Mean weekly hours
Global Work Level 5										
CDC Target level, Step 1	GS-4	9.74	-	-	-	-	-	-	-	-
CDC Target level, Step 10	GS-4	12.66	-	-	-	-	-	-	-	-
Civilian child care workers.	Service	12.58	4.4	37.0	11.10	4.6	36.2	13.59	2.8	37.6
Early childhood teachers' assistants.....	Service	13.60	9.9	33.4	-	-	-	-	-	-
Welfare service aides	Service	12.38	6.3	36.5	10.83	3.9	34.4	13.62	10.0	38.4
Health aides except nursing.....	Service	13.43	5.0	36.9	13.35	6.8	37.2	13.59	7.0	36.2
Nursing aides, orderlies, and attendants	Service	12.59	4.7	37.8	11.32	4.4	37.2	15.19	2.3	39.1
Cooks	Service	11.92	3.4	38.1	11.70	3.6	38.6	14.24	4.0	33.5
Supervisors, food preparation and service	Service	12.16	2.5	40.8	11.99	3.0	41.3	12.97	6.1	38.7
Attendants, amusement and recreation facilities	Service	8.37	17.9	31.2	-	-	-	-	-	-
Teachers' aides.....	White collar	16.99	7.1	28.4	10.44	2.2	32.4	17.36	6.7	28.2
Pre-kindergarten and kindergarten teachers	White collar	10.44	3.8	37.4	10.38	3.9	37.5	12.75	15.0	35.4
Elementary school teachers.....	White collar	20.49	17.3	31.4	13.60	8.9	32.9	27.45	13.1	30.1
Substitute teachers.....	White collar	9.74	6.3	14.3	-	-	-	9.90	6.4	14.6
Social workers.....	White collar	12.96	4.5	39.3	12.63	6.9	39.4	13.53	2.6	39.1
Cashiers.....	White collar	15.79	5.1	34.5	15.78	5.6	34.0	-	-	-
Receptionists	White collar	14.02	9.0	37.5	14.04	9.2	37.4	-	-	-
Bank Tellers	White collar	11.97	6.1	34.4	11.97	6.1	34.4	-	-	-
Data entry keyers.....	White collar	13.59	3.2	39.9	13.99	3.3	39.9	-	-	-
Secretaries	White collar	17.14	6.6	38.2	17.57	6.8	38.3	15.13	3.8	38.0
Electricians.....	Blue collar	13.74	5.9	40.0	13.67	6.0	40.0	16.18	3.2	39.0
Textile sewing machine operators.....	Blue collar	13.26	18.5	40.0	13.26	18.5	40.0	-	-	-
Groundskeepers and gardeners	Blue collar	15.21	3.0	38.8	14.84	3.4	38.6	15.89	5.1	39.3
Animal caretakers.....	Blue collar	11.76	6.3	35.9	-	-	-	-	-	-

Figure 17
 Hourly Wage Averages of Jobs Rated at Global Work Level 5



Note. The yellow band covers GS-4 wages, from step 1 to step 10. The area between the dashed lines represents competitive GS-6 wages, from step 1 to step 10.

Global Work Level 7 Results

Civilian Child Care

Civilian child care workers fall in rank to become the lowest paid employees among the benchmark jobs in global work level 7 (see Table 14 and Figure 18).

Military Child Care

Leader-level hourly wages for CDC caregivers are also low in competitiveness. Child Development Program Assistants in the leader-level position are classified at global work level 7. The yellow GS-5 wage band in Figure 18 shows that leader-level wages decrease in rank among the higher occupational-level jobs. GS-5 wages begin about \$.50/hour below civilian child care work. Even at step 10, GS 5 wages fall more than \$3 below the average of all benchmark jobs. At step 10, only civilian child care workers, cooks, substitute teachers and social workers are earning less per hour, on average, than CDC caregivers.

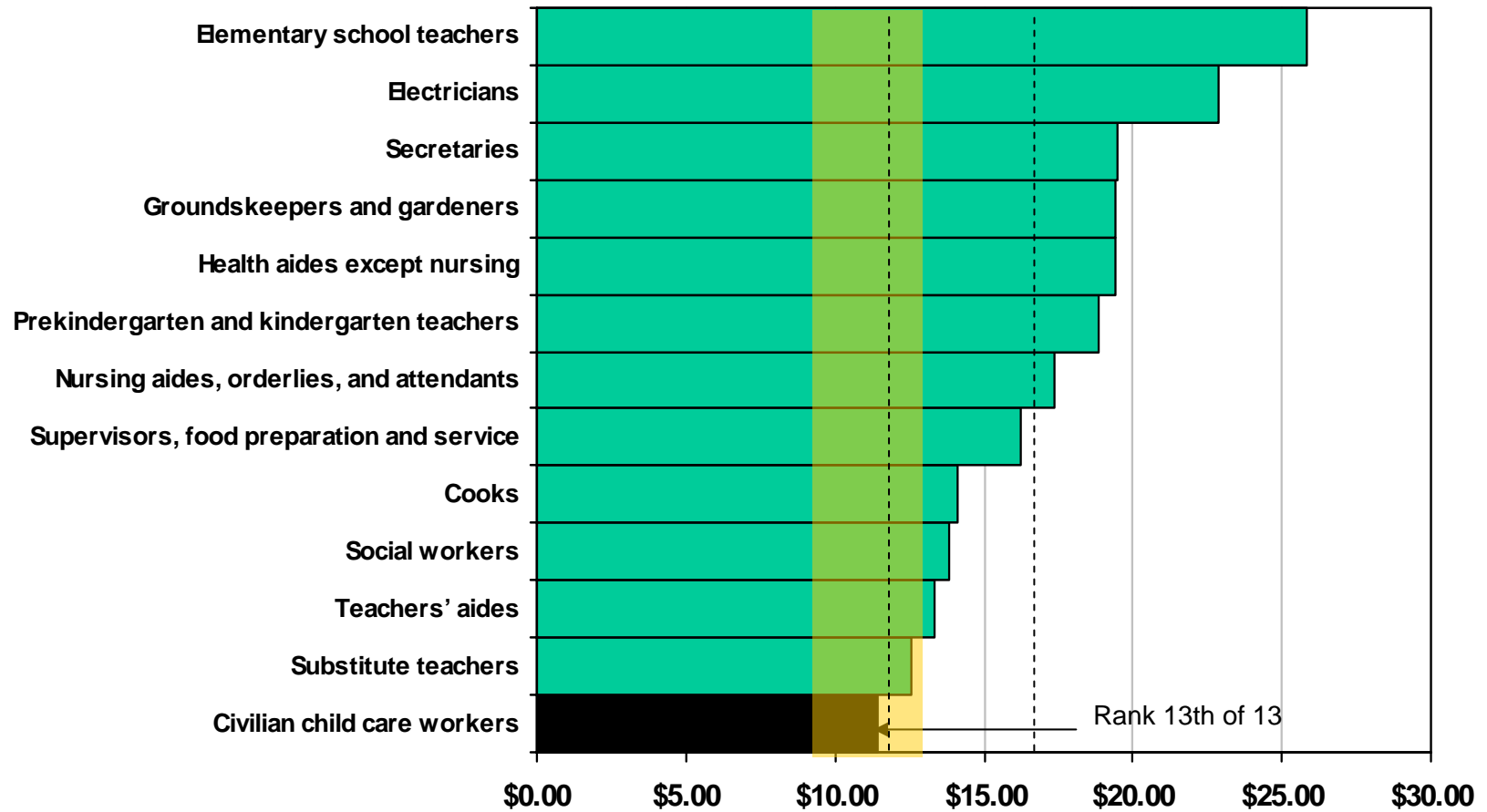
Elementary school teachers, on average, earn \$12 more per hour than the highest GS-5 step; pre-kindergarten/kindergarten teachers earn almost \$5 more per hour than the highest step.

Again, this illustrates the dilemma faced by military policymakers: how to afford wage increases within the current APF budget. To illustrate the magnitude of the problem, we include dashed lines in Figure 18 which show that at a GS-7 level, hourly wages are competitive with civilian child care work and almost all other benchmark jobs in global work level 7.

Table 14
Average Wages and Hours for Global Work Level 7

Occupation category		Total			Private industry			State and local government		
		Hourly earnings			Hourly earnings			Hourly earnings		
		Mean	% Error	Mean weekly hours	Mean	% Error	Mean weekly hours	Mean	% Error	Mean weekly hours
Global Work Level 7										
CDC Leader level, Step 1.....	GS-5	10.89	-	-	-	-	-	-	-	-
CDC Leader level, Step 10.....	GS-5	14.16	-	-	-	-	-	-	-	-
Civilian child care workers.	Service	11.40	9.0	40.0	10.58	6.5	40.0	-	-	-
Health aides except nursing.....	Service	19.40	8.3	38.2	-	-	-	-	-	-
Nursing aides, orderlies, and attendants	Service	17.37	3.4	38.1	17.55	5.7	32.9	17.34	3.8	39.1
Cooks	Service	14.11	6.6	40.0	13.50	4.9	40.0	-	-	-
Supervisors, food preparation and service.....	Service	16.26	7.9	43.8	16.32	8.0	43.9	-	-	-
Teachers' aides.....	White collar	13.32	17.2	36.8	-	-	-	-	-	-
Prekindergarten and kindergarten teachers	White collar	18.85	16.7	36.2	-	-	-	26.30	13.5	37.8
Elementary school teachers.....	White collar	25.84	3.2	36.5	19.43	6.5	35.4	27.20	3.2	36.8
Substitute teachers.....	White collar	12.53	8.1	19.1	12.37	9.4	15.7	12.53	8.4	19.2
Social workers.....	White collar	13.80	11.2	38.3	12.86	13.2	38.1	16.59	2.9	38.9
Secretaries	White collar	19.47	2.6	37.8	19.75	3.1	37.5	18.46	2.8	39.2
Electricians.....	Blue collar	22.90	3.9	39.7	23.40	4.2	39.7	19.75	5.8	40.0
Groundskeepers and gardeners	Blue collar	19.43	11.9	40.0	-	-	-	19.76	14.5	40.0

Figure 18
Hourly Wage Averages of Jobs Rated at Global Work Level 7



Note. The yellow band covers GS-5 wages, from step 1 to step 10. The area between the dashed lines represents competitive GS-7 wages, from step 1 to step 10.

Global Work Level 8 Results

Civilian Child Care

The highest global work level given to civilian child care work is global work level 8. CDC Program Technicians are also rated at global work level 8. With the exception of substitute teachers and social workers, civilian child care workers remain the lowest paid among all benchmark jobs in global work level 8 (see Table 15 and Figure 19).

Military Child Care

Hourly wages for Child Development Program Technicians are the least competitive. Although the CDC Program Technician is rated at global work level 8, this position is classified as GS-5, the same grade level as that of a CDC Development Program Assistant, Leader-level. The difference in GS-5 wages becomes more pronounced when they are compared with those of other benchmark jobs in global work level 8. As the yellow GS-5 wage band in Figure 19 illustrates, even the average civilian child care worker earns over \$4 more per hour than the maximum earning potential of a GS-5 employee.

Comparing the hourly wages of civilian substitute teachers and CDC caregivers is a good way to gauge the decline of competitiveness in CDC positions. At global work level 3 (GS-3), the minimum CDC caregiver wage began at almost \$0.50 more per hour than the average hourly wage of substitute teachers. At global work level 8 (GS-5), the maximum CDC position falls about \$2.50/hour below the average wage of substitute teachers. The impact of this decline in competitiveness becomes more pronounced when other occupations are considered. For example, according to these data, military spouses and civilians living near military installations will reach higher earning potentials if they climb the career ladder in food service (on average, \$5 more per hour) or secretarial (on average, \$11 more per hour) positions than if they pursued a career in military child care.

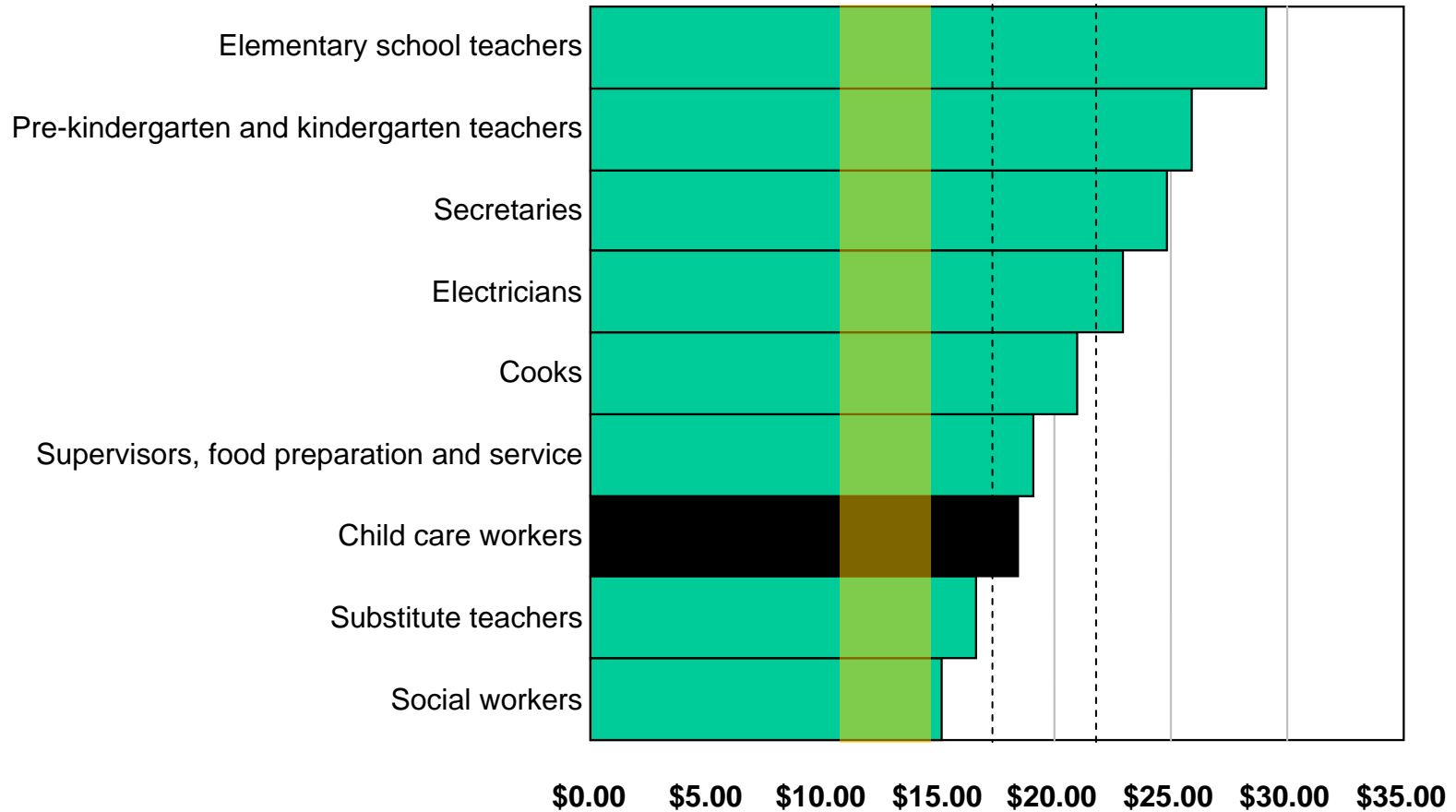
The dashed lines in Figure 19 represent the extent of the salary compression at this level. As can be seen, in order to be competitive with civilian child care work and most other benchmark jobs in global work level 8, CDC Program Technicians working under global work level 8 conditions would need to be paid at a GS-9 level.

Table 15
Average Wages and Hours for Global Work Level 8

Occupation category		Total			Private industry			State and local government		
		Hourly earnings			Hourly earnings			Hourly earnings		
		Mean	% Error	Mean weekly hours	Mean	% Error	Mean weekly hours	Mean	% Error	Mean weekly hours
Global Work Level 8										
CDC Program tech., Step 1	GS-5	10.89	-	-	-	-	-	-	-	-
CDC Program tech., Step 10	GS-5	14.16	-	-	-	-	-	-	-	-
* Civilian child care workers	Service	18.41	20.7	38.5	-	-	-	-	-	-
Cooks	Service	20.93	7.6	43.2	20.93	7.6	43.2	-	-	-
Supervisors, food preparation and service.....	Service	19.05	4.4	40.8	19.34	4.5	41.6			
Pre-kindergarten and kindergarten teachers	White collar	25.88	10.0	36.0	12.89	16.0	38.1	30.23	5.3	35.3
Elementary school teachers.....	White collar	29.05	2.0	33.8	20.13	7.6	36.5	29.79	2.0	36.9
Substitute teachers.....	White collar	16.56	10.5	18.6	-	-	-	16.54	10.7	18.6
Social workers.....	White collar	15.10	11.6	39.0	-	-	-	18.63	3.0	38.4
Electricians.....	Blue collar	22.93	6.1	39.9	22.71	7.1	40.0	23.75	11.2	39.6
Secretaries	White collar	24.84	3.0	38.7	24.78	3.0	38.8	-	-	-

Note. Although no global work levels are reported for Dental Hygienists, overall mean hourly wage is \$27.22

Figure 19
Hourly Wage Averages of Jobs Rated at Global Work Level 8



Note: The yellow band covers GS-5 wages from step 1 to step 10. The area between the dashed lines represents competitive GS-9 wages, from step 1 to step 10.

CAREER REQUISITES: MILITARY CHILD CARE VERSUS BENCHMARK JOB BENEFITS

Surveys from the NSCW contain detailed questions about the benefits offered to employees. Unfortunately, data from these surveys contain too few civilian child care workers to allow any assumptions about wages or benefits for the field to be made. However, data are available for several of the identified benchmark occupations. Benefit data are also available for full-time regular CDC caregivers, as they receive GS and NAF employee benefits. Table 16 presents the frequencies of benefits for six civilian benchmark occupations. This same data is presented for full-time CDC caregivers when available.⁵³ Figures 15 through 18 display this data graphically for easier comprehension.

Health Care Benefits

Full-time CDC caregivers fare well when it comes to health care benefits. All full-time CDC caregivers are offered subsidized health care coverage, compared to as few as 32% to 39% of teachers' aides, cashiers, and cooks (see Figure 20). Elementary school teachers have the best health care benefits; nearly half have their entire health care cost covered and the remainder receives partial cost coverage.

Time-Off Benefits

CDC caregivers fare well when it comes to time-off benefits. CDC caregivers are eligible to receive paid vacation days and holidays, and are allowed days off for a sick child without the loss of pay or vacation (see Figure 21). It should be noted, however, that staff receive family leave only if they have accrued sick leave. CDC caregivers can also be given a "time off" award which can be used to take care of personal business - but it is a special award administered through the personnel system - local directors do not have the authority to give an employee time off.⁵⁴ A good majority of teachers' aides, elementary school teachers, nursing aides, and receptionists also receive these time-off benefits. Cashiers and cooks are least likely to receive time-off benefits.

Child Care Benefits

As a DoD employee, all CDC caregivers have access to the military subsidized child care system, regardless of employee (full-time, part-time, or flexible) status (see Figure 22). However, with slots at 50 hours per week, CDC caregivers working less than full-time may not need and/or be able to afford the weekly rate. The financial assistance provided to CDC caregivers for child care is indirect; all child care subsidies are used directly by the program to improve program quality. Teachers' aides experience the second best frequency of child care benefits, though it only reaches 26%.

⁵³ GS benefit data was obtained from the Federal Jobs Digest at <http://www.jobsfed.com>

⁵⁴ Barbara Thompson, personal communication, January, 2004.

Pension Plan Benefits and Training Opportunities

Full-time CDC caregivers fare well when it comes to pension plan and training benefits. All full-time CDC caregivers are offered a pension plan and receive employer contributions toward it (see Figure 23). Both GS and NAF employees are also offered pre-tax accounts for child/dependent care. The majority of teachers' aides, elementary school teachers, nursing aides, and receptionists also receive these benefits. Cooks and cashiers are least likely to receive pension plan benefits. As for training, all CDC caregivers receive training opportunities, as do most teachers' aides, elementary school teachers, and nursing aides.

Table 16
Frequency of Employee Benefits for Military CDC Caregivers (GS and NAF) and Civilian Benchmark Occupations

Employee Benefit	GS/NAF employees	Teachers' aides	Elementary school teachers	Nursing aides, orderlies, and attendants	Receptionists	Cashiers	Cooks
Employed full-time ...		52.2	87.0	70.2	71.4	40.4	65.2
Salaried.....		60.9	85.5	10.5	23.8	13.5	15.2
Offered health plan.....	100.0	69.6	88.4	73.7	71.4	51.9	52.2
Uses employer coverage.....	Unknown	52.2	78.3	59.6	47.6	26.9	34.8
Provided partly or entirely paid health insurance coverage.....	Entirely... 0.0 Partly... 100.0	Entirely...21.7 Partly.....39.1	Entirely...44.9 Partly.....39.1	Entirely...15.8 Partly.....56.1	Entirely...14.3 Partly.....57.1	Entirely...9.6 Partly....34.6	Entirely...6.5 Partly.....32.6
Offered pension plan.....	100.0	69.6	87.0	59.6	57.1	34.6	37.0
Provided pension plan contributions.....	100.0	43.5	68.1	52.6	52.4	28.8	32.6
Receive paid vacation days.....	100.0	39.1	46.4	82.5	85.7	59.6	63.0
Receive paid holidays.....	100.0	78.3	62.3	82.5	81.0	46.2	39.1
Allowed paid time off for personal business.....	Unknown	82.6	91.3	75.4	71.4	44.2	34.8
Allowed days off for sick child without pay or vacation loss.....	100.0	26.1	27.5	15.8	14.3	9.6	6.5
Provided employer-sponsored child care center on/near site.....	100.0	26.1	13.0	12.3	9.5	1.9	6.5
Provided direct financial assistance for child care*.....	100.0	26.1	10.1	7.0	4.8	17.3	10.9
Offered pre-tax account for child/dependent care.....	Unknown	17.4	24.6	28.1	23.8	9.6	10.9
Offered training opportunities.....	100.0	82.6	78.3	73.7	42.9	40.4	21.7

*Child care benefit is indirect; benefit subsidy goes directly back into the program to improve quality.

Figure 20
A Comparison of Health Care Benefits

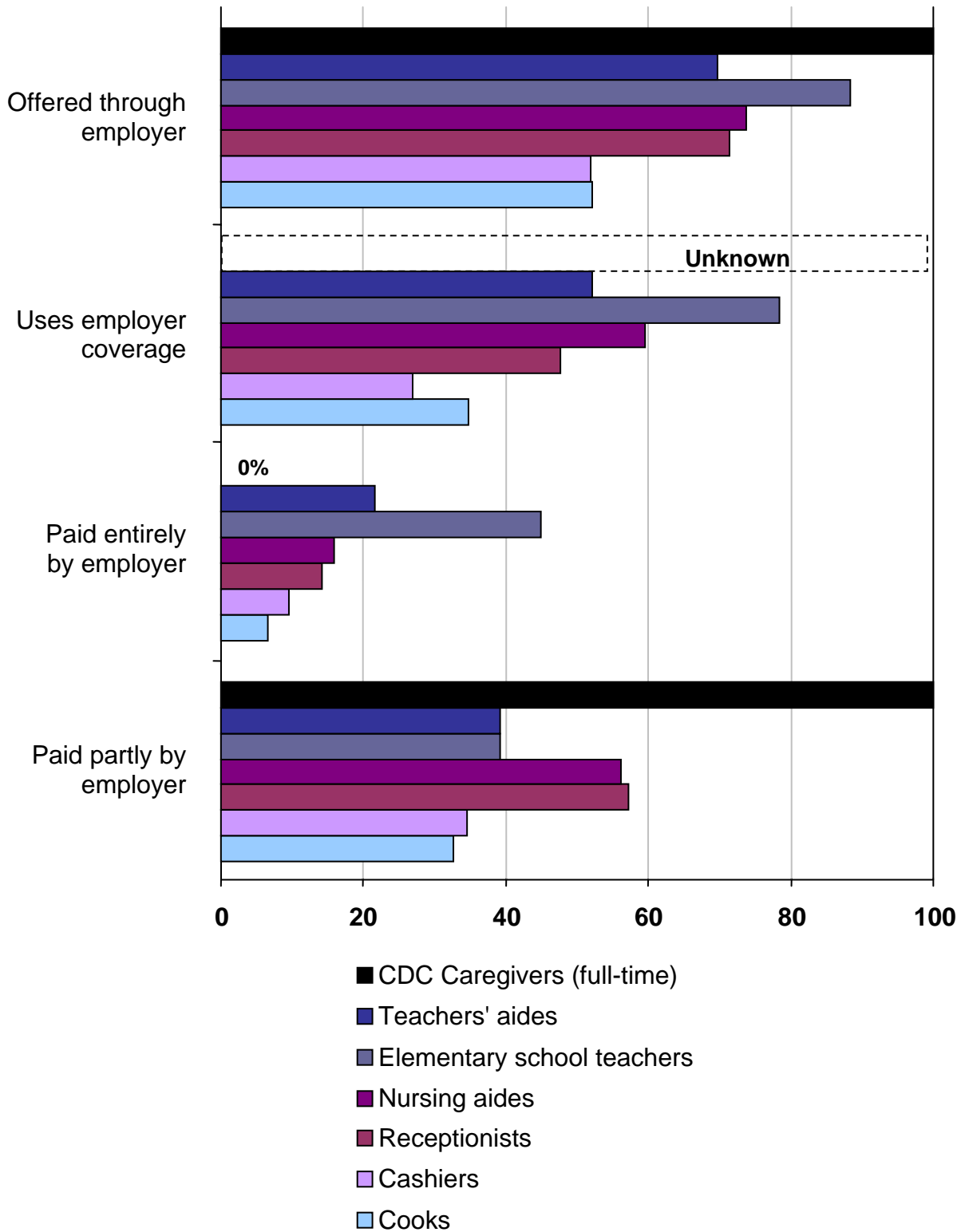


Figure 21
A Comparison of Time-Off Benefits

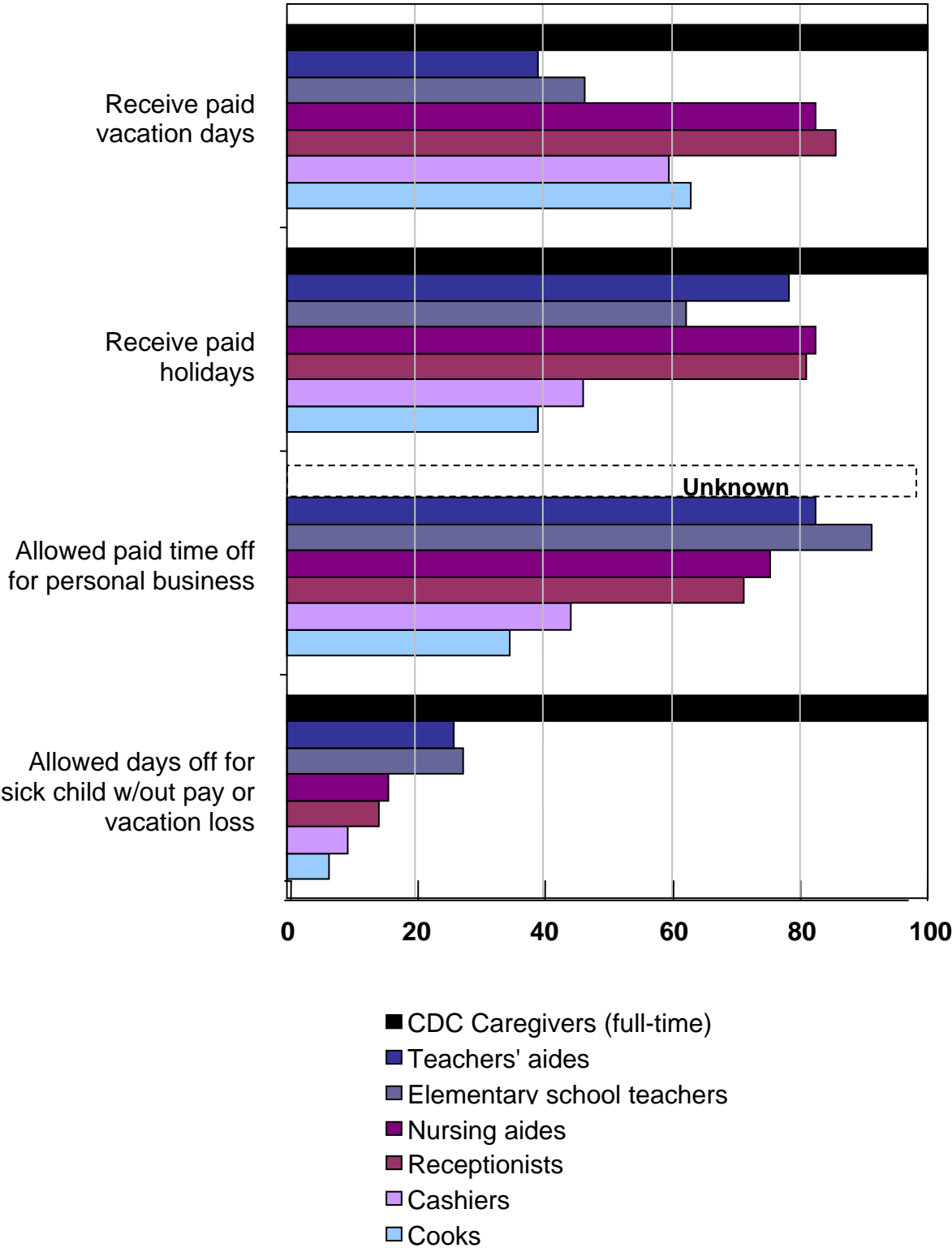


Figure 22
A Comparison of Child Care Benefits

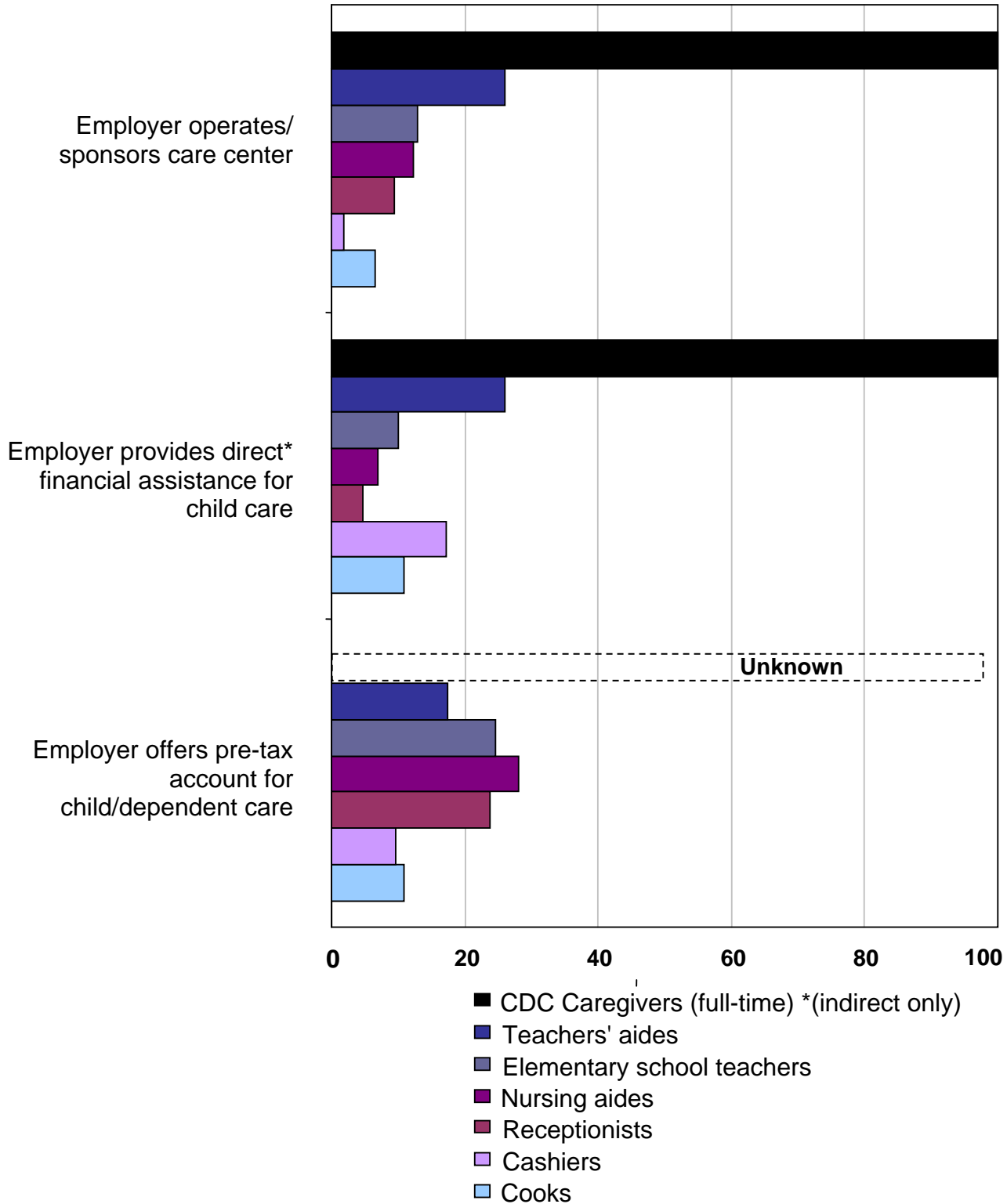
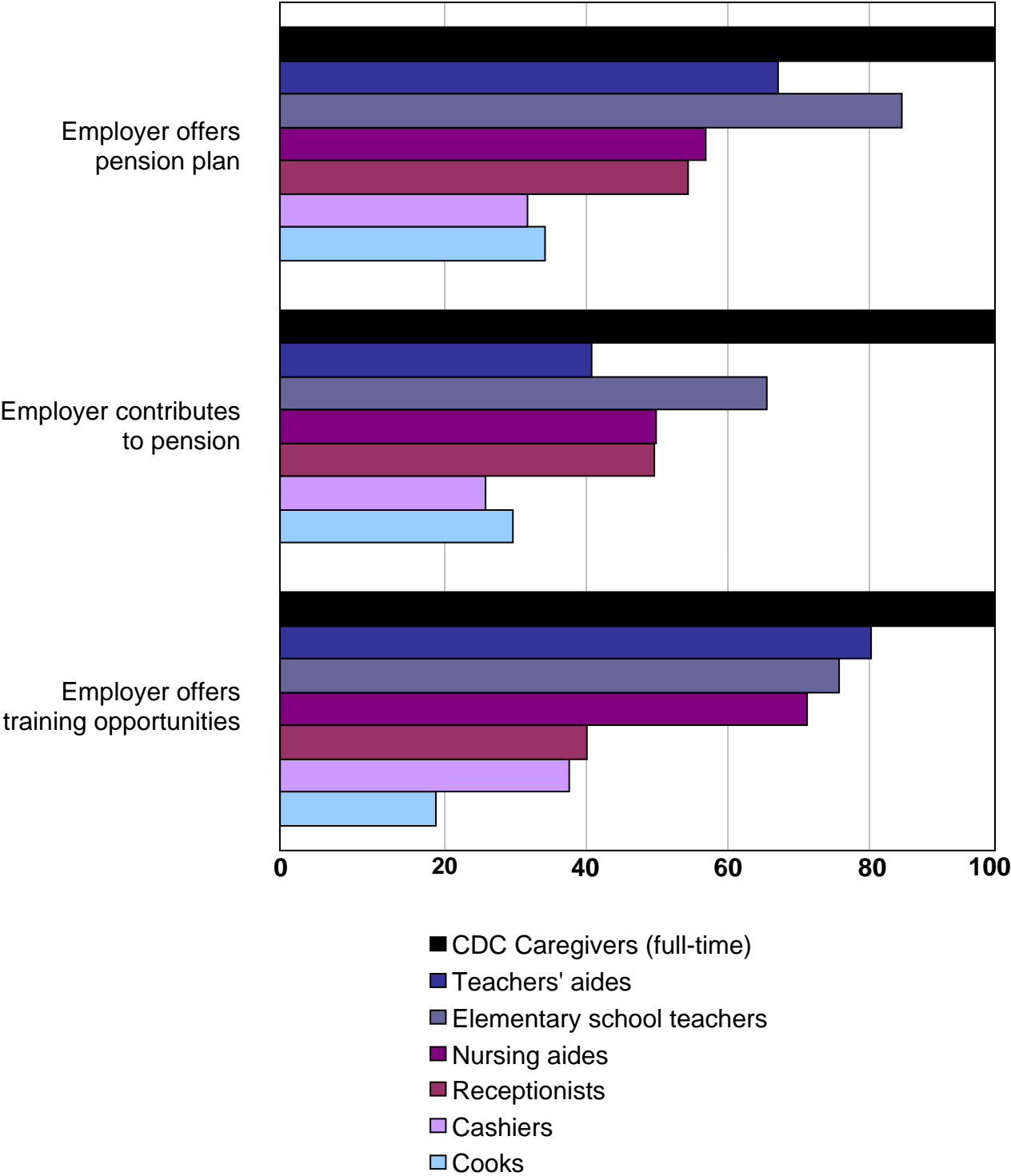


Figure 23
A Comparison of Pension Plan and Training Benefits



SUMMARY OF FINDINGS

Military Child Care versus Military Benchmark Jobs

How do CDC caregiver jobs compare to other DoD jobs classified at the same GS-level?

- Overall, CDC caregiver positions within GS levels 2 through 4 have knowledge requirements, job duties, and responsibilities equivalent to those of other similar DoD positions.
- When there are differences between CDC caregiver positions and DoDDS positions in GS-level 2 through 4, CDC caregiver positions usually:
 - require more on-the-job training and less education;
 - receive more supervision;
 - require more complex tasks with greater impact on program operations
 - require more public contact and more safety precautions.
- Within the GS-5 pay grade, the leader-level CDC caregiving position rates lower in overall occupational level than the CDC caregiver technician position. Compared to other DoD GS-5 jobs, the CDC leader-level caregiving position:
 - is equal in overall occupation level to the DoDDS School Support Assistant A and requires a comparable level of responsibility, autonomy, and technical expertise.
 - is lower in overall occupational level than the DoD Education Technician position primarily due to lower professional knowledge requirements. The Education Technician position requires specialized knowledge and technical expertise whereas the leader-level CDC position requires more standardized knowledge.
- The CDC program technician position, classified at a GS-5 pay grade, reflects the highest overall occupational level in the CDC child care career ladder. Compared to other DoD GS-5 jobs, the CDC program technician position:
 - is equal in overall occupational level to the DoD Education Technician despite the fact that the CDC caregiver technician position requires more education and experience than the Education Technician position, has more supervisory responsibilities, is rated higher in complexity and scope and receives less supervision than the Education Technician position.
 - is lower in overall occupational level than the DoDDS Pre-kindergarten Teacher position and requires:
 - less education, less professional knowledge and more on-the job training;

- slightly less overall independence;
 - more supervisory duties and training;
 - similar tasks and responsibilities.
- is higher in overall occupational level than the DoDDS Substitute Teacher position and requires:
 - less education and less professional knowledge;
 - more on-the job training;
 - considerably more responsibility and autonomy;
 - less supervision.

Military Child Care versus Civilian Benchmark Jobs

How do military CDC jobs compare to civilian jobs featuring similar content?

Without considering global work level, CDC caregiver average hourly wages are highly competitive compared to those of all civilian benchmark jobs.

- CDC caregivers earn higher hourly wages than civilian child care workers—about \$2 more per hour on average. However, the CDC average hourly rate of \$10.67 used in these analyses is an unweighted rate – that is, it does not attempt to adjust for size of population in each of the five CDC positions. If the majority of CDC staff are not at the GS-4/5 level, this figure may be unrealistically high.
- CDC caregivers earn higher hourly wages than do workers in all civilian jobs featuring similar content and requiring similar or lower education levels; they earn lower hourly wages compared to civilian jobs featuring similar content and requiring higher education levels.
- In comparison, hourly wages for civilian child care increase as education levels increase. Civilian child care workers rank 5th in education but 7th in wages among 10 benchmark jobs judged similar in content.

How do military CDC jobs compare to civilian jobs featuring similar qualifications?

- CDC average hourly wages are higher than those for most civilian benchmark jobs featuring similar educational requirements
- In comparison, civilian child care workers earn the lowest annual income of employees in all benchmark jobs requiring similar education levels. Specifically, civilian child care wages rank 10th out of 12 jobs requiring similar educational levels.

How military CDC jobs compare to civilian jobs compatible with the military lifestyle?

- Except for dental hygienists (and to a lesser extent, secretaries) CDC caregivers earn higher hourly wages than workers in all other civilian jobs identified as being widely available to military spouses, including civilian child care--anywhere from \$2 to \$4 more per hour on average.
- Similarly, civilian child care work offers competitive hourly wages, but falls below average wages paid to dental hygienists and secretaries, ranking 3rd of 7 in hourly wages of jobs convenient to military spouses.

How do military CDC jobs compare to civilian jobs featuring similar wages?

- CDC caregivers earn higher hourly wages than do workers in civilian child care and all benchmark occupations with similar wages. Considering the span of wages obtainable by CDC caregivers, military child care workers fare very well compared to workers in these civilian jobs.
- With low weekly work hours, competitive hourly wages do not translate into competitive annual wages for CDC caregivers. The average CDC caregiver earns just over \$12,000 per year working an estimated 22.1 hours per week. With a full-time work week, the average CDC caregiver would earn just over \$22,000 per year. Thus, they earn a little more than half (55.2%) of their full-time earning potential every year.
- Based on average hourly wage and estimated annual work hours, CDC caregivers earn:
 - \$2.32 more per hour but \$2,572 less per year than animal caretakers,
 - \$0.65 more per hour but \$4,375 less per year than teachers' aides,
 - \$1.52 more per hour but \$4557 less per year than nursing aides,
 - \$0.18 more per hour but \$6,892 less per year than hairdressers and cosmetologists,
 - \$0.98 more per hour but \$4,505 less per year than bank tellers,
 - \$1.69 more per hour but \$5,997 less per year than sewing machine operators,
 - and \$2.73 more per hour but \$2,245 less per year than cooks.
- If military CDCs cannot offer caregivers more hours than the typical civilian child care center—and if caregivers desire more work hours—then they lose the advantage afforded to them by their higher hourly wage.
- In comparison, civilian child care workers are the most educated employees in benchmark jobs offering similar wages where they rank 1st out of 8 in education level. However, compared with other employees who are paid similar hourly wages, civilian child care workers are less likely to work full-time and rank 8th of 8 in terms of number

of weekly hours worked. As a result, among civilian employees who earn similar hourly wages, civilian child care workers come away with the lowest annual income, earning just under \$10,000 per year working an average of 22.1 hours per week. Working full-time, child care workers would earn \$17,824 annually.

How do the benefits of jobs in military CDC compare to those of civilian jobs featuring similar content, qualifications, and/or wages?

- Full-time CDC caregivers fare well when it comes to health care, time-off, child care, and pension plan benefits.

Military Child Care: Wage Benchmark and Global Work Levels

When global work level is considered, CDC caregiving hourly wages are highly competitive with those of all lower-level civilian benchmark jobs, but rapidly lose ground at higher Global Work Levels.

- Entry-level wages for CDC caregivers are highly competitive. In fact, these caregivers begin as some of the highest paid employees in global work level 1.
- Intermediate-level wages for CDC caregivers remain competitive in global work level 3, though competitiveness falls from that of entry-level CDC positions.
- Target-level wages for CDC caregivers are no longer competitive in global work level 5; target-level wages begin at \$2.84 less per hour than the average civilian child care wage, and maximize at the average wage of civilian child care.
- Leader-level wages for CDC caregivers lack competitiveness in global work level 7; leader-level wages begin at about \$0.50/hour below civilian child care workers and even at step 10 fall more than \$3 below the average of all benchmark jobs.
- Wages for Child Development Program Technicians are the least competitive at global work level 8; even civilian child care workers at global work level 8 earn an average hourly wage of \$4 more than the maximum earning potential of a CDC Program Technician.
- As higher global work level CDC jobs lose competitiveness with civilian benchmark jobs, it is likely that career-oriented employees will seek other jobs that accommodate the military lifestyle.
- Employees will reach higher earning potentials if they climb the career ladder in food service (on average, \$5 more per hour) or secretarial (on average \$11 more per hour) occupations than if they pursue a career in military child care.
- Similar to CDC caregivers, civilian child care hourly wages fall in competitiveness as global work level increases. Specifically, civilian child care wages rank:
 - 7th out of 14 jobs in global work level 1,
 - 13th out of 17 jobs in global work level 3,
 - 13th out of 20 jobs in global work level 5,

Comparative Analyses

- and 13th out of 13 jobs in global work level 7.

It should be emphasized that while civilian child care workers on average work the least amount of hours among jobs similar in content, education level, and hourly wage, it is only the lowest, entry-level child care workers who work less than full-time. When global work level is taken into account, we find that starting with global work level 5, civilian child care providers work full-time (35 hours per week or more), on average.

RECOMMENDATIONS

RECOMMENDATIONS

This report compared the compensation packages of DoD CDC staff to those of employees in occupations similar to child care work in terms of content, qualifications, compatibility to the military lifestyle, wages and benefits. Using data from various sources, we compared CDC caregiver positions with both military and civilian benchmark jobs. Our findings revealed a number of strengths and weaknesses in the compensation packages of military caregivers. Below, we list our recommendations for enhancing these compensation packages and reducing turnover among qualified child care professionals. These recommendations are broken down into three domains: (1) compensation; (2) quality improvement; and (3) recruitment. It should be noted that compensation recommendations are specific to military CDCs; quality improvement and recruitment recommendations represent more general strategies to improve retention and recruitment of child care providers in center-based programs.

Compensation Recommendations

We begin with *recurring* recommendations – that is, initiatives that result in permanent increases to an employee’s basic rate of pay on an ongoing basis or provide an ongoing increase in income in the form of a benefit such as health coverage - since salary and wage increases remain the most important ways to stabilize the workforce and reduce turnover. These are followed by *non-recurring* recommendations – initiatives that are not tied to basic rates of pay or benefits and therefore do not represent increased operating costs to CDCs on an annual or ongoing basis. These non-recurring recommendations include both financial (e.g., lump-sum cash awards) and non-financial (e.g., indirect strategies that affect retention and recruitment) incentives. It is important to distinguish between recurring and non-recurring financial initiatives because even though the latter may be substantial in dollar amounts (as are the stipends in the California C.A.R.E.S. program, for example), a financial reward is independent of a worker’s regular pay and therefore is not as dependable nor as unrestricted in nature as an ongoing increase in benefits or pay.

Our major recommendations address gaps in current military compensation systems. Based on our findings, it is apparent that while entry-level wages for CDC caregivers are competitive, CDC caregiving positions beyond the intermediate level (CC-I or GS-03) are no longer competitive in the marketplace. Furthermore, due to the constraints imposed by competing and somewhat incompatible compensation systems, administrators have limited flexibility (by choice or mandated at a higher level) with which to address these problems.

Create a coherent salary and wage classification system for all caregiving positions, regardless of funding source.

Ideally, such a system would be seamless and invisible with respect to funding source – that is, funding source in and of itself would not dictate level of pay and qualifications for positions. Rather, caregivers with comparable qualifications and experience would receive the same salary and benefits whether paid by GS or NAF. The salary and wage system would be based on clear,

accurate job descriptions and jobs would be classified according to their level of responsibility, complexity, and amount of training and education required. Care would be taken to accommodate a diverse staffing pattern that includes caregivers with lower as well as more advanced credentials.

A salary system that rewards caregivers differently for the same job risks serious division and discontent. Indeed, anecdotal evidence from the implementation of the MCCA indicates that having two salary systems that reward education, training and tenure differently can undermine the caregiving staff's sense of fairness and equity in the workplace. For example, according to the RAND(1998) study, an individual with a particular set of credentials and no experience might qualify for a GS-5 position whereas someone who has been a NAF caregiver for 20 years might be classified as a GS-4 (Zellman, & Johansen, 1998). Furthermore, the greater security and benefits of GS positions reinforce status differentials and can make NAF employees feel like second-class citizens. With such inconsistencies in the salary system, it is difficult to create work environments that foster teamwork and build high morale.

A standardized set of caregiver job descriptions and a coherent salary and wage classification system throughout the military child care system would make it possible to award salary increases consistently and fairly (Whitebook & Bellm, 1999). As such it would strengthen the military's ability to:

- More easily accommodate transfers and promotions at each installation as well as within the military child care system as a whole
- Establish caregiving as a bonafide career track within the total military system (similar to other occupations at large national corporations). This would help attract and retain a (more) highly qualified staff that desires to work within the child care field.

To be effective, a revised system would incorporate the following:

- Allow for a combination of education and experience that would accommodate grade levels in excess of GS-5 even for staff without bachelor degrees.
- Recognize and reward level of education. For example, even though certain positions may not require the completion of a bachelor's degree, it would not penalize staff who have earned such degrees and who desire to work directly with children. It would build in sufficient flexibility to enable paying such individuals at higher grades or different levels than those who are filling the same position without a degree. [Currently, most caregiving staff who work directly with children are not required to have bachelor's degrees; those who do may not always be paid at a level commensurate with their education (except those at a GS-5, Step 10 level). Consequently, CDC employees with bachelor's degrees typically are administrators.]
- Provide a broader range of salary levels than is currently available, particularly at the high end where compression is most evident and costly. For example, it is important that DoD be able to differentiate among the various NAF positions that currently are paid at the GS-5 grade level. The current salary compression that exists at the GS-5 level is a direct result of the salary caps imposed by the NAF CC payband system. For example,

Recommendations

senior caregiving positions (i.e., the CDC program technician) are compensated at the same grade level as more junior level target and leader level program assistant positions.

- Provide consistency with respect to eligibility for and payment of benefits for all levels of full- and part-time staff. For example, it would eliminate the inequities that currently exist where benefits represent an additional 25% of salaries and wages for GS staff but only an additional 22% of salaries and wages for NAF staff (GAO, 1999). Such inequities create divisiveness within the caregiving environment (see Zellman & Johansen, 1998).

Although the current practice of using two different (i.e., GS and NAF) classification/pay systems may be feasible in the future, in their current format, neither system by itself is ideal for the caregiving environment. The following changes would be very useful:

Create a unique Caregiving Occupational Series and Specific Qualification Standards within the GS System.

As previously noted, the current generic 1702 job series is vague. It tends to attract people with the appropriate qualifications for the grade, but not the interest in caregiving as an occupation. Instead, applicants use the position to “get in the door” and move up to higher positions within the GS system. This practice encourages unnecessary turnover, hampers future recruiting efforts, and negatively impacts morale. Most important, it negatively impacts quality of care. This recommendation has been made before⁵⁵ and will no doubt continue to be made because it addresses a fundamental omission.

We recognize that the creation of a new job category is an enormous task within the competitive service bureaucracy. Until such a time as a specific caregiving classification guide and standard can be established in the GS system (with corresponding NAF equivalents), the CDC leader-level and program technician positions could continue to use the 1702 occupational series but be covered under “Administrative and Management” position qualification standards (i.e. two grade interval work) rather than “Clerical and Administrative Support” position qualification standards (one-grade interval work). We make this recommendation based on the following criteria:

- The supervisory nature of the work for both these positions can be a significant and substantial part of the overall position (i.e., occupy at least 25% of the employee’s time) particularly at larger installations where there may be a large number of entry-level staff.
- A combination of education and experience would meet total qualification requirements for a GS-7 grade level particularly if the applicant has a bachelor’s degree and specialized experience equivalent to a GS-5.
- The global work level ratings of the Program Technician position, in particular, are on a par with other higher-rated DoDDS positions such as School Support Assistant b, and pre-Kindergarten teacher.
- Results of this study indicate a need to address salary compression at the higher global work levels in order to retain the considerable investment already made in training and education of staff; and to prevent loss of the most highly skilled and qualified employees

⁵⁵ Rand proposed this in its 1998 report.

to better-paying (similar) occupations (e.g., pre-kindergarten or elementary teaching) both on and off the installation. For example, to be competitive, the evidence in this report shows that target level CDC caregiving positions (i.e., global work level 5) would need to be paid at GS-6 wage levels; leader level CDC positions (at global work level 7) would need to be paid at GS-7 wage levels, and CDC program technician positions (at global work level 8) would need to be paid at GS-9 wage levels.

While our study revealed a number of strengths of the current NAF system, modification of the two-band structure would help the military CDS remain the preeminent leader in the field. Some specific suggestions follow:

Create separate CC paybands (CC-III and CC-IV) for each non-entry level position within the NAF system.

Retain the current CC-II for the child development program assistant, target position. If the system is to be tied to a GS scheduled rates, keep the current minimum (GS-4) and maximum (GS-5) rates for the target level position, but create an additional CC-III payband for the leader level position (minimum equivalent to a GS-5, maximum to a GS-7); and create a new CC-IV payband to accommodate the program technician position (minimum equivalent to a GS-7, maximum to a GS-9). This will permit employers more discretion to set pay within the minimum and maximum rates for each band as needed for their localities. Furthermore, creating new NAF CC-1702-III and IV standard positions will accommodate highly skilled staff with bachelor's degrees that desire to work directly with children. Most important, however, this will alleviate the compression that exists within the current CC-II-payband/GS-5 structure.

and/or

In lieu of the above, reclassify or increase the minimum and maximum salary rates for current NAF CC paybands. Consider eliminating the need to equate NAF positions to the corresponding rates on the GS schedule.

Again, the goal here would be to create the flexibility necessary in order to remunerate individuals according to their levels of education and experience. Forcing NAF positions to adhere to the more rigid GS classification standards and pay structure significantly reduces flexibility and the ability to respond to local market conditions.

Encourage the appropriate use of part-time positions

While a certain amount of flexible part-time labor is inherently necessary in the child care industry to cover such things as split shifts and census fluctuations, reliance on part-time staff encourages higher turnover and contributes to a high rate of daily caregiver instability for children (Zellman, & Johansen, 1998).

- Ensure that as many as possible direct care staff are given the opportunity to work full-time (35-40 hours with benefits), and that employment of part-time staff without benefits does not exceed 25 percent.

Recommendations

- A second useful option would be to provide staff with support via additional clerical personnel. Research suggests that teachers are in need of more administrative assistance. The additional staff members may alleviate some of the stressors in the complex work climate (Wisniewski & Gargiulo, 1997).

Establish a substitute caregiving system

Teachers have suggested that a better substitute system would be one of the most effective ways to reduce turnover (Whitebook & Bellm, 1999). A stable pool of substitutes or regular flexible care staff is essential for reducing stress among staff, creating smoother transitions when turnover occurs, ensuring adequate break coverage for regular staff, and scheduling vacation, sick leave, and professional development days (Whitebook & Bellm, 1999).

To establish a flexible caregiving system:

- assess center needs;
- define whose responsibility it is to schedule substitutes;
- rotate the scheduling of substitutes and/or provide a monetary incentive to perform same;
- include funds for flexible-hour staff/substitutes in the center's annual operating budget;
- consider establishing permanent floaters (i.e., regular flexible-hour positions);
- clarify level of skill and qualifications needed;
- ensure that flexible-hour staff feel welcome, recognized and included in center activities;
- develop a set of orientation and supervision procedures.

Continue to compare "cafeteria" benefits used in industry to the benefits offered in NAF/APF systems.

The provision of an adequate benefits package is a crucial component of compensation for child care staff (Johnson & McCracken, 1994), and improvements in benefits are routinely cited as an important mechanism for reducing turnover (Whitebook & Bellm, 1999). Although the results of our study indicate that, in general, full-time CDC caregivers fare well in this area, flexible-hour employees receive no benefits. Provision of benefits for part-time staff on a pro-rated basis and/or personalized benefit packages for part-time staff members that best meet their needs might help attract and retain a more professional part-time staff.

Non-Recurring Compensation Recommendations

If the salary compression problem cannot be resolved within the classification and pay system (either GS or NAF), the problem could be addressed on a non-recurring basis.

Use Retention Allowances, Recruitment Bonuses and Relocation Bonuses as needed to augment compensation.

These allowances and bonuses can be an effective way to temporarily increase compensation when grade level and classification cannot be changed. The U.S. Office of Personnel Management has delineated specific guidelines and procedures for each type of allowance.⁵⁶ In general, these guidelines are similar for GS and NAF positions, but not necessarily identical. Retention allowances may be used if the unusually high or unique qualifications of the employee or a special need for the employee's services makes it essential to retain the employee, and the agency determines that the employee would be likely to leave the Federal service without the allowance. Recruitment bonuses may be used in difficult-to-fill positions. Criteria for approval include such factors as recent turnover, labor-market factors, and special qualifications needed in the position. Relocation bonuses may be used to attract employees who must relocate to accept difficult-to-fill positions in a different commuting area.

In all cases, the agency may target groups or categories of positions to be paid these allowances/bonuses rather than individual employees. The groups must be narrowly defined based on such factors as occupational series, grade level, job duties, unique qualifications, assignment to special projects, etc. For the most part, these bonuses or allowances are calculated as a percentage of the employee's rate of basic pay, not to exceed 25%, except in the case of group allowances, which may constitute up to 10% of basic pay. Relocation and Recruitment bonuses are paid in one lump sum; Retention allowances are paid at the same time as the employee's regular paycheck.

According to the guidelines set forth, the determination to use Recruitment and Relocation bonuses must be made prior to the employee's official start date. Written agreements are generally required before any bonuses can be paid. If an employee fails to complete the period of employment, he or she must repay the portion of the bonus attributable to the uncompleted period.

Agencies must review each Retention allowances authorization at least annually to determine whether payment is still warranted. An agency may continue payment of a Retention allowance as long as the conditions giving rise to the original determination to pay the allowance still exist. An agency may reduce or terminate an allowance if, for example, a lesser amount would be sufficient to retain the employee, the agency no longer needs the employee's services, or for budget considerations.

Establish awards and award programs to reflect the unique culture and mission of the military CDC.

In addition to Retention allowances, Recruitment and Relocation bonuses, a variety of other tools exist to deal with issues not properly resolved through the classification of positions. In particular, heads of DoD Components are delegated authority to establish awards and award programs for civilian employees within the Department of Defense. The policies for awards and

⁵⁶ <http://www.opm.gov/oca/>

Recommendations

awards programs are outlined in DoD 1400.25-M, Civilian Personnel Manual, Subchapter 451, “Awards.”

Appropriate recognition and/or reward of a job well done or of a significant accomplishment can be a powerful motivating tool, contributing immeasurably to improving employee performance, strengthening morale, increasing productivity, promoting creativity, and unlocking workforce potential. Such awards include, but are not limited to, employee incentives that are based on predetermined criteria such as productivity standards, performance goals, measurements systems, award formulas, or payout schedules. Performance based awards include such recognition devices as monetary awards (cash payments that do not increase the employee’s rate of basic pay), non-monetary awards (awards of a honorific value); time-off awards (time-off from duty is granted without loss of pay commensurate with the employee’s contribution or accomplishment); and quality step increases (a faster than normal within-grade increase used to reward employees at any GS grade level who display exceedingly high-quality performance).

The following examples illustrate how awards in the area of professional development could be used to build and reward a skilled and stable military child care workforce. We note that the DoD has already identified many of these practices; refer to Appendix K for more detailed information.

- Put into place a system of stipends for attained education or continuing education and profession growth and development, beyond the training programs that are currently in place.
- Using either a performance-based award vehicle or discretionary cost savings, arrange to provide competitive annual travel grants to staff to fund attendance at professional conferences or workshops.
- Provide rewards for membership in professional organizations.
- Give stipends or rewards for job tenure.
- Provide stipends for those with higher education (e.g., bachelors degrees even though not required at grade) in order to bridge gap between child caregivers and elementary school teacher salaries.
- Arrange to pay caregiving staff for time spent in excess of 40 hours/week) for tasks devoted to planning, scheduling and managing child care activities (e.g., time spent in preparing lessons, scheduling field trips, etc.)

However, as pointed out by Whitebook et al. (2001), all of these awards, bonuses and allowances are non-recurring which means they must be applied for every year and do not represent a permanent solution to the compensation crunch. They are merely palliative efforts to “buy time”. More efficient and lasting mechanisms would be needed to upgrade child care compensation in the form of permanent changes to the salary and benefit structure.

Quality Improvement Recommendations

Not all incentives aimed at improving child care jobs and quality of child care programs need be financial. While improved pay and benefits remain the number one priority for reducing turnover in the child care field (e.g., Whitebook & Bellm, 1999; Whitebook et al., 2001), our review of the child care literature has identified a number of non-financial incentives or practices that generate considerable employment benefits for child care workers. The bulk of these fall under the rubric of *job satisfaction* and *organizational commitment* as key attitudinal factors that predict intent to leave the child care field. The thinking here is that if dissatisfaction with specific aspects of child care work or low commitment is associated with intent to leave, then the best strategies to reduce turnover may be to generate interventions or to change the conditions that affect job satisfaction and commitment (Stremmel, 1990). Consequently, researchers in this area have looked at identifying factors designed to improve the quality of the work environment as these influence child care workers' affective reactions to different facets of their jobs (i.e., job satisfaction) as well as their degree of organizational commitment (i.e., identification with and involvement in the organization).

The *quality of work life* for the adult caregiving staff is a critical component of any successful program because research suggests that wages alone do not function to predict job satisfaction, turnover, or the quality of care provided for children (Jorde-Bloom, 1996). Aspects such as collegiality among co-workers, supervisor support, the decision-making structure, professional growth opportunities, goal consensus, communication, and general working conditions are also important. These intangible dimensions of organization climate do not consume financial resources, - that is, they cannot be found as line items in any recurring annual center budget – yet they are critical components in determining whether staff will decide to stay or leave. However, while they are under our direct control, creating such positive work environments can be challenging. Perhaps that is why these adult development issues have tended to receive less attention than child development issues (Whitebook & Bellm, 1999).

The following recommendations to encourage caregiver retention are targeted more to center directors than DoD-level policymakers. They are designed to provide guidance to caregiving staff and to foster new initiatives in the delivery of high-quality education and care for children. These recommendations and strategies are not ours alone: they have been culled from our review of the literature in these areas. Indeed, the DoD has already identified a set of best practices designed to improve the quality of the work environment. Refer to Appendix K for more detailed information.

Prioritize professional development

Among those incentives strongly endorsed in the literature are those that promote and prioritize professional development, an essential component of ensuring quality child care. Investing in profession development provides two important benefits: not only does it improve the skill and qualifications of child care workers, involvement in professional activities also increases caregiver satisfaction with the work itself (Jorde-Bloom, 1988). Thus, incentives that emphasize professional development may indirectly help reduce turnover and improve program stability.

Recommendations

- Establish career paths whereby training and education allow participants to earn credentials or degrees (Bellm, Burton, Shukla, & Whitebook, 1997).
- Provide opportunities for staff to receive additional training and education, and encourage all staff to take advantage of these opportunities by facilitating their participation.
- View professional development as an ongoing process. It is important for all early childhood professionals to continually update their knowledge and skills (Johnson & McCracken, 1994).
- Provide professional development experiences that clearly link theory and practice, and ensure that they have a coherent and systematic program structure (Johnson & McCracken, 1994).
- Involve staff in the planning and design of their professional development plan. This helps to ensure fit. It also encourages individuals to develop a stronger sense of ownership for their learning and reinforces the notion that professional development is an ongoing professional responsibility (Johnson & McCracken, 1994).
- Consider professional development programs that suit the background, experiences, and present roles of staff members (Johnson & McCracken, 1994).
- Use training and mentoring programs to recruit and train new caregivers as well as to retain experienced workers who participate as mentors. For example, team new workers with experienced child care workers (i.e., mentors) who may or may not receive cash awards or stipends for their participation. Many states have implemented such programs (e.g., California Early Childhood Mentor program) in an effort to improve retention of experienced workers in the child care workforce.

Link compensation with career development

Limited training and career development funds are best spent when linked to salary enhancement and when providing concrete opportunities for career mobility (Bellm, Burton, Shukla, & Whitebook, 1997). Practices like these have been found to reduce turnover. When the link between compensation and career development is absent, the investment that centers make in training caregivers is lost, as personnel leave the field for better opportunities elsewhere (Whitebook et al., 1998). Recommendations in this area include:

- Provide access to training opportunities directly linked to financial rewards (such as increased compensation) as well as professional advancement (Bellm et al., 1997; Johnson & McCracken, 1994; LeBoeuf, 1986; Ritchie, 1991; Whitebook et al., 1998).
- Establish career ladders that delineate incremental increases in salary based upon performance and participation in professional development activities (Johnson & McCracken, 1994).
- When linking compensation with career development, avoid imposing a career trajectory that requires teachers to give up their direct work with children. Advancement in early childhood programs has often required teachers to forfeit their direct work with children when they would otherwise prefer not to do so (Johnson & McCracken, 1994).

A variety of initiatives at the local, state and federal levels reward continuing education and training with increased compensation. In their publication *Building a Stronger Child Care Workforce: A Review of Studies of the Effectiveness of Public Compensation Initiatives*, the Institute for Women's Policy Research (2002) profiled seven of these programs across the United States:

- Compensation and Recognition Enhances Stability (CARES) in California;
- Child Development Program Caregiver Pay Program (DoD);
- Georgia Early Learning Initiative (GELI);
- Teacher Education and Compensation Helps (T.E.A.C.H.) Early Childhood Project in North Carolina;
- Child Care WAGES (North Carolina);
- Washington Early Childhood Education Career Development Ladder;
- and Wisconsin Child Care Mentor Project.

Of these, the most widely used civilian program is the T.E.A.C.H. model, which in April 2003 was operating in 23 states (De Vita & Montilla, 2003). T.E.A.C.H works with providers, colleges and child care staff to offer scholarship programs and support systems that improve the education and compensation of child care workers. The scholarship covers most of the cost for tuition and books. Recipients also receive a travel stipend each semester they are enrolled in class.

T.E.A.C.H. requires that the sponsoring child care program offer paid release time for the student to attend class, study, or handle personal needs. In one scholarship year, each participant must successfully complete a required number of credit hours (usually 9-15) toward a degree or credential in early childhood education. At the end of the scholarship year, if they complete their educational requirement, participants are eligible to receive either a bonus or a salary increase of three to five percent in conjunction with their commitment to continue working in their child care program for one year after each scholarship year.

Create a positive work environment

Factors such as healthy inter-personal relationships among staff, open lines of communication, and a participatory management style have consistently been associated with more satisfying workplaces and lower child care turnover (Whitebook & Bellm, 1999). Practices that enhance co-worker relations, (i.e., help the caregiving staff from close relationships with colleagues), as well as supervisor relations (i.e., improve encouragement and helpful support from supervisors) have little financial impact yet have enormous impact in terms of achieving quality work environments that are personally and professional satisfying.

- Practice shared decision-making. If necessary provide training and exercises to increase problem-solving skills and to foster teamwork and collaboration. For example, solicit input and involve staff in identification and solutions to problems; involve staff in setting budget priorities (e.g., decisions regarding scheduling, purchasing of supplies and equipment, etc.), and in establishing program goals and objectives. Staff members who feel valuable and respected have a greater sense of ownership and commitment to the child care program as a whole because they have been involved in shaping it.

Recommendations

- Hold regular and meaningful staff meetings with the entire child care center staff and allow them to participate in setting the meeting agenda. If size of the program prohibits meeting with the entire staff when the center is in operation, hold full staff meetings once a quarter when the center is closed and meet in smaller groups on a more regular/frequent basis. Structure the time together so that meetings run smoothly and tasks are accomplished. For example, choose a facilitator to run the meeting and a recorder to keep notes. These and other committee or project assignments can be useful vehicles to groom staff for future administrative positions.
- Provide regular opportunities for open two-way communication with child care staff and a comfortable environment (e.g., furnished staff break rooms) to actively listen to staff needs, complaints, and suggestions. Ensure that staff members feel safe to express themselves.
- Provide child care staff with as much freedom and autonomy to implement child care activities as possible yet still ensure high quality delivery of services.
- Provide specific and personalized feedback to staff regarding their progress, development and performance. Ensure that job roles and responsibilities are accurate and clearly defined and that standards are communicated and understood.
- Include staff in the evaluation process: Inform staff of the performance criteria when they enter the program, and encourage periodic self evaluation.
- Foster and encourage opportunities that promote social interaction among the staff and fun outside of the classroom environment. For example, social events such as pot-luck dinners, center picnics (for caregivers and their families), and evenings out can increase cohesion and esprit de corps among the staff that carries over to the workplace.

Foster a sense of affiliation, involvement, and investment

A decreased sense of affiliation and belonging is among the most common reasons child care professionals leave the profession (Hill, 1995). Practices designed to increase professional affiliation, involvement, and investment can be powerful tools against turnover. Particularly important in this regard is communicating center goals:

- Identify and articulate clearly the values and goals of the center to all current and prospective employees (Ritchie, 1991). When asked, employees in centers with low turnover were able to describe the centers' goals in detail. Goal consensus forces staff to compromise and work out differences so that they achieve a common vision. Our review of the research suggests that having a common vision for the program is crucial because it affects a center's ability to carry out its mission and to establish priorities. Furthermore, goal consensus may influence the quality of teaching practices and overall program effectiveness by lessening isolation and increasing professional interaction. For example, in discussing instructional objectives, teachers frequently request and offer advice and assistance in helping their colleagues improve (Jorde-Bloom, 1996).
- Implement practices designed to demonstrate appreciation and acknowledgement of hard work (e.g., assigning an 'employee of the month', distributing certificates of achievement for earned accomplishments, offering job-title changes, etc.) (Hill, 1995; LeBoeuf, 1986).

- Encourage employees to invest in the process of mentoring and training new staff, and provide incentives for them to do so (Hill, 1995; Whitebook & Bellum, 1999).
- Provide one-on-one time with staff to obtain their feedback and ideas for improvement of the center (Sheerer & Jorde-Bloom, 1990).
- Ask staff what they believe would reduce turnover most. Listen to their answers. Research and debate the best solutions before making a group decision through consensus (Whitebook & Bellum, 1999).
- Organize annual staff retreats wherein staff may participate in the identification of annual goals for the center (Hill, 1995).
- Create a sense of tradition and history within the center. Reinforce this with regularly scheduled celebrations honoring the center as a whole as well as its staff (Hill, 1995).
- Encourage broader involvement. When involved in child advocacy effort, teachers become a vital part of larger institution (Neugebauer, 1984).

Help caregivers to find meaning in their experiences

Our review of the research indicates that childcare workers' interactions with children and the pleasure of witnessing the positive child outcomes associated with their work provide their strongest source of satisfaction (Neugebauer, 1984; Whitebook et al., 2001; Whitebook & Bellum, 1999). Therefore practices that increase the extent to which the job provides intrinsic enjoyment and fulfills caregiver's needs for recognition, creativity and skill building can be powerful retention incentives in lieu of direct increases to compensation. They help the child care staff to know that their work is important, valuable, and worthwhile.

- Provide opportunities to help teachers observe their children's progress over time.
 - For example, use videotapes, display panels/bulletin boards of children's work, digital photos that can be scanned and placed on a center Web site, and/or children's portfolios (Carter & Curtis, 1997).
 - Chronicling the process in addition to displaying children's work benefits children, engages parents and guides teachers. In addition to displaying the process of intellectual growth, the documentation can be a powerful professional development tool to enhance caregivers' learning. By helping caregivers understand how children learn they are better able to chart what their own next move should be to enhance that learning.
 - Documentation can also be used to improve communication with parents and educate the public about the value of caregiving work.
- Provide feedback that helps teachers identify how their work has facilitated positive changes in the children with whom they work (Neugebauer, 1984).
- Allow teachers to work with a consistent group of children over a substantial time-frame. When teachers' responsibilities shift from one group of children to another, they are not able to attribute long-term changes in children to their own efforts (Neugebauer, 1984).

Minimize stress

While stress cannot be completely avoided, it is potentially manageable. Wisniewski and Gargiulo (1997) review a variety of tactics for minimizing stress in a teaching environment that might be readily adapted to the child care setting.

- Establish a peer support system that provides for professional and personal interactions with colleagues. This is particularly important for teachers/caregivers who frequently complain of professional isolation.
- Similarly, create mentorships (see above) in which novice caregivers are matched with veteran colleagues who can provide advice and direction in stressful situations.
- Administrative assistance is also important in combating the stresses of a complex work environment, particularly for novice teachers/caregivers. For example, the educational literature strongly suggests that high levels of support from building principals is critical; in the child care setting this may come from the director or other supervisory personnel.
- Try not to assign novice teachers/caregivers to the least desirable locations or age groups since these challenging environments may induce significant stresses and strains. Compared to veteran teachers/caregivers, beginning teachers/caregivers usually lack the experience and skills necessary to cope with challenging assignments.
- Incorporate “stress management” module(s) into professional training and development programs. Provide the caregiving staff with opportunities to recognize potentially stressful situations and train them to generate appropriate adaptive responses. Taking a proactive approach to stress identification and management by ensuring that staff receive training in stress reduction techniques, maintaining a healthy lifestyle, managing multiple roles in professional and personal life, and other coping skills will hopefully encourage them to remain in the caregiving field.
 - For example, recent research (e.g., Fabes et al., 2003; Crockenberg, 2003; Watamura et al., 2003) suggests that during long days in child care, children with inadequate regulatory abilities become increasingly stressed leading them to engage in aggressive or withdrawn behaviors. Similarly caregivers become tired and stressed and are less likely to respond effectively to these behaviors. Thus, teaching caregivers how to foster regulatory skills in children, how to maintain positive interactions between children, how to provide opportunities for late afternoon quiet play, and how to reduce activities that involve competition for resources may be a strategy helpful to both care providers and children (Langlois & Liben, 2003).
- If flexible caregiving staff or aids are available for only half a day, consider assigning them to assist in the afternoon, when the regular staff and the children are more likely to be stressed and tired.

Survey and/or interview the military child caregiving workforce

In order to implement more effective retention practices and policies, we need to deepen our understanding of the reasons behind employee turnover. The voices of military caregivers have not been systematically heard in these debates. Surveys and/or interviews of military child

caregiving workforce would provide insight into their experiences as employees. One of the best methods to increase such understanding is to go directly to the source. By capturing the perspectives of the child care workers and not just the CDC directors and managers, we can gain first-hand information about where best to invest resources to manage and reduce turnover in the CDC workforce. This strategy has been used very successfully in civilian child care settings (e.g., Whitebook & Bellm, 1999; Whitebook et al., 2001), however, with the exception of the 1998 Rand Report (Zellman & Johansen, 1998) we know of no recent study of military CDCs that has employed this methodology.

Recruitment Recommendations

Hiring practices play an important function in turnover prevention. Taking time to recruit and hire candidates who are skillful, knowledgeable and philosophically compatible with the organization, eliminates some of the major reasons employees leave their jobs (Whitebook & Bellm, 1999). While military spouses may provide a convenient source of labor, as we have seen, military CDCs still must compete with the civilian sector for these employees, including jobs in civilian child care. A variety of strategies may be used to fine-tune the hiring and recruitment process in order to give military CDCs an edge in recruitment and hiring.

- In order to attract the best pool of applicants, have an ongoing strategic recruitment and hiring plan that includes the following elements: an outline of CDC philosophy, an organizational chart, job descriptions, salary and benefits schedule, a recruitment, interviewing, and selection process, and an orientation procedure for new staff (Whitebook & Bellm, 1999).
- Make a commitment to remunerate commensurate to education and experience. A sizeable presence of highly-trained staff remains the best predictor of a center's ability to sustain quality improvements over time. In addition, highly skilled and educated staff members are more likely to remain in their jobs when they work with similarly skilled and educated co-workers (Whitebook, Sakai, Gerber & Howes, 2001).
- Advertise to, and recruit from, the right audience. Build relationships with local community colleges and universities, particularly with instructors of ECE. Consider advertising in locations such as local universities/colleges or job information centers at professional organizations, etc. (Johnson & McCracken, 1994; Sheerer & Jorde-Bloom, 1990).
- Consider candidates that are a good fit for both the position and the center. Workplace stability has been found to relate to a center's ability to positively match candidates to available positions (Jorde-Bloom, 1988).
- Match the values and needs of the center to the values and needs of prospective employees in order to maximize the degree of person-environment fit or congruence (Jorde-Bloom, 1988). During the interview process, allow sufficient time to probe about a candidate's work style, expectations and goals. Understanding what constitutes their ideal job vis-à-vis the real conditions of the center (role and work environment) can help reduce mismatch and thus promote greater professional fulfillment, job satisfaction and workplace stability (Balfour & Neff, 1993).

Recommendations

- When possible, tailor positions to the unique talents, skills, and job aspirations of individual child care workers (Sheerer & Jorde-Bloom, 1990).
- Examine the motivations of candidates interested in part-time work. Although recent research in the civilian sector indicates that part-time jobs can be good jobs in center-based child care (Mocan et al., 2003), there is also some indication that part-time workers may be less productive or less ambitious – that is, workers who are not prepared to spend much job effort, and thus self-select into part-time jobs. Hiring practices that examine the motivations of candidates interested in part-time work will help ensure that a center’s flexible caregiving staff are as motivated and interested in caregiving as a profession/career track as the regular full-time staff.
- Take time to hire the right person.
- If necessary, hire a long-term substitute to fill in until the right job candidate is located.
- Encourage employees to invest in the process of mentoring and training new staff, and provide incentives for them to do so (Hill, 1995; Whitebook & Bellm, 1999).
- Identify and articulate clearly the values and goals of the center to all current and prospective employees (Ritchie, 1991).
- Recruit teaching staff to assist in the recruitment and hiring process. They have a personal stake in the outcome and first-hand knowledge of what it takes to do the job (Whitebook & Bellm, 1999).
- Use training and mentoring programs to recruit and train new caregivers as well as to retain experienced workers who participate as mentors.
- Team new workers with experienced child care workers (i.e., mentors) who may or may not receive cash awards or stipends for their participation. Many states have implemented such programs (e.g., California Early Childhood Mentor program) (Montilla, Twombly, De Vita, 2001) in an effort to improve retention of experienced workers in the child care workforce.
- Do not overlook sources of unpaid labor: volunteers; retirees, college students, or high school interns can be valuable additions to the regular child care staff.

Conduct effective employment interviews.

For a helpful set of tips and techniques to assist center directors in the hiring process, see *Staffing Your Child Care Center: A Theoretical and Practical Approach* (Schwarz, MacDermid, Swan, Robbins, & Mathers, 2003).

Develop a placement service for military caregivers

Although staff turnover at military CDCs is now less than 30% annually (Campbell et al., 2000), much of this turnover is explained by the fact that roughly 66% of child care employees are spouses of military members, who move approximately every two-three years. Given that moving every few years is an inescapable fact of military life, it behooves the military CDS to develop a system-wide placement service to ensure that high-quality caregivers who relocate are

given priority placement at a new location and poor performers are not recommended for rehire. The establishment of such a placement service would provide multi faceted benefits. It would:

- serve to increase the overall quality of care in military CDCs by effectively expanding the pool of highly skilled and experienced staff;
- create and sustain a staffing pool of higher caliber that promotes stability among qualified staff;
- continue to reinforce the caregiving career track within the military CDS;
- reduce the time and costs associated with recruitment, training, and orientation of new staff;
- ensure that the considerable investment that centers make in training caregivers is not lost;
- help increase spouses' satisfaction with their employment and career opportunities in the military CDS, already a high-priority issue for military policy makers.

CONCLUSION

Military child care, which many regard as the nation's "gold standard," faces many difficult challenges ahead as policymakers struggle to maintain a stable, skilled workforce, sustain high-quality care, and support DoD families and the military mission. In addition to the current compensation problems identified in this report, both the military and the civilian sector must prepare for the proposed NAEYC accreditation criteria, which require at least 75% of teachers to have a minimum of a baccalaureate degree or equivalent by 2020.

Unlike its civilian counterpart, the military child care system is already the recipient of a sizeable investment of public funds. Increased congressional appropriations and allocations from the DoD made the turnaround in military child care possible. Yet more than a decade after the enactment of the MCCA of 1989, wages for senior-level CDC caregiving positions lag behind those for civilian benchmark jobs. Given that market forces alone cannot solve the tension between the need for better-paying child care jobs and the need for more accessible, high-quality child care services (Whitebook & Sakai, 2004), the challenge becomes not only how to finance the child care system, but also where to target the resources should new funding become available. Should they be allocated for caregiver compensation to stem turnover and maintain quality of care? Or should they be allocated to expand child care services by increasing capacity? A similar debate exists in the civilian sector, with advocates arguing for new public investment and widespread calls for universal preschool programs (Barnett, Brown, & Shore, 2004).

If the military chooses to improve quality by increasing caregiver compensation, there are two possible sources of revenue: APFs authorized by Congress, or NAFs generated from child care fees. Yet is it politically feasible to reclassify positions to higher GS levels? *Where will the APF money come from* (since parents cannot be charged more)? Furthermore, of the supplemental funds received in FY 2002 for "Operation Enduring Freedom," DoD recently allocated \$8 million to increase the availability of child care for both active-duty service members and reservists (Campbell et al., 2002). Given limited funds and the likelihood of continued funding shortages for current military operations, along with the variety of claims for every public dollar allocated for young children, is it realistic to expect increased DoD funding to address child care staffing problems?

Similarly, is it politically feasible to pass on the additional costs of increased provider compensation to the parents? A key feature of the military child care system has been the recognition that quality child care costs more than most parents can afford to pay. Consequently, the DoD bases child-care fees on total family income using a sliding fee schedule, and not on children's age, as commonly practiced in the civilian sector. Thus, decreasing parent subsidies appears to be inconsistent with DoD values. More important, such an action might have unintended consequences: if fewer military families are able to afford child care, the anticipated additional revenues might not be generated.

Clearly, military as well as civilian child care providers must find a balance between quantity and quality: focusing too much on quality may exclude children with the greatest need (Barnett

et al. 2004) while focusing too much on quantity without sufficient resources may negatively impact child development. With the new Social Compact,⁵⁷ the military is addressing these issues as part of its commitment to improve quality of life for military members and their families. Indeed, DoD has implemented a detailed strategic plan with specific goals and timetables to meet them. Three primary goals - availability, affordability, and high quality - define the Child and Youth Services vision of having affordable, quality child- and youth-care programs available to support DoD families in their dual role as military members and parents. While moving forward will require significant investments, continued debate, expanded access, and the ability to maintain quality, DoD states in the Social Compact that it has made it a priority to sustain military child care programs as a national benchmark for quality, affordability and availability.

⁵⁷ A New Social Compact: A Reciprocal Partnership Between The Department of Defense, Service Members, and Families. <http://www.mfrc-dodqol.org/socialcompact/intro.htm>

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APPENDICES

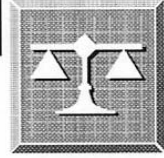
Appendix A Acronyms

Acronym	Definition
APF	Appropriated Funds
AV	Audio-visual
BC	Bureau of the Census
BLS	Bureau of Labor Statistics
CAP	Concepts About Print
CC	Child Care
CDA	Child Development Associate
CDC	Child Development Center
CDPM	Child Development Program Managers
CDS	Child Development System
CLS	Columbia Library System
CPS	Current Population Survey
DDESS	Domestic Dependent Elementary and Secondary Schools
DoD	Department of Defense
DoDDS	Department of Defense Dependent Schools
DoDEA	Department of Defense Education Activity
DoL	Department of Labor
ECE	Early Childhood Education
ECERS	Early Childhood Environment Rating Scale
EEO	Equal Employment Opportunity
FCC	Family Child Care
GAO	General Accounting Office
GED	General Education Degree
GS	General Schedule
HOME	Home Observation for Measurement of the Environment
ITERS	Infant/Toddler Environment Rating Scale
MCCA	Military Child Care Act
MDI	Mental Development Index
NAEYC	National Association for the Education of Young Children
NAF	Non-appropriated funds
N.E.C.	Not Elsewhere Classified
NCCSS	National Child Care Staffing Study
NCS	National Compensation Survey
NICHD	National Institute for Child Health & Human Development
NSCW	National Study of the Changing Workforce
OPM	U.S. Office of Personnel Management
PPVT-III	Peabody Picture Vocabulary Test
PPVT-R	Peabody Picture Vocabulary Test - Revised
R&R	Resource and Referral Programs
RFT	Regular Full-Time
RPT	Regular Part-Time
SAC	School-Age Care
TFI	Total Family Income
USDA	United States Department of Agriculture
U.S.C.	United States Code
WGI	Within-Grade Increases

Appendix B
General Schedule and Position Classification Flysheet

TS-109 October 1991

**General Schedule
Position Classification Flysheet**



WCPS-2 August 2002

**EDUCATION AND
TRAINING TECHNICIAN
SERIES, GS-1702**



**Workforce Compensation
and Performance Service**



Theodore Roosevelt Building • 1900 E Street, NW • Washington, DC 20415-8330 Classification Programs Division

Education and Training Series

GS-1702

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SERIES DEFINITION

This series includes positions that involve nonprofessional work of a technical, specialized, or support nature in the field of education and training when the work is properly classified in this group and is not covered by a more appropriate series. The work characteristically requires knowledge of program objectives, policies, procedures, or pertinent regulatory requirements affecting the particular education or training activity. Employees apply a practical understanding or specialized skills and knowledge of the particular education or training activities involved, but the work does not require full professional knowledge of education concepts, principles, techniques, and practices.

This series coverage standard supersedes the standard for this series issued in June 1967.

EXCLUSIONS

1. Classify in the appropriate clerical or administrative support series positions that involve primarily clerical and general office support duties. Consider, for example, the Secretary Series, GS-0318; the Office Automation Clerical and Assistance Series, GS-0326; a specialized subject matter clerical support series; or the Miscellaneous Clerk and Assistant Series, GS-0303.
2. Classify in the Training Instruction Series, GS-1712, positions that involve training instruction when the work requires a practical, but less than full professional, knowledge of the methods of instruction, and a practical knowledge of the subject matter being taught. These positions include classroom instructors, supervisors, and managers in Government-operated training programs. They may also include nonprofessional training and program staff specialists engaged in course development, test development, or similar staff work.
3. Classify in the Vocational Rehabilitation Series, GS-1715, positions that have as their paramount requirement knowledge of training programs and occupational information designed to help handicapped or underskilled individuals find employment. These positions do not require full professional counseling knowledge and skill.

OCCUPATIONAL INFORMATION

Positions in this series involve nonprofessional education or training work not covered by another established series in the Education Group, GS-1700. The series covers primarily one grade interval aid and technician positions, but it may also cover a few two grade interval positions involved in quasi-professional work.

One Grade Interval Positions

Most positions covered by this series involve one grade interval aid and technician work in the field of education and training. Employees in these positions perform support duties that facilitate the work of professional education personnel in education and training activities. The duties of the positions vary with the kind of program, the specific type of assignment, and the grade level of the position.

Education Aids support education programs. They apply a practical understanding of program objectives and the particular procedures and requirements involved in the activity. The most familiar example is that of the teacher's aid whose supportive role is to relieve the classroom teacher of nonprofessional, routine duties. This enables the teacher to give more time and attention to professional responsibilities.

Education Technicians also work in education programs. They differ from education aids in that they additionally must have specialized knowledge of and skill in particular aspects of an educational activity or program. For example, an education technician may develop supportive background information for use by professional educators in making program decisions. This type of position may require skill in conducting surveys and analyzing data on education needs.

Training Technicians work in training programs and apply a practical understanding of the training program and its objectives, policies, procedures, and requirements. They also apply a specialized knowledge of and skill in particular aspects of the program. For example, a training technician may be responsible for the planning, direction, and administration of the testing program for a training center. The work does not require full professional knowledge of educational tests and measurements.

NOTE: This series does not provide specific coverage for aid positions in training activities. Typically, such positions would primarily involve clerical duties and therefore should be classified in the appropriate clerical series.

Two Grade Interval Positions

There are some positions at GS-5 and above that are exceptions to the general grade pattern for this series. They include specialized positions involving work of a quasi-professional nature and require specialized background training or experience in a particular field of work. For example, a Community Health Educator plans and conducts community health education programs to improve health practices and the understanding of health and disease within the community. Such a position would be covered by this series if it does not require full professional knowledge of education programs and is not covered by a more specialized subject matter series.

TITLES

Educational Aid is the title for nonsupervisory positions at grades GS-4 and below that meet the description for this kind of work.

Educational Technician and Training Technician are the titles for nonsupervisory positions at grades GS-4 and above that meet the description for these kinds of work.

Supervisory Educational Technician and Supervisory Training Technician are the titles for supervisory positions.

Agencies may construct an appropriate official title for two grade interval positions classified in this series.

Parenthetical titles, such as Typing, Office Automation, or Stenography, must be added to the official title when the position requires competitive level skill in either of these areas. Agencies may select and add other parenthetical titles to the official titles to more carefully identify the work for recruitment and other personnel purposes.

See the Introduction to the Position Classification Standards for more guidance on constructing official titles and on using parenthetical titles.

EVALUATING POSITIONS

Evaluate nonsupervisory positions in this series by the criteria in standards or guides for work most closely related to that of the position being classified.

Evaluate supervisory positions by the criteria in the appropriate supervisory guide.

Appendix C

Description of Navy Job Classifications

Education Aid (CDC) GS-1702-2

Introduction

This is a statement of differences to the base position, Education Technician (CDC), GS-1702-4. This position is the entry position leading to base position, Education Technician, GS-1702-4.

In this capacity, the position assists in providing safe environments and activities to children ages six weeks to five years in a CDC classroom setting. Successful completion of Department of Defense (DoD) and Department of Navy (DoN) standardized training is a condition of employment (to include Child Development training modules). Work is continually reviewed and evaluated in detail for attainment of training objectives and readiness for further training.

Major Duties and Responsibilities

The duties of this position are developmental in nature and designed to provide experience to qualify for higher-level CDC positions leading to the base position, Education Technician (CDC), GS-1702-4.

Performs other duties as assigned.

Employment Requirements

- 18 years of age and high school graduate or equivalent required and prior experience working with young children preferred.
- Speak, read, and write English
- Satisfactorily complete background checks IAW PL 101-647 to include NAC.
- Present favorable pre-employment physical and evidence of immunization and be free of communicable disease.
- Posses and maintain ability to lift and carry up to 40 pounds, walk, bend, stoop and stand on routine basis.
- Provide pre-employment documentation within three days of employment.
- Must complete all Navy Child Development orientation, initial, annual, and ongoing training requirements within the specified timeframe to include CPR, First Aide, and Child Abuse and Neglect Recognition/Prevention.
- Be able to obtain food handler's card.
- May be required to work uncommon tour of duty.

Classification Factors

Factor 1: Knowledge Required by the Position

- 18 years of age and high school graduate or equivalent required and experience working

with young children preferred.

- Ability to follow verbal and written instructions.
- Ability to communicate effectively orally and in writing.
- Ability to attend and participate in prescribed training program to include CPR and First Aid within 30 days and Child Abuse Prevention and Reporting Course within 60 days of employment.
- Ability to promote and foster effective working relationships with children and co-workers.
- Ability to work cooperatively as a member of a team.

Factor 2: Supervisory Controls

Works under the close supervision of the CDC Director and senior education specialists who provide specific and detailed instructions regarding assigned tasks and who are readily available to provide additional guidance or assistance. Incumbent works as instructed and consults with the supervisor, as needed, on matters not specifically covered by the original instructions. Work is checked in progress and completed work is reviewed for adherence to instructions and for adequacy.

Factor 3: Guidelines

The guidelines of this position are essentially the same as the base position, Education Technician (CDC), GS-1702-4.

Factor 4: Complexity

The work consists of a relatively few clear-cut tasks with limited choice in deciding what needs to be done and with readily recognized actions.

Factor 5: Scope and Effect

The work involves the performance of specific, routine, repetitive or closely related tasks. The service provided saves the time of other CDC staff members and contributes to the efficiency of the CDC, but has little impact beyond the immediate organizational unit or beyond the timely provision of limited services to others.

Factor 6: Personnel Contacts

The personal contacts are with employees within the immediate organization, or work unit and/or with members of the community serviced, such as parents, children, and educators.

Factor 7: Purpose of Contacts

The purpose of contacts is to clarify, or give facts or information directly related to the work.

Factor 8: Physical Demands

The work requires considerable walking, standing, bending, stooping and lifting up to 40 pounds. CDC activities may require incumbent to drive an automobile (to include driving a government vehicle). However, most of the work is done in classroom settings, and no special, physical demands are made upon the incumbent.

Factor 9: Work Environment

The work environment involves everyday risks or discomforts that require normal safety precautions typical of a wide variety of child care activities, programs, and services, such as exposure to disease and injuries from lifting. Normal fire and safety precautions must be adhered to. Activities planned are conducted in a building or outside and are suitable for child care programs. The work area is adequately lighted, heated, and ventilated.

**Education Aid (CDC)
GS-1702-3**

Introduction

This is a statement of difference to the base position, Education Technician (CDC), GS-1702-4. This position is the intermediate position leading to the base position.

In this capacity, the position provides safe, developmentally appropriate environments and activities to children ages six weeks to five years in CDC classroom setting. Supervisor provides additional specific instructions for new, difficult, or unusual assignments including suggested work methods or advice on resource material available. Incumbent refers deviations, problems, and unfamiliar situations to supervisor. Successful completion of Department of Defense (DoD) and Department of Navy (DoN) standardized training is a condition of employment (to include Child Development training modules). Work is continually reviewed and evaluated in detail for attainment of training objectives and readiness for further training.

Major Duties and Responsibilities

The duties of this position are essentially the same as those of the base position, Education Technician (CDC), GS-1702-4.

Performs other duties as assigned.

Employee Requirements

The requirements of this position are essentially the same as the base position, Education Technician (CDC), GS-1702-4.

Classification Factors

Factor 1: Knowledge Required by the Position

- Six months experience working with children in a child development program or related setting.
- Knowledge of basic child development principles as they relate to children's physical, social, emotional and intellectual development (which requires some previous training or experience).
- Knowledge of safety and occupational health requirements pertinent to child care.
- Ability to interpret a curriculum plan and follow written instructions.
- Ability to plan and organize work.

- Ability to implement developmentally appropriate child development principles and practices under immediate supervision to provide direct care, education and development for children, individually or with groups of children in child development classroom settings.
- 18 years of age and high school graduate or equivalent required and experience working with young children preferred.
- Ability to follow verbal and written instructions.
- Ability to communicate effectively orally and in writing.
- Ability to attend and participate in prescribed training program to include CPR and First Aid within 30 days and Child Abuse Prevention and Reporting Course within 60 days of employment.
- Ability to promote and foster effective working relationships with children and co-workers.
- Ability to work cooperatively as a member of a team.

Factor 2: Supervisory Controls

The supervisory controls of this position are essentially the same as the base position, Education Technician (CDC), GS-1702-4. However, work is reviewed for compliance with instructions, policies, and procedures and increases with new and unusual tasks. Incumbent uses initiative in carrying out recurring assignments independently without specific instruction, but refers deviations, problems, and unfamiliar situations to supervisor.

Factor 3: Guidelines

The guidelines of this position are essentially the same as the base position, Education Technician (CDC), GS-1702-4.

Factor 4: Complexity

The complexities of this position are essentially the same as the base position, Education Technician (CDC), GS-1702-4.

Factor 5: Scope and Effect

The work involves the performance of specific, routine operations that include a few separate tasks or procedures. The work product or service is required to facilitate the work of others; however, it has little impact beyond the immediate organizational unit or beyond the timely provision of limited services to others.

Factor 6: Personnel Contacts

The personal contacts are with employees within the immediate organization, or work unit and/or with members of the community serviced, such as parents, children, and educators.

Factor 7: Purpose of Contacts

The purpose of contacts is to obtain, clarify, or give facts or information regardless of the nature of those facts (i.e., the facts or information may range from easily understood to highly technical).

Factor 8: Physical Demands

The work requires considerable walking, standing, bending, stooping and lifting up to 40 pounds. CDC activities may require incumbent to drive an automobile (to include driving a government vehicle). However, most of the work is done in classroom settings, and no special, physical demands are made upon the incumbent.

Factor 9: Work environment

The work environment involves everyday risks or discomforts that require normal safety precautions typical of a wide variety of child care activities, programs, and services, such as exposure to disease and injuries from lifting. Normal fire and safety precautions must be adhered to. Activities planned are conducted in a building or outside and are suitable for child care programs. The work area is adequately lighted, heated, and ventilated.

**Education Technician (CDC)
GS-1702-4**

Introduction

The purpose of the Education Technician Child Development Center (CDC) position is to provide safe, developmentally appropriate environments and activities directly to children ages six weeks to five years in a CDC classroom setting. Incumbent refers deviations, problems, and unfamiliar situations to supervisor. Successful completion of Department of Defense (DoD) and Department of Navy (DoN) standardized training is a condition of employment (to include Child Development training modules). Work is continually reviewed and evaluated in detail for attainment of training objectives and readiness for further training.

Work is reviewed for compliance with instructions, policies, and procedures and increases with new and unusual tasks. Incumbent uses initiative in carrying out recurring assignments independently without specific instruction, but refers deviations, problems, and unfamiliar situations to supervisor.

Major Duties and Responsibilities

Follows verbal and written instructions. Provides care, oversight and accountability of children that complies with established standards, policies, procedures, and regulations. Provides developmentally appropriate care and activities for children. Follows planned activities. Conducts daily health checks of children and notifies supervisor of any marks or signs that might indicate suspicion of illness, abuse, or neglect. Adheres to child admission and release policies and procedures. Attends to physical individual needs of children (e.g. diapering, feeding, toileting, resting, etc).

Maintains control of assigned group of children and keeps and accurate count of children at all times. Maintains continuous observation of children to detect early signs of distress or abnormal behavior. Ensures safety and sanitation of children through constant supervision. Holds infants during feeding. Assists older children during family style meals. Assists in responsible classroom and play materials to accommodate the daily schedules and activities of children. Receives children from parents, and notes all special instructions from parents. Leads children in songs, games, finger-play and other activities. Assists in providing resources and making preparations

for a variety of developmentally appropriate indoor and outdoor activities. Assists in developing a list of needed supplies and equipment for submission to supervisor. Assists parents promptly and courteously. Works collaboratively as part of a team with other Education Technicians (CDC), Lead Education Technicians (CDC), Training and Curriculum Specialists (T&C), CDC support staff, and CDC Director, and parents. Performs other duties as assigned.

Develops, reviews, and implements daily activity schedules and activity plans and keeps other personnel informed. Ensures compliance with applicable standards, policies, procedures, and regulations. Assists in planning and conducting an effective program that meets the physical, social, emotional, and cognitive needs of each child based on established goals and curriculum plan. Assists in maintaining effective arrangement of spaces, and observes for equipment/playground/facility repair and maintenance concerns or discrepancies. Conducts developmentally appropriate play and learning activities.

Helps children to develop self-help skills. Arranges the room and play materials to accommodate the daily schedules and activities of children. Observes children and documents developmental progression, and/or concerns. Implements training and role models developmentally appropriate practice and classroom management techniques. Works collaboratively to obtain/retain Department of Defense Certification and National Association for the Education of Young Children (NAEYC). Implements established curriculum plan. Sets up displays and bulletin boards. Completes and submits required reports in an accurate and timely manner. Provides parents with daily verbal or written feedback about their child's day. May participate in conferences with parents and supervisor.

Performs other duties as assigned.

Employment Requirements

- Be able to complete mandatory Child Development training within 18 months.
- Six months of specialized experience in a Child Development Center (CDC).
- 18 years of age and high school graduate or equivalent required and prior experience working with young children preferred.
- Speak, read, and write English.
- Satisfactorily complete background checks IAW PL 101-647 to include NAC.
- Present favorable pre-employment physical and evidence of immunization and be free of communicable disease.
- Posses and maintain ability to lift and carry up to 40 pounds, walk, bend, stoop and stand on routine basis.
- Provide pre-employment documentation within three days of employment.
- Must complete all Navy Child Development orientation, initial, annual, and ongoing training requirements within the specified timeframe to include CPR, First Aide, and Child Abuse and Neglect Recognition/Prevention.
- Be able to obtain food handler's card.

- May be required to work uncommon tour of duty.

Classification Factors

Factor 1: Knowledge Required by the Position

- Working knowledge in child development principles to provide input to an efficient and effective program responsive to children's needs.
- Completion of the standardized caregiver training program.
- Ability to implement developmentally appropriate child development principles/practices and care services to provide direct care and education for children, individually or with groups of children in child development classroom settings.
- Knowledge of standardized program objectives, policies, and pertinent regulatory requirements.
- Possesses skill in oral expression to explain processes and procedures and to provide basic program information.
- 18 years of age and high school graduate or equivalent required and experience working with young children preferred.
- Ability to follow verbal and written instructions.
- Ability to communicate effectively orally and in writing.
- Ability to attend and participate in prescribed training program to include CPR and First Aid within 30 days and Child Abuse Prevention and Reporting Course within 60 days of employment.
- Ability to promote and foster effective working relationships with children and co-workers.
- Ability to work cooperatively as a member of a team.

Factor 2: Supervisory Controls

The supervisor provides assignment by indicating what is to be done, limitation, quality and quantity expected, deadlines, and priority of assignments. The supervisor provides additional specific instructions on new, difficult, or unusual assignments including suggested work methods or advice on resource material available. The employee uses initiative in carrying out recurring assignments independently without specific instruction, but refers deviations, problems, and unfamiliar situations not covered by instructions to the supervisor for decision or help. The supervisor assures that finished work and methods used are technically accurate and in compliance with instructions or established procedures.

Factor 3: Guidelines

Specific, detailed guidelines covering all aspects of the assignment are provided to the employee. The employee works in strict adherence to guidelines, and deviations must be authorized by the supervisor.

Factor 4: Complexity

The work consists of duties that involve clear-cut and directly related steps, processes, or methods. Work operations are routine and stable. Actions to be taken and responses to be made are readily discernible. The work is quickly mastered.

Factor 5: Scope and Effect

The work involves the development and implementation of plans and activities for a designated classroom. Employee provides classroom oversight, ensuring activities are carried out according to established rules and procedures. The service provided by this employee affects the reliability and acceptability of services provided by the CDC as a whole.

Factor 6: Personal Contacts

Contacts are with contacts and parents or guardians of children receiving care in the facility. Contacts with parent/guardians are frequent and are carried out in moderately structured settings/meetings, such as progress meetings, and also occur infrequently when dealing with specific problems involving an individual child, or classroom problem/situation.

Factor 7: Purpose of Contacts

The purpose of contacts is to obtain and provide facts and information, plan and coordinate work efforts and motivate individuals who are working toward the mutual goal of a quality child development program.

Factor 8: Physical Demands

The work requires considerable walking, standing, bending, stooping and lifting up to 40 pounds. CDC activities may require incumbent to drive an automobile (to include driving a government vehicle). However, most of the work is done in classroom settings, and no special, physical demands are made upon the incumbent.

Factor 9: Work Environment

The work environment involves everyday risks or discomforts that require normal safety precautions typical of a wide variety of child care activities, programs, and services, such as exposure to disease and injuries from lifting. Normal fire and safety precautions must be adhered to. Activities planned are conducted in a building or outside and are suitable for child care programs. The work area is adequately lighted, heated, and ventilated.

Lead Education Technician (CDC)

GS-1702-5

Introduction

The purpose of the Lead Education Technician (CDC) is to provide leadership, assistance, and mentoring to CDC Program Assistants who work with a specialized program (e.g., infants, pre-toddlers, toddlers, preschool-age or combination, special needs, etc.) within the CDC in order to ensure safe, developmentally appropriate environments for children six weeks to five years of age. CD Program Leader has responsibility for a primary care group, designs and implements a variety of activity plans, assists Program Assistants with classroom management skills, provides training and instruction, implements developmentally appropriate curriculum, activities, and practices, conducts child observations, and participates in parent conferences. Assistance and guidance are available, but incumbent uses initiative and creativity in accomplishing goals and objectives. Work is reviewed in terms of results and adherence to established standards and procedures.

Major Duties and Responsibilities

Provides leadership and mentoring to CDC Education Technicians and continually reviews activities and plans for developmentally appropriate practices and compliance with applicable regulations and standards. Responsible for modeling developmentally appropriate activities and uses own initiative to design and implement a variety of activity plans that stimulate and sustain the interest of children and contribute to the social, cognitive, physical and emotional growth of children. Develops activities and plans consisting of concrete or hands-on elements of mathematical and letter concepts, language development,, art, music, science, social studies, health, and physical education for approval by T&C Specialist or CDC Director.

Recommends changes or additions to policies and procedures, and makes adjustments to activities and plans where necessary to deal with unusual or difficult problems or situations associated with the needs of individual children. Ensures a pleasant, inviting atmosphere for all children. Observes and evaluates children's developmental levels and maintains records of progress. Under the supervision of the CDC Director or medical personnel, prepares and implements specialized programs for children with special needs, e.g., children with physical or mental disabilities, children with disciplinary problems or learning disabilities, etc.

Participates in conferences with parents. Plans and conducts parent involvement activities and encourages parents to become involved. Prepares and submits accurate and timely reports as required. Ensures meals and snacks are served in a timely developmentally appropriate manner (e.g., family style). Observes children for signs of illness, abuse or neglect, and reports as directed.

Incumbent works 80% of the workday in ratio with an assigned primary care group. The remaining 20% includes duties such as working with T&C Specialist to identify staff training objectives and to track training progress, assisting Program Assistants with schedules, lesson plans, and room arrangements, coordinating field trips and special events, conducting child observations, implementing curriculum guidelines, observing and planning outdoor play activities, utilizing environment assessment tools such as Early Childhood Environmental Rating

Scale (ECERS) and Infant Toddler Environmental Rating Scale (ITERS), participating in parent and Program Assistants conferences, and preparing for and maintaining DoD Certification and NAEYC accreditation.

Provides for adequate staffing, fills in for staff absences, and ensures employees follow safety, health and nutrition procedures. Makes recommendations to CDC Director for purchase of material, equipment and furnishings for program(s). Provides input to supervisor as requested on promotions regarding direct caregiver staff, reassignments, and performance appraisals. Provides care, oversight, and accountability for children in compliance with DoD, OPNAV 1700.9D, and local policies, guidelines and standards.

Performs other duties as assigned.

Employment Requirements

- Successful completion of Child Development Associate (CDA) credential or Associate Degree (AA) in Early Childhood Education (ECE), Child Development or related field of study or successful completion of one year at the CD Program Assistant/Target Level 4 where incumbent displayed knowledge of and competency in developmentally appropriate programming for young children
- Ability to effectively communicate verbally and in writing (in English) and possess strong interpersonal skills.
- Satisfactorily complete background checks IAW PL 101-647 to include NACI.
- 18 years of age
- Pass required immunization and be free of communicable disease.
- Possess and maintain ability to lift and carry up to 40 pounds, walk, bend, stoop and stand on routine basis.
- Provide pre-employment documentation within three days of employment.
- Must complete all DON Child Development requirements to include ongoing and annual training as prescribed, CPR, First Aid, and Child Abuse and Neglect Recognition/Prevention.
- Be able to obtain food handler's card.
- May be required to work uncommon tour of duty.

Classification Factors

Factor 1: Knowledge Required by the Position

- Successful completion of Child Development Associate (CDA) credential or Associate Degree (AA) in Early Childhood Education (ECE), Child Development or related field of study or successful completion of one year at the CD Program Assistant/Target Level 4 where incumbent displayed knowledge of and competency in developmentally appropriate programming for young children

- Knowledge of developmentally appropriate programs designed to meet the physical, emotional, social, and cognitive needs of children from six weeks to five years of age.
- Knowledge of child development programs/centers, principles, practices, and techniques.
- Must possess maturity and judgment and be capable of handling emergency situations.
- Demonstrates skills to provide leadership, mentoring, and guidance to caregiving staff and possesses an understanding of the interests and motivation of individuals and groups in a CDC environment.
- Ability to train staff on variety of issues to include recognition and identification of childhood illnesses and child abuse, etc.
- Skills to apply Federal and State Laws governing the detection and prevention of child abuse and/or neglect.
- Ability to develop curriculum outlines and lesson plans/guides.
- Demonstrates organizational skills necessary for program planning and staff scheduling.

Factor 2: Supervisory Controls

Incumbent works under general supervision of CDC Director or designated supervisor. Assistance and guidance are available, but incumbent had a great deal of flexibility in selecting, altering, and improving activities. Incumbent is expected to use initiative and creativity in accomplishing goals and objectives. Consults with the CDC Director when unusual childcare situations are encountered. Work is reviewed in terms of results and adherence to established standards and procedures.

Factor 3: Guidelines

Operational guidelines include, but are not limited to, MCCA, DODINST 6060.2, OPNAVINST 1700.9 series, NAEYC, NAVCOMPT Manual 075260, NAVMED P-5010, Standard Operating Procedures, and all other applicable instructions and regulations and generally accepted standards of the profession. The incumbent implements program policies, regulations, standards, and procedures to ensure the timely implementation of program goals and objectives. The CDC Director will take corrective action to promote more effective achievement of proper objectives.

Factor 4: Complexity

The work includes numerous different and unrelated processes, methods and procedure concerning the wide variety of activities in a Child Development Center (CDC) and/or specialized program e.g., infants, pre-toddlers, preschool-age, (or combination), special needs, etc. The developmental activities are conducted throughout the year. The nature of the programs offered are such that regular staff planning sessions must be conducted by incumbent to decide what activities are to be scheduled, how they are to be coordinated between groups, what resources are needed, etc.

Incumbent works and guides staff toward achieving/retaining DoD Certification and NAEYC Accreditation. The incumbent must provide input to the CDC Director and the T&C Specialist who develop and refine methods and techniques to continually improve services. ECERS and

ITERS training sessions are held quarterly to meet requirements and enhance continuous evaluation of the success of the programs.

Factor 5: Scope and Effect

The primary purpose of the position is to provide leadership, assistance, and mentoring for Program Assistants within the CDC and to contribute to the efficient operation and administration of the program(s) and related activities. This contributes to the emotional well-being and morale of the military and civilian personnel whose children attend the centers.

Factor 6: Personal Contacts

Personal contacts are with the CDC Director, T&C Specialist, children, their parents, staff, and base civilian and military personnel. The incumbent has other contacts with members of the general public, individually or in groups, members of national and local child care organizations, school officials and representative of local child care organizations, and representatives of local civic volunteer groups.

Factor 7: Purpose of Contacts

Contact with children and their parents are to determine their needs in order to provide and maintain a safe, developmentally appropriate CDC environment. Contacts with staff are to keep apprised of goals and objectives and to mentor, assist and train Program Assistants. Contacts with the military community and agencies are to coordinate available activities for the children. Incumbent is a main liaison between CDC Director and CDC Program Assistants and is at times a representative before parent groups, the general public, and local civic volunteer groups.

Factor 8: Physical Demands

The incumbent is required to do considerable walking, standing, bending, stooping, standing, and lifting up to 40 pounds. CDC activities may require incumbent to drive and automobile (to include driving a government vehicle). However, most of the work is done in classroom settings, and no special, physical demands are made upon the incumbent.

Factor 9: Work Environment

The work environment involves everyday risks or discomforts that require normal safety precautions typical of a wide variety of child care activities, programs and services, such as exposure to disease and injuries from lifting. Activities planned are conducted in a building or outside and are suitable for child care programs. The work area is adequately lighted, heated and ventilated.

**Appendix D
Classification and Pay Systems for Child Development Program NAF Assistants, Leaders
and Technicians**

Subchapter 1405

**Classification and Pay Systems for Child Development
Program NAF Assistants, Leaders and Technicians**

References: (a) Section 7121 of title 5, United States Code, “Grievance Procedures”
(b) Section 1791-1798, Chapter 88 of Subtitle A of title 10, United States Code,
“Military Child Care”

STRUCTURE OF CLASSIFICATION AND PAY SYSTEM			
Band	Standard Positions	Minimum and Maximum Pay Rates Are Equivalent to the Corresponding GS Locality Schedule Rate	
CC-I	Child development program assistant, entry level, CC-1702-1 (comparable to the GS-2 level) Child development program assistant, intermediate level, CC-1702-1 (comparable to the GS-3 level)	GS-2, Step 1	GS-3, Step 10
CC-II	Child development program assistant, target level, CC-1702-1I (comparable to the GS-4 level) Child development program assistant, leader level, CC-1702-1I (comparable to the GS-5 level) Child development program technician, CC-1702-1I (comparable to the GS-5 level)	GS-4, Step 1	GS-5, Step 10

Table 19

A) **GENERAL**. Basic policy on coverage, purpose and requirements is at Subchapter 1405 of this Manual. Additional policies and procedures follow in this Appendix.

B) **STRUCTURE OF CLASSIFICATION AND PAY SYSTEMS**. Table 19, above, depicts the two-band structure.

1) **Classification**

a) **Standard Position Descriptions**. All caregiving personnel are assigned to one of the DoD-wide standard position descriptions provided at the end of this Appendix. As shown in Table 19, above, Band CC-I covers entry and intermediate-level Child Development Program Assistant positions. Band CC-II covers the positions of Child Development Program Assistant at the target and leader levels, and the Child Development Program Technician. CC-I positions are development positions for entry into band CC-II positions.

b) **Classification Complaints**. NAF caregiving personnel may grieve their assignment to a standard position description when they believe they are required to perform the duties of, and have the qualifications for, a higher level standard position description. Employees may not grieve the content of the position description or the assignment of the position to a band when the content and assignment are in compliance with this Appendix. Either the negotiated or the administrative grievance procedure may be used, as appropriate. In accordance with section 711 of 5 U.S.C. (reference (a)), the negotiated grievance procedure may be used only if the classification results in a pay or payband reduction. Bargaining unit employees may use the applicable NAF administrative grievance system for classification complaints regarding actions that do not result in a pay or payband reduction.

2) **Pay**

a) **Schedules and Across-the-Board Pay Increases**. Wage and Salary Division does not issue CC schedules. As shown in Table 19, the minimum and maximum rates for payband CC-I are the rates for GS-2 step 1 and GS-3, step 10, respectively. And for CC-II, GS-4, step 1 and GS-5, step 10, respectively. These minimum and maximum rates shall be adjusted by serving civilian personnel officers or human resources offices as necessary to equate to the corresponding rates on the GS schedules for the locality in which the CC job is located. Adjustments are effective the first day of the first pay period beginning on or after the effective date of the GS locality schedule. AN employee's pay must be increased as necessary to prevent it from falling below the minimum rate of the band. However, employers have discretion to set pay within the minimum and maximum rates for each band, within the limits of paragraph 2.b., below, and the pay comparability provisions of section 1792© of 10 U.S.C. (reference (b)).

- b) **Pay Setting**. Except for Subsection E.2.c. of Appendix B of this Subchapter, the pay setting provisions of the “Payband Classification and Pay System for White-Collar NAF Employees” apply (substitute “CC” for “NF”). Those provisions are found at Appendix B of this Subchapter, Section E.
- c) **Premium Pay**. See Appendix E of this Subchapter.
- d) **Pay Upon Advancement Within or Between Paybands**. A position change to the next level of responsibility within or between paybands requires a minimum of 6 percent hourly rate increase, or the minimum rate associated with the applicable GS grade in the locality to which assigned, whichever is higher. Advancement occurs when an employee moves from the Child Development Program Assistant entry level, to the intermediate level, the to target level; or from the target level to either the Program Leader or Program Technician position.

C) **TRAINING AND ADVANCEMENT TO TARGET POSITION**

- 1) **General**. Section 1791-1798 of 10 U.S.C. (reference (b)) provide policy on training, education, and experience requirements for caregiving personnel. Policy guidance is provided by the Office of the Deputy Assistant Secretary of Defense (Personnel Support, Families, and Education).
- 2) **Mandatory Assignment to Target Level After Training**. Within two pay periods of completing requisite training and experience, satisfactory caregiving personnel must be advanced to the Child Development Program Assistant position in CC-II, the target level position.

**CHILD DEVELOPMENT PROGRAM ASSISTANT
1702-PAYBAND CC-I/CC-II OR GS-02/03/04/05**

A) **INTRODUCTION**

The primary function of this position is to provide appropriate development care and instruction for children in the DoD Child Development (CD) Facility.

B) **MAJOR DUTIES AND RESPONSIBILITIES**.

The grade levels of this position represent the entry, intermediate, target, and leader levels for Child Care positions within DoD.

Entry Level (Payband CC-I or GS-02)

Performs the more routine, simple child care tasks following step-by-step instruction. Little or no previous training or experience is required. Work is reviewed in detail, while in progress, and upon completion to ensure and assess trainee’s progress and to evaluate attainment of

training objectives and readiness for further training. Training will be of a progressively more responsible and specialized nature associate with the child care and development operations. These duties are performed to increase knowledge of the child care duties and responsibilities and to develop skills for advancing to the higher level positions.

1. Helps arrange room and play materials to accommodate the daily schedule.
2. Helps create adult-made games and play materials (i.e., mixing paint and playdough; assembling props for dramatic play, activities, etc.), and assists with developing a list of needed supplies and equipment for submission to the supervisor
3. Receives children from parents. Notes all special instructions that parents may provide. Maintains an accurate count of children at all times
4. Conducts the appropriate play and learning activities to foster individual and group activity development. Leads children in songs, games, fingerplays, and other activities.
5. Interacts with children during programmed activities.
6. Attends to the physical needs of the children (i.e., diapering, feeding, toileting, resting, etc.). Rocks and holds babies, and assists children during family-style meals. Notifies the supervisor of Facility Director of any marks or other signs that might indicate s suspicion of illness, abuse, or neglect.
7. Helps children collect their belongings when they depart. Ensures that each child leaves with a parent or someone authorized to take the child at all times.
8. Performs other related duties as assigned.

Intermediate Level (1702-Payband CC-I or GS-03)

Performs the following major target-level duties and responsibilities, working under the close supervision of the supervisor or other qualified higher-graded employee who makes assignments of specific basic tasks, provides detailed initial instructions, and is available for guidance and advice on all aspects of work to be accomplished.

1. Ensures that care is provided in compliance with Child Development standards as outlined in applicable regulations.
2. Assists in planning and conducting an effective child development program to meet the physical, social, emotional, and intellectual needs of each child, based upon stated goals and a curriculum plan provided by the supervisor.
3. Reviews and implements daily schedules and activity plans, and briefs lower-graded employees. Assists in arranging the room and play materials to accommodate the faily schedule. Sets up displays and bulletin board.
4. Helps create adult-made games and play materials, (i.e., mixing paint and playdough; assembling props for dramatic play, activities, etc.), and assists with developing a list of needed supplies and equipment for submission to the supervisor.
5. Receives children from parents. Notes all special instructions that parents may provide. Maintains an accurate count of children at all times
6. Conducts daily health checks of children. Notifies the Family Advocacy Program and the supervisor or Facility Director of any marks or other signs that might indicate a suspicion of illness, abuse or neglect.

7. Assists in creating a pleasant, inviting atmosphere for children. Ensures the safety and sanitation of children through constant supervision, effective arrange of space, proper maintenance of equipment, etc.
8. Completes and submits required reports in an accurate and timely manner. May participate in conferences with parents and the supervisor.
9. Conducts the appropriate play and learning activities to foster individual and group activity development. Leads children in songs, games, fingerplays, and other activities.
10. Interacts with children during programmed activities. Uses approved child guidance and caregiving techniques that support overall program objectives. Maintains continuous observation of children to detect early signs of distress or abnormal behavior, and supervises their activities.
11. Attends to the physical needs of the children (i.e., diapering, feeding, toileting, resting, etc.). Rocks and holds babies, and assists children during family-style meals. Notifies the supervisor of Facility Director of any marks or other signs that might indicate s suspicion of illness, abuse, or neglect.
12. Helps children collect their belongings when they depart. Ensures that each child leaves with a parent or someone authorized to take the child at all times.
13. Performs other related duties as assigned.

Target Level (1702-Payband CC-II or GS-04)

The incumbent performs duties under the direct supervision of a leder or supervisor. Assistance and guidance is normally available at all times, and work is reviewed in terms of results and adherence to established standards and procedures.

1. Ensures that care provided is in compliance with Child Development standards as outlined in applicable regulations.
2. Assists in planning and conducting an effective child development program to meet the physical, social, emotional, and intellectual needs of each child, based upon stated goals and a curriculum plan provided by the supervisor.
3. Reviews and implements daily schedules and activity plans, and briefs lower-graded employees. Assists in arranging the room and play materials to accommodate the daily schedule. Sets up displays and bulletin board.
4. Helps create adult-made games and play materials, (i.e., mixing paint and playdough; assembling props for dramatic play, activities, etc.), and assists with developing a list of needed supplies and equipment for submission to the supervisor.
5. Receives children from parents. Notes all special instructions that parents may provide. Maintains an accurate count of children at all times
6. Conducts daily health checks of children. Notifies the Family Advocacy Program and the supervisor or Facility Director of any marks or other signs that might indicate a suspicion of illness, abuse or neglect.
7. Creates a pleasant, inviting atmosphere for children. Ensures the safety and sanitation of children through constant supervision, effective arrange of space, proper maintenance of equipment, etc.

8. Completes and submits required reports in an accurate and timely manner. Participates in conferences with parents and the supervisor. Gives parents daily feedback on children's activities.
9. Coordinates, by age, the appropriate play and learning activities to foster individual and group activity development. Leads children in songs, games, fingerplays, and other activities.
10. Interacts with children during programmed activities. Uses approved child guidance and caregiving techniques that support overall program objectives. Maintains continuous observation of children to detect early signs of distress or abnormal behavior, and supervises their activities.
11. Attends to the physical needs of the children (i.e., diapering, feeding, toileting, resting, etc.). Helps children to develop self-help skills. Rocks and holds babies, and assists children during family-style meals.
12. Helps children collect their belongings when they depart. Ensures that each child leaves with a parent or someone authorized to take the child at all times.
13. Performs other related duties as assigned.

Leaders Level (1702-Payband CC-II or GS-05)

In addition to the above, Child Development Program Leaders perform the following duties:

14. Serves as leader to all staff of Child Development Program Assistants, with responsibility for the operation of the activities and program in accordance with applicable regulations.
15. Relays instructions from the supervisor and gets the work started in accordance with the daily activity plan.
16. Demonstrates proper work methods and provides work-related guidance to subordinates. Conducts on-the-job training and instruction.
17. Ensures that employees follow security, safety, health, and other required rules. Checks with supervisor on problems.

C. Controls over the Position

The incumbent performs duties under the direct supervision of a Program Leader or supervisor. Assistance and guidance are normally available at all times, and work is reviewed in terms of results and adherence to established standards and procedures.

Child Development Program Technician 1702 Payband CC-II or GS-05

A. INTRODUCTION

The primary function of this position is to provide appropriate, specialized developmental care and instruction for children in the DoD Child Development (CD) Facilities.

B. MAJOR DUTIES AND RESPONSIBILITIES

1. The incumbent uses own initiative to design and implement a variety of activity plans to stimulate and sustain the interest of children, and to contribute to their social, emotional, intellectually, and physical development. Ensures a pleasant, inviting atmosphere for all children.
2. Under supervision of the program director or medical personnel, prepares and implements specialized programs for children with special needs, e.g.; children with physical or mental disabilities, children with disciplinary problems or learning disabilities, or gifted children.
3. Ensures that care is provided in compliance with CD standards as outlined in applicable regulations, and continually reviews activities and plans for appropriateness.
4. Recommends changes or additions to policies and procedures, and makes adjustments to activities and plans where necessary to deal with unusual or difficult problems or situations associated with the needs of individual children.
5. Develops activities and plans consisting of concrete or hand-on elements of mathematical and letter concepts, language development, art, music, science, social studies, health, and physical education for approval by the Facility Director.
6. Observes and evaluates children's developmental levels and maintains record of progress. Participates in conferences with parents and Program Assistants. Prepares and submits accurate and timely reports as required. Notifies the Family Advocacy Program and the supervisor or Facility Director of any marks or other signs that might indicate a suspicion of illness, abuse or neglect.
7. May supervise CD Assistants and Leaders. Provides training and instruction to subordinates.
8. Plans and conducts parent involvement activities and encourages parents to become involved. Uses parents as a resource when possible.
9. Recommends purchase of material, equipment, and furnishings for activity rooms to the Facility Director.
10. Performs other related duties as assigned.

C. CONTROLS OVER THE POSITION

The incumbent performs duties under the general supervision of the Facility Director or other designated supervisor. Assistance and guidance are available, but the incumbent has a great deal of flexibility in selecting, altering, and improving activities. Incumbent is expected to use initiative and creativity in accomplishing goals and objectives. Work is reviewed in terms of results and adherence to established standards and procedures.

Appendix E
Army Child Development Center Foundation Training Topics for Entry Level Staff

Prior to first duty assignment (CYPA 2):

- Orientation training
- Supervised work experience

Entry level training – 1st six months:

- Identifying and reporting child abuse module
- Preventing and responding to child abuse module
- Communicable diseases/administering medication
- Basic computer skills
- Module 1: Safe
- Module 2: Healthy
- Module 10: Guidance
- First aid/SIDS
- Infant/child CPR

Successful completion of training results in non-competitive promotion to CYPA 3.

Skill level training – 1st 12 months:

- Family style dining
- Early childhood environment rating scale
- Special project
- Conducting observations
- FCC home or SAS observation
- CDC observation
- Module 3: Environments
- Module 4: Physical
- Module 9: Social
- Module 11: Families
- Blueprints for Care
- Installation specific requirements

Target level training – 1st 18 months:

- Module 5: Cognitive
- Module 6: Communication

- Module 7: Creative
- Module 8: Self
- Module 12: Program Management
- Module 13: Professionalism
 - CPR update
 - Measuring quality

Successful completion of training results in the Army Foundation Training Certificate and non-competitive promotion to CYPA 4.

**Appendix F
Detailed Description of DoDDS Benchmark Positions**

DoDEA Title	Wage	Qualifications/Knowledge Required	Summary of Job
Monitor	GS-2	Ability, knowledge & skill in following areas: <ul style="list-style-type: none"> - Working with children of all ages in a school setting - Communicating with children - Non-physical discipline practices - Behavior control techniques - Common games and activities encouraging and promoting appropriate behavior - Safety practices - Identifying and reporting issues, problems, etc. potentially affecting student health or welfare. <u>NOTE:</u> Some postings state applicants may substitute the 3-month experience requirement with evidence of a high school diploma or equivalent.	This position has been established to perform simple and repetitive lunchroom, recess, classroom, and bus monitoring duties in a DoDDS school. In performing some or all of these duties, the safety and welfare of the students are the primary concern. The monitor identifies and reports known or suspected problems, issues, or concerns to the appropriate staff, faculty member, or other official (e.g., military police) in accordance with established policies and procedures. The work may be performed in a cafeteria, a designated lunch site, outdoor or indoor recess area, a bus loading and unloading area, or any combination of these or similar areas.
Job Description/Major Duties			
<ul style="list-style-type: none"> - Assembles students - Monitors movement through halls & lunchroom activities - Monitors recess, enforces safety rules - Prevents altercations - Assists & monitors restrooms...instructs in basic personal hygiene practices - Performs bus monitoring duties - Other duties as assigned 			

DoDEA Title	Wage	Qualifications/Knowledge Required	Summary of Job
Lead Monitor	GS-3	<p>All regular monitor (GS-2) qualifications plus:</p> <ul style="list-style-type: none"> - Ability to set the work pace - Schedule and assign work and instruct on several basic routine tasks - Approve short periods of leave - Provide input to performance appraisals - Resolve minor complaints. <p><u>NOTE</u>: Some postings mention applicants may substitute the 6-month experience requirement with 1 year of education beyond high school (30 semester or 45 quarter hours).</p>	<p>This position has been established to perform the duties of Lead Monitor. This position will set the pace for Monitors who perform simple and repetitive lunchroom, recess, and bus monitoring duties in a DoDDS school. While performing or overseeing activities of Monitors, the safety and welfare of students are the primary concern. The monitor identifies and reports known or suspected problems, issues, or concerns to the reports known or suspected problems, issues, or concerns to the appropriate staff, faculty member, or other official (e.g., military police) in accordance with established policies and procedures. The work may be performed in a cafeteria, a designated lunch site, outdoor recess areas, or indoor recess areas, and at bus loading and unloading areas, or any combination of these or similar areas.</p>
Job Description/Major Duties			
<p>Handles all regular monitor (GS-2) duties, plus:</p> <ul style="list-style-type: none"> - Develops and maintains shift schedules - Assigns work and instructs employees in the performance of their tasks - Gives simple on-the-job training - Provides input to employee performance appraisal - Resolves informal complaints - Keeps principal informed of disciplinary problems 			

DoDEA Title	Wage	Qualifications/Knowledge Required	Summary of Job
Teachers Aide (Education Aide)	GS-3	<p>- Knowledge of educational practices - Knowledge of clerical procedures - Skill in working with children</p> <p><u>NOTES:</u> Some postings require successful completion of a full 4-year high school curriculum and 6 months “general experience”... <i>General experience</i> includes: (a) Progressively responsible clerical, office, or other work that indicates the ability to acquire the particular knowledge and skills needed to perform the duties described above, and (b) Experience working with groups of young children. <i>Substitution for experience:</i> One year of successfully completed education above the high school level may be substituted. This education must have been obtained in an accredited business, secretarial or technical school, junior college, college, or university. [Other postings require applicants to have either 1-year full-time experience or 2 years of education beyond high school (60 semester or 90 quarter hours).]</p>	<p>Assists school faculty with record keeping, routine filing, and in keeping the classroom neat and orderly. Supervises small study groups and committees, testing situations, and children’s individual research projects. Provides assistance to students in reading, math, and makeup work. Accompanies teachers and students on field trips, maintains classroom order, and enforces and upholds school regulations and discipline. Monitors students on the playground, in hallways and restrooms, during study hall, during lunch, and in bus loading areas. May be assigned to work in classroom, media center, health clinic, school office, or cafeteria as required.</p>
Job Description/Major Duties			
<p>Supports the Department of Defense Dependents Schools instructional program by performing at least two or more of the following duties:</p> <ul style="list-style-type: none"> - TESTING: Distributes testing materials, instructs pupils concerning tests, collects testing materials, grades tests through application of identified scoring techniques, and provides desired analysis in standard form. - INSTRUCTIONAL MATERIALS: Develops audio-visual-tactile aids or sets up laboratory demonstrations on the basis of identified educational objective. - LEARNING: Tutors selected pupils and supervises independent study in laboratories and learning resource centers. - ADMINISTRATION: Makes arrangements for field trips, identifies points of interest and obtains brochures and other informational data for educator, guides pupils during trips, and maintains discipline. - MISCELLANEOUS: Performs a variety of self-help skills in the classroom (e.g. feeding, toileting, dressing students); Monitors playground activities; Assists teacher in the classroom; Monitors lunchroom activities; and may be required to ride a school bus with handicapped students. Performs other duties as assigned. 			

DoDEA Title	Wage	Qualifications/Knowledge Required	Summary of Job
Health Aide	GS-3	<p>Knowledge and skill to perform the following:</p> <ul style="list-style-type: none"> - Routine and emergency first aid - Setting up equipment used in basic health examinations such as scoliosis, hearing, or visual (test results are read by professional personnel) - Administering properly prescribed and prepared medicines - Examining ill students and determining if parents should be contacted, if student should rest, or if they should be referred to medical personnel - Serving as a contact point with students' parents and medical personnel to be able to relate a child's condition and initiate medical treatment if necessary - Gathering and presenting health and safety materials to classes of students - Operating a manual or electric typewriter and preparing letters, memorandums, and notes from draft - Correcting errors in grammar, spelling, punctuation, syntax, etc. 	<p>Performs routine and emergency first aid in support of the school nurse.</p>
Job Description/Major Duties			
<p>In order to assist the school nurse in administering routine and emergency first aid to students, the Health Aide...</p> <ul style="list-style-type: none"> - Washes wounds, applies compresses/dressings to stop bleeding, administers CPR, follows established Red Cross first aid procedures - Assists with student's "sick call"; Checks students' pulse, temperature, and visual appearance to determine a course of action - Makes contact with parents, principal, or medical personnel; Dispenses dosages of medicine provided by student's parents - Certifies that student records do not reflect adverse medical conditions for outside parties or organizations - Administers routine health tests, including visual tests (to determine "color" difficulties, unusual acuity), audio tests (to record hearing ranges), scoliosis examinations (to observe spinal curvature), and weight and height measurements to note on a child's record - Administers fluoride rinse to students - Contacts local health care officials or Exceptional Family Member Program (EFMP) representatives to arrange for speakers, examinations, or to procure health and safety materials such as posters, handouts, and materials for teachers to use in the classroom - Observes students' physical appearance for signs of abuse (such as bruises, contusions). Tactfully questions student regarding how injury occurred. When necessary - notifies Principal of a possible problem - Maintains student health records; Makes notations of data gathered; Completes accident/injury reports - Maintains an in-house supply of dressings, antiseptics, and other common first aid materials - Assists faculty by presenting health or safety topic materials to class ranging in subject from basic food groups, to what to do if injured at school. Gathers facts and material for self use or use of teachers; Types routine correspondence and performs other duties as assigned. 			

DoDEA Title	Wage	Qualifications/Knowledge Required	Summary of Job
Health Technician	GS-4	Same as for health aide (GS-3)	This position provides continuing health care program coverage for a small school. Medical personnel usually are not immediately collocated and may be 30-45 minutes away.
Job Description/Major Duties			
Same as for health aide (GS-3), but also required to be a fully qualified typist.			

DoDEA Title	Wage	Qualifications/Knowledge Required	Summary of Job
Library Technician	GS-4	<ul style="list-style-type: none"> - 1 year of full-time general experience OR 2 years of education above high school level (60 semester or 90 quarter hours). - Knowledge of the Columbia Library System cataloging and circulation programs, to assist in cataloging items, to maintain records of transactions, and to train users. - Knowledge of Library Media Center services, practices, procedures, terminology, content, and classification scheme sufficient to provide quality everyday services to users. - Knowledge of circulation procedures to charge library materials in and out and record status changes, and a knowledge of material reserve procedures to notify customers when a publication is available. - Ability to communicate in English, both orally and in writing. - Ability to type 40 wpm, and to operate a personal computer in performance of CLC cataloging and circulation functions, and to prepare memorandums and reports. 	<p>The primary purpose of this position is to provide technical and clerical assistance to a school Library-Media Specialist by: providing everyday library services to students, teachers, and other patrons; inventorying equipment and library supplies; locating and securing materials from outside sources for loan or purchase; and in processing and circulating books and audio-visual (AV) materials. In processing and circulation functions are performed using the Columbia Library System (CLS) software program being installed throughout DoDDS. The system is used to assign students a bar code identification number card that is used for automated circulation control, and for cataloging media center books and materials.</p>
Job Description/Major Duties			
<ol style="list-style-type: none"> 1. Assists students and teachers in locating desired materials, and monitors students in the absence of teachers. Gathers materials for specific classroom units of study upon the request of a teacher and sets up special checkouts. Assists in procuring and/or copying filmstrips, videos, and AV software for circulation; or (if available) ordering such material from the District/Regional AV film library. Schedules the use of films and videos. Sets up AV equipment and computer hardware/software as required for library training sessions. Performs equipment repairs and routine maintenance functions as necessary. Monitors circulation files and notifies overdue users. Reviews record file of students who are withdrawing to assure they have returned all school library materials. Instruct student and parent volunteers in the use of Library Media Center resources (e.g., copy machine, laminator, lettering machine, binding machine, AV equipment, etc.). Assists the Media Specialist and/or staff in development and display of bulletin boards and other media center displays. Oversees the work of assigned part-time student aides. 2. Prepares material orders on proper DoDDS forms for submission to supply or the Regional Information Management Center (IMC). Assists in processing new materials (i.e., assigns and inputs catalog numbers and types and applies labels), date-stamps receipt documents and annotates records. Maintains a list of new acquisitions, and an updated listing of outstanding requests. Monitors DSAMMS supply listings and expenditures. 			

3. Assists in cataloging incoming materials and inputs into the CLS school program. Maintains the CLS circulation file on books and materials borrowed by students and teachers. Shelves all types of Library Media Center materials including books, AV software, and computer software. Maintains non-cataloged items in proper location and order. Maintains Library Media Center regulations and operating instructions in appropriate files. Maintains and updates automated class lists and bulletins.
4. Assists students and other users in the use of Library Media Center computers and peripheral equipment. Prepares computer software for circulation, and maintains backup copy files. Uses computer software in preparation of bibliographies, lists, and other library records. Maintains an automated inventory of assigned computer software and hardware. Follows guidelines for regular computer maintenance and back-up. -- Performs other duties as assigned.

DoDEA Title	Wage	Qualifications/Knowledge Required	Summary of Job
Educational Technician	GS-5	<ul style="list-style-type: none"> - 1 year of full-time specialized experience. - Quality level of specialized experience must be at a level of difficulty and responsibility at least equivalent to the GS level. OR 4 years of education (i.e. 120 semester or 180 quarter hours) above the high school level are required. <p><u>Specialized experience:</u> Experience that equipped the applicant with the particular knowledge, skills, and abilities to perform successfully educational technical duties, and experience that is typically in or related to education technician work (such as specialized knowledge of and skill in particular aspects of an educational activity or program for the hearing impaired).</p> <p><u>Quality level of specialized experience:</u> Moderately difficult and responsible educational aid work (performed under immediate or general supervision) requiring: (a) a moderate amount of training and minor supervisory experience; (b) a good working knowledge of educational technical work; and (c) the exercise of independent judgment with well-established policies, procedures, and techniques.</p>	Serves as an Educational Technician in support of educational program for hearing impaired students.
Job Description / Major Duties			
<ol style="list-style-type: none"> 1. Provides total communication support services and instructional assistance that facilitates the educational programs of hearing impaired students in the classroom for the hearing impaired and regular mainstream classroom settings. Sign language skills and fluency must be at a level sufficient to provide through instantaneous translation and interpretation of: (a) regular mainstream class lectures in all subject matter areas and elective work sheets, special projects, study material, etc., (b) audio-visual classroom presentations /activities, i.e., films, videos, tape recordings, phonograph records, etc., (c) presentations /performances, information in assemblies, special programs and activities. 2. Serves as a student tutor, individually or in small groups, in accordance with plans developed by a specialist. When rendering such assistance all instructional methods and techniques employed must be within program guidelines and appropriate to maintain and reinforce students' vocabularies and augment those vocabularies whenever possible. Depending on the student's process and adaptability, the incumbent gears the instruction to the student's learning pace, making changes as required, within the established educational program plan. The incumbent applies knowledge of hearing impaired handicaps during the course of assignments. During assignments observes and records student behavior and activity, noting productivity, ability, attitude, attention span, and sociability, in relation to the objective of the established learning process. Attends CSC conferences, and meetings regarding the student(s) to which assigned to provide input regarding performance in areas of responsibilities. 3. Performs general administrative tasks relating to such areas as attendance records, student evaluations, inventory or equipment, and routing office work. -- Performs other duties as assigned. 			

DoDEA Title	Wage	Qualifications/Knowledge Required	Summary of Job
School Support Assistant (a)	GS-5	<ul style="list-style-type: none"> - Requires a military drivers license. - Knowledge of standard DoD supply support systems as implemented in DoD component regulations covering supply management, i.e., standard requisitioning, stock, storing, records, and issuing procedures, in order to provide adequate support within funding limitations. - Knowledge of established supply regulations, policies, and procedures in order to set/revise appropriate stock levels for school supplies and equipment. - Ability to operate a personal computer and peripheral equipment to input data. - Ability to clearly speak and write English, and to fully comprehend regulations written in English. 	<p>The employee performs their duties in order to provide school support services. This position will be located in a larger school with a higher graded School Support Assistant on staff.</p>
Job Description/Major Duties			
<ul style="list-style-type: none"> - Prepares, edits, and submits orders via electronic data transfer for purchasing supplies and equipment. - Verifies the availability of supply funds, supply levels, emergency conditions, economic order quantities, and authorizations. - Obtains common-use items and processes requests for locally available material, follows up on requests, responds to verbal and written inquiries, handles returns to vendors, handles documentation. - Sets or revises appropriate stock levels in the school. Performs a combination of tasks concerned with the receipt, storage, issue, and replenishment of supplies and equipment, etc. Examines items received, takes action to resolve discrepancies. Ensures proper and secure storage. Is responsible for and serves as the primary point-of-contact for transportation functions related to the receipt or shipment of material. Prepares documentation for shipment of items. - Uses and maintains a library of DoDDS, GSA, and other appropriate federal and commercial catalogs in order to identify supply items requested by the faculty and school management data, as required. Identifies in-country sources for hazardous or perishable material and host-nation related materials. - Records all supply transactions, files copies of documents, and ensures that an adequate automated and hard copy audit trail exists. Reconciles system rejects and other property or documentary discrepancies. Advises the school, district, or ASC logistics personnel as appropriate, when procedural variations are required or discrepancies need to be resolved. Ensures that forms and publications maintained are up-to-date. - Performs a variety of light maintenance and repair work for the school. Sends and receives registered, certified, and express mail. Responsible for pick-up and delivery of all official school incoming and outgoing mail. Prepares and arranges furniture for assemblies. Moves supplies and equipment in and around the school, between school buildings, etc. -- Performs other duties as assigned. 			

DoDEA Title	Wage	Qualifications/Knowledge Required	Summary of Job
School Support Assistant (b)	GS-6	<ul style="list-style-type: none"> - The employee may be subject to mandatory travel within the theater, by military or commercial modes of transportation; requires Military Drivers License. - Knowledge of Host Nation language desired, but not required. - Knowledge of standard DoD supply and logistic support systems as implemented in DoD component regulations covering supply management, i.e., standard requisitioning, stock, storing, records, and issuing procedures, in order to provide adequate support within funding limitations. - Knowledge and understanding of established and standardized budgetary and financial rules, regulations and procedures to manage the IMPAC card program. - Knowledge of policies and procedures governing accountability of US government property to include its acquisition, control, protection, and disposition, and the maintenance of accurate property records. - Knowledge of administrative procedures and established supply regulations, policies, and procedures required to maintain and accurate accounting and reporting system for accountable property, to conduct inventories, and to process work requests/orders for equipment maintenance and repair, and administrative transportation to move materials from one location to another. - Knowledge of security and safety procedures to detect and determine proper corrective action for potential hazardous conditions. - Knowledge of and ability to operate personal computers and the automated material management system and other software programs to accomplish assignment requiring material management or budget data reports. 	<p>The employee performs the material management and support function for a unit school to provide adequate and timely logistics support to the students, staff, and faculty. In a larger school, the employee may have the support of one or more lower graded personnel.</p>
Job Description/Major Duties			
<p>A) <u>Property/Material Management:</u></p> <ul style="list-style-type: none"> - Serves as property custodian maintaining a perpetual inventory of a wide spectrum on non-expendable property and informal supply records of durable items in the school. - Identifies equipment requiring repair or maintenance on density lists. Coordinates computer and computer ancillary equipment repair through the complex or school computer coordinator. Takes action to return unserviceable equipment to a serviceable condition, or if required, action necessary to replace the equipment. Forecasts and identifies to the principal life cycle replacement requirements for equipment items. Ensures that general and special purpose test equipment is calibrated periodically. <p>(B) <u>Support Services:</u></p> <ul style="list-style-type: none"> - Oversees accounts and detailed financial matters. Manages, monitors, and compiles financial data. Forecasts the budget for the 			

replenishment of supplies and equipment, etc. Ensures allocated funds are properly used. Identifies problematic trends to the principal to ensure that funds are not exceeded or exhausted before the end of the school year. Prepares statistical reports, budget variance analysis, and programmatic reports for presentation to the principals as available from the automated material management system.

- Monitors base-level support provided under the inter-service support agreement including service contracts for school equipment maintenance and repair, custodial support, utilities, laundry and dry cleaning, mail pickup and delivery, etc., to ensure that the supporting community is in compliance with the terms of the agreement. Evaluates and prepares written or verbal reports on the service received and informs the principal or the contracting officer's representative of noncompliance as appropriate. Monitors lease contracts on school equipment to initiate and track requirements for preventative maintenance and to return the equipment at the end of the contractual period.
- Accompanies the principal and representatives of the servicing military installation and ASC logistics facilities engineers as they conduct the semi-annual surveys of the school buildings and grounds. Generates facility cyclical maintenance and repair needs and safety violation work orders to repair deficiencies. Follows up to ensure that work orders have been prepared, submitted, and followed to completion. Serves as the point of contact for the school in facilities issues.
- Assists administrators in monitoring the school safety and security programs to ensure compliance with the supporting military installations and DoDDS programs. Reports to, and coordinates any required actions with, the principal and supporting military security personnel when increased threats from terrorist activities are received and assists with appropriate responses, as directed. Secures and unlocks school on a daily basis. Assists Area and District personnel with physical security inspections to insure adequate security measures are adhered to and conducts school level self-inspections. Ensures that property holders comply with requirements to secure high value and pilferable accountable property in such a manner as to discourage potential thieves. Inspects school facility daily to ensure all stairways and pathways are not obstructed. May issue and control keys for some or all school facilities. Assists administrators in coordinating school fire safety efforts to ensure compliance with DoDDS and the supporting military community requirements. Performs caretaker services at the school throughout the school year and during recesses for the winter, spring, and summer.
- Handles all IMPAC purchases and associated tasks.. -- Performs other duties as assigned.

DoDEA Title	Wage	Qualifications/Knowledge Required	Summary of Job
Lead School Support Assistant	GS-7	<ul style="list-style-type: none"> - The employee may be subject to mandatory travel within the theater, by military or commercial modes of transportation. - Knowledge of Host Nation language desired, but not required. - Requires Military Drivers License. - Working knowledge of the disciplines which make up material management and logistic support, such as material acquisition, property accounting, equipment maintenance and repair, property transfer and disposal, facilities maintenance and repair, security and safety policies. - Knowledge and experience working with standard DoD supply and logistic support systems, as implemented in DoD component regulations covering supply management, i.e., standard requisitioning, stock, storing, records and issuing procedures, in order to review the complex's school's material management programs. - Knowledge of general policies and procedures governing accountability of US government personal property to include its acquisition, control, protection, and disposition, and the maintenance of accurate records to review the complex's school's hand receipts. - Knowledge of written policies and procedures governing the DoD safety and security program in order to detect and determine proper corrective action for potentially hazardous conditions. - Knowledge and understanding of an extensive body of established and standardized budgetary and financial rules, regulations, and procedures to manage the IMPAC card program. - Skill and experience in operating and training others in use of personal computers and the operation of an automated material management system, word processing requirements, and other software programs or packages deemed necessary to accomplish the assigned work. 	<p>The employee serves as a school complex team leader to school level support services personnel performing work in support of the duties listed in the "job description" section. A complex is comprised of three or more elementary through secondary schools. Leads the work of the lower graded support services personnel in the complex.</p>
Job Description/Major Duties			
<p><i>(A) Property/Material Management:</i></p> <ul style="list-style-type: none"> - Prepares and conducts hands-on training to new support services personnel and administrators in complex schools in the use of the automated material management system and training in the policies and procedures governing material management in the DoDDS community. Periodically reviews the products and files generated by the system. Establishes a system to assist support services personnel in detecting and correcting identified deficiencies. Ensures that support services personnel provide equipment density listings to the supporting military installation(s) for equipment maintenance and repair requirements. Periodically surveys complex schools to ensure that in-operable equipment is being repaired or reported as unserviceable to the accountable officer. 			

Appendices

- Provides guidance/assistance to support services personnel in maintaining equipment and identifying repair sources when needed.
 - Periodically surveys the complex schools to ensure that excess material is being identified, offered for redistribution to other schools in the complex or district, processed for transfer, or disposed of. Reviews records to determine if property has become obsolete or excess to the needs of the school or complex; offers recommendations to school administrators for utilization and prepares reports and necessary documentation for transfer of property.
 - Periodically audits the hand receipt accounts of the complex schools.
 - Prepares procedures for annual inventories and participates in the inventory process by conducting investigations.
 - Reviews complex's school proposed purchase procedures to ensure they are in accordance with the fiscal year budget plan, reviews justifications, and recommends actions for property requests not on the fiscal year budget plan.
 - Plans and conducts limited segments of management studies on the utilization of the complex's schools property and equipment, and makes informal recommendations to the schools principals based on findings.
 - Reviews supply and central storage areas to ensure that materials are being labeled and stored properly.
- (B) *Small Purchase Procurement (IMPAC):*
- Handles IMPAC purchases and associated tasks.
- (C) *Safety/Security Administration:*
- Assists administrators with overall school complex safety and security duties. May assist responsible administrators through attendance at periodic training classes, safety training meetings, etc. Assists administrators or other designated persons with reviews of safe working conditions and practices in and around playgrounds, gymnasiums, and laboratories, industrial, and technical classrooms. Assists Area, District or base support personnel with required data, reports, and follow-up paperwork for review at the local or appropriate higher level. Assists administrators with reviews, analysis, and recommendations for correction of all safety and security deficiencies. Assists in the implementation of all internal security controls in accordance with DSR 4700.2, "DoDDS Internal Security". Assists in daily school inspections to ensure that doors, stairways, and pathways are not obstructed.
 - May act as designated school key custodian. Establishes a key and lock control program in accordance with the provision of DSR 4700.02, "DoDDS Internal Security". Conducts physical security inspections to the integrity of key and lock protection procedures and advises administration of corrective action necessary.
 - Assists administration personnel in fire prevention duties. Designs and posts internal evacuation plans for the complex schools. Coordinates and assists local fire officials with fire safety practices throughout the year. Submits data associated with fire drills and other fire prevention practices to administrators for review by the safety office.
- (D) *Support Services Oversight:*
- Provides technical direction to support services personnel in compiling financial data for forecasting the budget
 - Keeps advised of all changes in enrollments, utilization of supply and facilities resources, base tenure and population shifts and other plans which affect school support services programs.
 - Conducts scheduled on site inspection of school facilities.
- (E) *Contract Liaison:*
- Performs on-going quality assurance evaluation of contract performance for complex schools. Maintains close coordination and liaison with complex school administrators, teachers, contracting personnel, and host nation vendors.
 - Monitors the performance of contractor employees and equipment for complex schools to ensure compliance with contract specifications. Serves as liaison between teachers and school administration and contractor. Receives, investigates, and resolves minor service complaints, and performs follow-ups. Reviews contractor invoices for accuracy of services billed. - Performs other duties as assigned.

DoDEA Title	Wage	Qualifications/Knowledge Required	Summary of Job
Pre-K Teachers	Cost of living variation. No info specific to Pre-K wages. (*See “Teacher Salary”)	<ul style="list-style-type: none"> - A major in early childhood education (ECE) or a degree in elementary education with 24 SH in ECE is required. - The 24 SH must be in course description or title containing early childhood, kindergarten, or prekindergarten training. - Course work in methods of teaching emerging literacy and methods of teaching mathematics for early childhood, kindergarten, or prekindergarten is required. - Two years of full-time experience teaching prekindergarten or kindergarten may be substituted for 3 SH of the required ECE course work. <p>NOTES: According to most job vacancy announcements – applicants must have an appropriate valid professional teacher certificate. DODDS Certificates are also accepted. * “Teacher Salary”: <i>DDESS Teacher Salary Schedule Ranges</i>: <u>BA</u> = \$31,059-60,818; <u>Specialist</u> = \$42,860-72,620; <u>Masters</u> = \$35,539-65,299; <u>Doctorate</u> = \$45,592-75,352</p>	Monitor the physical, socioemotional and cognitive developmental growth of children as teacher and caregiver
Job Description/Major Duties			
<p>Most advertised job descriptions are not specific to pre-k teachers but include pre-k and/or preschool positions together with other types of teacher positions (e.g., pre-k through ninth grade). Excerpts from the 0090 Teacher Pre-kindergarten job description found on the DoDEA Classification & Compensation web site (www.odedodea.edu/pers/classcomp/pds.htm) follow:</p> <ul style="list-style-type: none"> - Incumbent independently develops lesson plans within the framework of approved curriculum objectives - Assumes responsibility for the administration and day-to-day operation of the program - Implements the Education Component and follows the guidelines of “The Creative Curriculum.” - Conducts biannual assessments of each child’s progress; maintains portfolio for each student - Conducts parent orientation, provides opportunities for parent education, works with parents to schedule volunteer time, conducts home visits to each family enrolled in the program - Collaborates with Child Development representatives, other community resources and with other DoDDS school staff - Provides training for program staff and volunteers as needed - Monitors sanitation, cleanliness, health and safety practices and fire evacuation procedures - Observes DoDDS regulations and procedures and consults with administrator concerning...unique functions of the program - Serves as member of several program Committees. - Coordinates screening for children with school nurse; medical, dental, mental health, and nutrition representatives; and parents - Performs other duties as assigned. - Performs work under the general supervision of the school principal. 			

DoDEA Title	Wage	Qualifications/Knowledge Required	Summary of Job
Substitute Teachers	Cost of living variation... Average daily rate for beginning teachers, approx. \$84.82 for 2000-2001	<p>The majority of the job vacancy announcements require:</p> <ul style="list-style-type: none"> - A Bachelor’s degree (in education) from an accredited college or university - Certification or eligibility for certification - Some postings ask for completion of supervised student teaching or at least five months of successful teaching experience - Other postings ask for successful completion of required course-work for a degree in education from accredited college and university. - Other postings ask for a valid professional teaching credential issued by a state, the Commonwealth of Puerto Rico, the US Virgin Islands, or the DODDS; or have a four-year degree in education. - One job posting asked for a minimum of a High School Diploma, with preference given to those with a B.S. degree, then to those with an A.S. degree and then to those with High School Diploma or GED. - 	<p>Present instruction in accordance with an established lesson plan and curriculum to students in a classroom environment. Substitute teachers perform the duties and responsibilities assigned to an educator.</p>
Job Description/Major Duties			
<p>The substitute teacher:</p> <ul style="list-style-type: none"> - Replaces the classroom teacher. - Plans, organizes, and presents information and instruction which helps students learn subject matter and skills that will contribute to their educational and social development. - Has an instruction plan which is compatible with the school and system-wide circular goals. - Interacts effectively with students, co-workers, and parents; Carries out non-instructional duties as assigned and/or as needed - Adheres to established laws, policies, rules, and regulations; Follows a plan for professional development - Reports to and is supervised by the building principal. 			

Appendix G
BLS Job Factor Descriptions From the Bureau of Labor Statistics, NCS

Job Factor	Level #	Job Factor Description
Knowledge		
	1	Knowledge to perform simple tasks: requires little/no previous education/training.
	2	Knowledge of commonly used procedures; requires some previous training.
	3	Knowledge of standardized rules. Requires considerable training or experience.
	4	Knowledge of extensive rules in a generic field to perform a wide variety of tasks.
	5	Knowledge of specialized, complicated techniques. BA/S degree or experience.
	6	Knowledge of a wide range of professional methods. Graduate study or experience.
	7	Knowledge of wide-range of concepts/principles. Extended graduate study or experience.
	8	Mastery of professional field to apply experimental theories/new developments.
	9	Mastery of professional field to develop new hypotheses and theories.
Supervision Received		
	1	Supervisor makes specific assignments, employee closely monitored.
	2	Employee handles on-going assignments, supervisor makes decisions.
	3	Supervisor provides objectives/deadlines, employee plans tasks.
	4	Supervisor sets objectives, employee sets deadlines/plans tasks.
	5	Supervisor defines mission, employee responsible for all planning. Review in terms of meeting program objectives.
Guidelines		
	1	Guidelines are specific and detailed. Employee follows them strictly.
	2	There is a list of guidelines; employee chooses most appropriate.
	3	Guidelines are not always applicable; employee uses judgment in adapting them.
	4	Guidelines are scarce, but policies are stated; employees may deviate from traditional methods to develop new methods.
	5	Guidelines are broadly stated; employee is technical authority in development of guidelines.

plexity	1	Tasks are clear cut and easily mastered. No decision making
	2	Tasks involve related steps requiring employee to recognize different steps.
	3	Tasks involve unrelated methods, employee must recognize them and choose based on relationships.
	4	Tasks involve unrelated methods, employee must assess approach.
	5	Tasks involve unrelated methods, decisions deal with uncertainty.
	6	Tasks involve broad functions; decision-making involves undefined issues.
	1	Little impact beyond immediate organization.
	2	Work impacts future processes.
	3	Work affects the operation of the program.
	4	Work affects wide range of establishment activities or operations of other establishments.
	5	Work affects work of other experts or development of major program aspects.
	6	Work is essential to the mission of the establishment.
	1	Contacts are with employees in immediate office or with public; highly structures situations.
	2	Contacts are with employees in the same establishment (in/out of office) or with public in moderately structured situations.
	3	Contacts are with individual/groups outside of the organization. Each contact is different.
	4	Contacts are with high-ranking officials in unstructured settings.
	1	The purpose is to obtain, clarify, or give facts.
	2	The purpose is to plan, coordinate, or advise on work efforts.
	3	The purpose is to influence, motivate, interrogate, or control persons or groups.
	4	The purpose is to justify, defend, negotiate, or settle matters involving significant/controversial issues.
ands	1	Work is sedentary.
	2	Work requires physical exertion.
	3	Work requires considerable and strenuous physical exertion.
ent	1	Work involved everyday risks – normal safety precautions.
	2	Work involves moderate risk – special safety precautions.
	3	Work involves high risk.

Appendix H
BLS Occupational Level Assignments to CDC Positions

Job Factor	CC-I or GS-02 Entry Level	CC-I or GS-03 Intermediate Level	CC-II or GS-04 Target Level	CC-II or GS-05 Leader Level	CC-II or GS-05 Program Technician
Knowledge	1	2	3	3	4
Supervision Received	1	1	2	3	4
Guidelines	1	1	2	3	3
Complexity	1	2	3	4	4
Scope and Effect	1	2	3	4	4
Personal Contacts	2	2	2	2	2
Purpose of Contacts	1	1	2	2	2
Physical Demands	2	2	2	2	2
Work Environment	2	2	2	2	2
Supervisory Duties	1	1	1	2	3
Overall Occupational Level Rated by BLS	1	3	5	7	8

Individual job factor ratings were assigned to CDC caregiving positions by Barbara Thompson, Senior program Analyst, Office of Child and Youth. Overall Occupational Level ratings were calculated by a BLS program found at the following website:
<http://146.142.4.24/labjava/outside.jsp?survey=nc>

Appendix I BLS Occupational Level Assignments to DoDDS Positions

Job Factor	Monitor GS-2		Lead monitor GS-3		Health aide GS-3		Health tech GS-4		Education aide GS-4		Library tech GS-4	
	MFRI	DoDDS	MFRI	DoDDS	MFRI	DoDDS	MFRI	DoDDS	MFRI	DoDDS	MFRI	DoDDS
Knowledge	1	2	2		3	5	3	5	3	5	3	5
Supervision Received	2	2	2		1	1	2	4	2	4	3	2
Guidelines	1	3	2		2	3	2	3	2	3	2	2
Complexity	1	3	1		2	4	2	4	3	5	3	3
Scope and Effect.....	1	1	2		2	1	2	1	2	2	2	1
Personal Contacts	2	2	2		1	1	2	3	2	3	1	1
Purpose of Contacts.....	2	2	2		1	2	2	2	2	2	1	1
Physical Demands	2	2	2		1	2	1	2	2	1	2	1
Work Environment.....	1	1	1		2	1	2	1	1	1	1	1
Overall Occupational Level Rated by BLS Calculator.....	2	5	3	NA	4	7	4	9	5	9	5	6
Published National Range	1 to 7 for Teachers' Aides		1 to 7 for Teachers' Aides		1 to 8 for Health Aide		1 to 8 for Health Aide		1 to 7 for Teachers' Aides		1 to 7 for Library Clerk	

	Education tech GS-5		School support assistant a GS-5		School support assistant b GS-6		Lead school support assistant GS-7		Pre-K teacher (white-collar)		Substitute teache (white-collar)	
	MFRI	DoDDS	MFRI	DoDDS	MFRI	DoDDS	MFRI	DoDDS	MFRI	DoDDS	MFRI	DoDDS
Knowledge	5	5	4		4		4	6	5	6	5	5
Supervision Received.....	3	3	3		4		4	4	3	5	2	5
Guidelines	3	4	3		3		4	4	3	5	3	5
Complexity	3	3	3		4		5	5	5	5	4	5
Scope and Effect.....	3	1	4		4		4	3	4	4	1	1
Personal Contacts	2	3	2		3		3	3	2	3	2	2
Purpose of Contacts.....	2	2	2		2		3	3	2	3	2	1
Physical Demands	2	2	2		2		2	2	2	2	2	2
Work Environment.....	2	2	1		2		1	2	1	2	1	2
Overall Occupational Level Rated by BLS Calculator.....	8	8	7	NA	9	NA	10	11	9	12	7	11
Published National Range	1 to 7 for Teachers' Aides		5 to 14 for Admin.'s, Education Field		5 to 14 for Admin.'s, Education Field		5 to 14 for Admin.'s, Education Field		5 to 9 for Pre-K and K Teachers		5 to 9 for Substitute Teachers	

Individual job factor ratings were assigned to DoDEA caregiving positions by the investigators, based on detailed job descriptions. Overall Occupational Level ratings were calculated by a BLS program found at the following website: <http://146.142.4.24/labjava/outside.jsp?survey=nc>

Appendix J

Glossary of Civilian Benchmark Jobs from the 2002-03 Occupational Outlook Handbook

Not Elsewhere Classified Occupations

The Census occupations are all inclusive in coverage. In other words, any establishment occupation (except in MOGs I and L) can be matched. To guarantee this full coverage of occupations, certain occupations are designated *Not Elsewhere Classified* (N.E.C.). An N.E.C. occupation captures the occupations not specifically classified or included in a separate Census occupation. N.E.C. occupations are at or below the MOG level. For example, occupation D336 (Records Clerks N.E.C.) is below the MOG because the occupation is restricted to include only those records clerks in MOG D who cannot be classified in one of the specific records clerks occupations. Occupation D389 (Administrative Support Occupations, N.E.C.) is at the MOG level because the occupation is a catchall for all MOG D occupations that do not match specific MOG D occupations but maintain the distinction of administrative support or clerical occupations.

ANIMAL CARETAKERS, EXCEPT FARM

Feed and provide water to animals, fish, and other marine life, and birds according to diet lists and schedules. Clean, sterilize, and adjust temperature controls in animal and bird quarters. May clip, mark, brand, wash and groom animals and examine them for signs of illness or injury. May administer serums, antibiotics, and antitoxins, keep records of weight and diet, order feed and supplies, and perform other duties necessary for the care of animals. Include Kennel Keeper, Animal Groomer, and Stable Attendant.

ATTENDANTS, AMUSEMENT AND RECREATION FACILITIES

Exclude Guides (**K461**) and Ushers (**K462**).

Schedule the use of recreation facilities. Allocate equipment to participants in sporting events or recreational pursuits. Collect fees for games played, set pins, and prepare billiard tables for playing. Provide caddying and other services to golfers. Operate carnival rides and amusement concessions.

BANK TELLERS

Exclude Cashiers (**C276**).

Receive and pay out money and keep records of money and negotiable instruments involved in various bank transactions.

CASHIERS

Exclude Sales Workers (C263-C274), Transportation Ticket/Reservation Agents (**D318**), and Tellers (**D383**).

Handle cash transactions. Primarily concerned with receiving and/or disbursing funds. May record mandatory transactions and perform related clerical functions. May make change, cash checks and issue receipts. Such transactions may be in payment for merchandise in self-service store. Include workers in the following occupations:

- Cashiers-Clerical or Office---Receive funds from customers and employees; disburse funds and record monetary transactions incidental to conduct of business.
- Cashiers-Checker---Itemize and total customer's purchases in discount, self-service or department store, using cash register or computer scanning device.

Appendices

- Cashiers-Courtesy Booth---Cash checks for customers and monitor checkout stands in self-service store.
- Cashiers-Wrapper---Operate cash register to compute and record sale and wrap merchandise for customers.
- Cashiers-Box Office, or Ticket Seller---Receive and disburse money. Usually involves use of calculators, cash registers, and change makers. May sell tickets to customers.

CHILD CARE WORKERS, EXCEPT PRIVATE HOUSEHOLD, N.E.C.

Exclude Kindergarten and Pre-Kindergarten Teachers (**A155**) and Teacher's Aides (**D387**).

Care for and attend to personal needs of children including handicapped and deprived children. Children may be attended to in residential care facilities, such as boarding or foster homes, or in other care facilities. Workers may supervise and monitor children, dress and feed children, discipline children and direct children in health and personal habits. May also counsel or provide therapeutic services to mentally disturbed, delinquent or handicapped children. May be designated as Children's Attendant, Cottage Parent, Nursemaid, Residence Supervisor, House Parent, etc. This classification also includes other child care occupations that cannot be elsewhere classified.

COOKS

Exclude Bakers (**E687**) and Food Batchmakers (**E688**).

Workers involved in planning menus, estimating consumption, and cooking meals in hotels, restaurants, hospitals, nursing homes, and other institutions and establishments. May prepare and bake bread, rolls, muffins, biscuits, cakes, cookies, pies, puddings, and other foods according to recipe. May specialize in a particular area. Workers producing food for sale by other establishments are classified in MOG's E and F. Include Short-Order Cooks who also prepare, grill, cook, and fry foods.

CORRECTIONAL INSTITUTION OFFICERS

Occupations involved in guarding prisoners and maintaining order in jails, reformatories, and penitentiaries.

DATA ENTRY KEYERS

Exclude Peripheral Equipment Operators (**D309**) and Word Processor Operators (**D315**).

Operate keyboard or other data entry machine to enter data into computer or onto magnetic tape or disc for subsequent entry. Include CRT Clerk, Key Puncher, and Telex Operator.

DENTAL HYGIENISTS

Exclude Dental Assistants (**K445**), Dental Laboratory and Medical Appliance Technicians (**E678**).

Perform dental prophylaxis. Remove calcium deposits, accretions, and stains from teeth and gums. Apply medicines to aid in arresting dental decay. Chart conditions of decay and disease for diagnosis and treatment by dentist. May expose and develop X-ray film. Include Oral Hygienists.

EARLY CHILDHOOD TEACHER'S CAREGIVERS

Exclude Kindergarten and Pre-Kindergarten Teachers (**A155**) and Teacher's Aides (**D387**).

Specialize in the care of infants or children and help promote social, physical, and intellectual growth in day care, nursery, and preschool education. May read to children, organize games, and teach simple painting and drawing. May direct children in learning to listen to instructions, playing with others, and using play equipment. Include Teacher's Assistant, Day Care Aide, Kindergarten's Helper, and Nursery Attendant.

ELECTRICIANS

Exclude Apprentices (**E576**) and Helpers (**H866**).

Install, maintain, and repair wiring, electrical equipment and fixtures. In general, a period of apprenticeship is required to qualify for this occupation.

ELEMENTARY SCHOOL TEACHERS

Exclude Prekindergarten and Kindergarten Teachers (**A155**).

Teach elementary school students academic, social, and motor skills through lectures, demonstrations or visual aids. Prepare teaching outlines, assign lessons, administer tests, keep attendance and grade records, and maintain order and discipline. May counsel students in adjustment and academic problems. Include all elementary and middle school teachers as well as elementary school athletic coaches.

FILE CLERKS

File correspondence cards, invoices, receipts and other records in alphabetical or numerical order or according to the filing system used. Locate and remove material from file upon request. May be required to classify and file new material. May also verify accuracy of filing records before they are actually filed.

FOOD COUNTER, FOUNTAIN, AND RELATED OCCUPATIONS

Workers involved in serving food and beverages to patrons from counters and steam tables. Include serving food to patrons in their cars or hotel rooms. May prepare bill and accept payment. May be designated as Carhop, Fountain Attendant, Curb Attendant, etc.

GROUNDSKEEPERS AND GARDENERS, EXCEPT FARM

Landscape and maintain grounds of industrial, commercial, or public property. May perform one or more of the following duties: lawn maintenance, trim and edge walks and flower beds, prune shrubs and trees, spray, plant flowers, trees and shrubs, weed, and fertilize. May be designated Grounds Caretaker, Gardener, Tree Surgeon, Laborer, Landscaper, etc.

HAIRDRESSERS AND COSMETOLOGISTS

Include Apprentices. Exclude Barbers (**K457**).

Provide beauty services for customers. Suggest hair styles. Style, cut, trim, shampoo, wave, curl, bleach and dye hair. Apply lotions and creams to customer's face and neck. Perform other services such as giving massages and polishing nails. May specialize in dressing hair according to latest style or period.

HEALTH AIDES, EXCEPT NURSING

Exclude Physicians Caregivers (**A106**).

Workers involved in performing various duties under the direction of trained medical practitioners, such as mixing pharmaceutical preparations, issuing medicines, labeling and storing supplies, assisting during physical examinations of patient, giving specified office treatments, keeping patients' records, preparing treatment room, maintaining inventory of supplies and instruments; and preparing, bottling and sterilizing infant formulas. May also assist in physical and other therapy. May be designated as Therapy Aides, Clinical Laboratory Aides, Formula Mixer, etc.

NURSING AIDS, ORDERLIES AND ATTENDANTS

Exclude Licensed Practical Nurses (**A207**).

Workers involved in providing auxiliary services in the care of patients. May bathe patients, record temperature and respiration rate. Other activities include answering patients' call bells, serving and collecting food trays, feeding patients and performing other routine tasks. Orderlies are primarily concerned with the care of male patients, setting up of equipment, and relieving nurses of heavier work.

PREKINDERGARTEN AND KINDERGARTEN TEACHERS

Exclude Elementary School Teachers (**A156**), Child Care Workers (**K468**), and Early Childhood Teacher's Caregivers (**K467**).

Prekindergarten Teachers---Organize and lead activities of children in nursery schools, day care, head start centers, or in playrooms operated for patrons of theaters, department stores, hotels and similar establishments. Instruct children in activities to promote social, physical, and intellectual growth.

Kindergarten Teachers---Teach elemental, natural and social science, personal hygiene, music, art and literature to children from 4 to 6 years old, to promote their physical, mental and social development. Also supervise activities such as field visits, group discussions, etc. to broaden physical and social skills.

RECEPTIONISTS

Receive visitors and customers entering establishment. Determine visitor/customer purpose and direct them to the proper person or department, answer inquiries. May perform additional clerical duties as required.

SECRETARIES

Schedule appointments, give information to callers, take and transcribe dictation, compose and type routine correspondence, and otherwise relieve officials of clerical work and minor administrative and business details. Include Legal and Medical Secretaries.

SOCIAL WORKERS

Exclude Welfare Service Aides (**K465**) and Eligibility Clerks, Social Welfare (**D377**).

Counsel and aid individuals and families requiring assistance of social service agency. May develop programs and activities according to needs of recipients. Usually required to have at least knowledge and skill in casework method acquired through Bachelors degree from accredited school of social work.

SUPERVISORS, FOOD PREPARATION AND SERVICE OCCUPATIONS

Exclude Dietitians (**A097**).

Supervise and coordinate activities of workers in occupations involved in preparing food and beverages and serving them to patrons of such establishments as hotels, clubs, restaurants and cocktail lounges.

TEACHERS' AIDES

Exclude Child Care Workers (**K468**) and Early Childhood Teacher's Caregivers (**K467**).

Assist teaching staff of public or private elementary or secondary school by performing the following instructional tasks: Prepare outline of instructional programs, test and grade students on achievement in class, conduct demonstrations to teach such skills as sports, dancing, and handicrafts, maintain order within the classroom, distribute teaching materials, take attendance, etc.

TEXTILE SEWING MACHINE OPERATORS

Exclude Helpers (**H874**).

Include workers who join together parts of textile (including apparel) articles, gather hem, reinforce, or add decorative trim to articles, attach buttons or other fasteners to articles by machine, using needle and thread. Include Stitching Machine Operators, Collar Basters, Seam Sewers, Glove Makers, etc.

WELFARE SERVICE AIDES

Exclude Social Workers (**A174**) and Eligibility Clerks (**D377**).

Include workers in occupations involved in going to the home or other place of residence to perform tasks agreed upon by the family, the professional supervisor, and the aide. May include keeping house, caring for children, the handicapped, the ill or the aged. May be Case-Worker Aide, Community Aide, Blind Aide, etc.

Appendix K

Department of Defense Child Development System Recruitment and Retention Strategies

Best Practices to Improve Recruitment and Retention Rates for Caregivers

Monetary Incentives

- Maximize the flexibility of the pay plan to increase caregiver wages to compete with local job market and to demonstrate value of this profession
- Provide retention bonuses, e.g., after 6 months give a cash award for \$50.00, a year-\$125.00, etc.
- Offer recruitment bonuses to staff who find potential job applicants
- Maximize use of monetary awards to recognize outstanding performance and commitment to the field of early education
- Ensure at least 75 percent of the direct care staff receive benefits, such as health and life insurance, retirement plans, and sick and annual leave
- Ensure staff are offered the opportunity to work 35-40 hours – looking at annual salary versus hourly rate

Quality of the Work Environment

- Give priority for employees' children to enroll in the child development center
- Offer flex schedules for employees who need personal time to care for family, go to school, etc.
- Provide job sharing opportunities for employees who want to work fewer hours
- Provide extra help to lower the staff: child ratio during stressful moments, such as meals, rest, etc.
- Empower staff in the decision-making process, e.g., suggestions for scheduling, decide what equipment and supplies they need Provide sufficient paid preparation, planning, and meeting time
- Develop a relaxing, aesthetically pleasing, comfortable, well-maintained area (staff break room) that shows respect for adults who have physically and emotionally challenged responsibilities – nurture staff so they can nurture children
- Provide reserved parking for recognized employees
- Form a parent recognition program for staff
- Implement an exit interview system to capture the reasons employees leave their jobs – develop an action plan to resolve any issues

Staff Development

- Provide a mentoring program for senior caregiving staff to support new staff during and after orientation until they reach the target level. Mentoring program would include monetary and work environment incentives, such as cash award or higher salary within their pay band, time away from the activity room to work with new staff member(s) in order to observe and research resources
- Provide tuition assistance and paid time away from work for staff to work on CDA, A.A., or B.A.
- Program for a number of staff to attend national/local conferences
- Provide opportunities for caregiving staff to support the training of other staff participating in outside training
- Implement a management trainee program to groom caregiving staff for management positions

Best Practices to Improve Recruitment and Retention Rates for Management Positions

Monetary Incentives

- Recruitment, retention, and relocation bonuses – up to 25% of salary
- For overseas positions, tax free allowance to cover housing costs (up to \$26,000)

Staff Development

- Provide tuition assistance and time off to pursue higher education levels (M.A., Ph.D.)
- Provide opportunities to visit other military programs
- Ensure professional growth, to include becoming NAEYC validator, NSACA endorser, etc.
- Provide opportunities for mentoring
- Provide opportunities to cross-train in the child and youth areas

Alternative Recruitment Sources

- Retirees
- College students
- Volunteers
- Male staff members to recruit more men to the profession
- Build internships with local high schools

Appendix L
Sample Exit Interview Questions

Demographics

1. How long have you been in your current daycare position? Circle one answer below.
 - a. 0-2 months
 - b. 3-6 months
 - c. 6 months-1 year
 - d. 1-2 years
 - e. More than 2 years

2. How long have you worked for this center? Circle one answer below.
 - a. 0-3 months
 - b. 4-6 months
 - c. 7-12 months
 - d. 13-24 months
 - e. 2-5 years
 - f. More than 5 years

3. What was your *starting grade/hourly wage* at this center? _____

4. What was your *current grade/hourly wage*? _____

5. How many hours did you typically work per week? Circle one answer below.
 - a. Less than 5 hours
 - b. 5-25 hours
 - c. 26-35 hours
 - d. More than 35

6. What percentage of your total family income would you estimate this job provided? _____

7. Did you receive sick and annual leave benefits?
 - a. Yes
 - b. No

8. What is your gender?
 - a. Male
 - b. Female

9. What is your age? _____

10. Are you a military spouse?
 - a. Yes
 - b. No

11. Are you a military retiree?
 - a. Yes
 - b. No

12. Do you have children?
- a. Yes
 - i. How many? _____
 - ii. Age of youngest child: _____
 - iii. Age of oldest child: _____
 - b. No – go to question 14
13. What is your current childcare arrangement? Circle one answer below.
- a. Family member cares for them in my home
 - b. Family member cares for them in their home
 - c. Babysitter cares for them in my home
 - d. I take them to a babysitter
 - e. I take them to a day care center
 - f. Other _____
14. What is your highest level of education? Circle one answer below.
- a. Some high school
 - b. High school degree
 - c. Some college
 - d. Bachelors degree or higher
15. On average, how many children did you normally supervise on a given day? *For example, if there were typically 10 children at the center, and a co-worker was present, the answer would be 5.*
_____ children on average per day
16. If applicable, did this number of children conform to center guidelines?
- a. Almost always
 - b. Usually
 - c. Sometimes
 - d. Rarely
17. Do you plan to continue work in the childcare field? Circle one answer below.
- a. Yes
 - b. No
 - c. Not sure

Your Working Conditions

Please respond to the following statements by circling your response on the scale provided.

Strongly Disagree = SD Disagree = D Neutral = N Agree = A Strongly Agree = SA

	SD	D	N	A	SA
1. I received sufficient resources at this center to provide high-quality care to the children.	1	2	3	4	5
2. This facility provided high-quality care to all the children it serves.	1	2	3	4	5
3. This job gave me good opportunities to learn and grow.	1	2	3	4	5
4. I had positive working relationships with my co-workers.	1	2	3	4	5
5. I had good promotion opportunities in this job.	1	2	3	4	5
6. The management staff did a good job in this center.	1	2	3	4	5
7. The number of children I supervised was reasonable.	1	2	3	4	5
8. I enjoyed my regular duties at the center.	1	2	3	4	5
9. I had a good working relationship with the parents of our children.	1	2	3	4	5
10. Parents had too much influence on my work and decisions at the center.	1	2	3	4	5
11. My overall benefits were satisfactory (if applicable).	1	2	3	4	5
12. My salary was satisfactory.	1	2	3	4	5
13. All things considered, I was satisfied with this job.	1	2	3	4	5

If you answered *Dissatisfied* or *Strongly Dissatisfied* for any of the above, please indicate why.

B) Why did you initially accept this job? Circle one answer below.

1. Good Pay
2. Only job I could get
3. Location
4. Liked the hours
5. Chance to grow professionally
6. Needed the income
7. Liked the work
8. Good benefits
9. Liked my coworkers
10. Other (please indicate) _____

C) Since you have been with this center, have you experienced any of the following? Use the scale at the right to mark your response.

- | | | | |
|--|----|-----|--------------------|
| 1. Received a monetary award | No | Yes | Yes, twice or more |
| 2. Received a promotion | No | Yes | Yes, twice or more |
| 3. Received official recognition for your work | No | Yes | Yes, twice or more |
| 4. Had conflicts with management | No | Yes | Yes, twice or more |
| 5. Had conflicts with parents | No | Yes | Yes, twice or more |

Reasons for Leaving

1. Which of the following contributed to your decision to leave your position? Circle all that apply.
 - a. Salary was too low
 - b. Leaving area (moving)
 - c. Lack of promotion opportunities
 - d. Didn't like the work
 - e. Issues with coworkers
 - f. Issues with management
 - g. Offered another job
 - h. Didn't like the hours
 - i. Little chance to grow professionally
 - j. Going to school
 - k. Understaffed/too many children to care for
 - l. Center provided inadequate care
 - m. Insufficient resources
 - n. Disagreed with day care/management policies
 - o. Issues with parents
 - p. Lack of benefits
 - q. Plan to not work

Comments: _____

2. Which of the items listed above is your *primary* reason for leaving?

3. Which of the above is your *next most important* reason for leaving?

4. If someone asked you about a job at this center, would you recommend it to him or her? Circle one answer below.

- a. Very likely
- b. Somewhat likely
- c. Unsure
- d. Somewhat unlikely
- e. Very unlikely
- f. If not, why not? _____

5. Could management have prevented you leaving?

- a. No
- b. Yes
- c. If yes, how? _____

Appendices

6. We are interested in attracting and retaining quality employees. What are the two most important things you feel we could do to accomplish this goal?

7. Is there anything else you would like to tell us about your reasons for leaving the center and how we might improve working conditions for our employees?

Thank you for sharing your views with us.

Appendix M Cost Turnover Logs

Director – Cost of Turnover Log

Week Beginning _____ - _____ - _____

Person completing form _____ Title _____

Number of positions changing* _____

If you wish to track costs by each event or if more than 2 events are occurring at one time, use additional forms.

*Record non-teaching staff costs here. Indirect costs from teaching staff logs will be incorporated on the final page of this log.

COST CATEGORY Leave blank if category Is not applicable	DIRECT COSTS Report amount of money spent by the Center	INDIRECT COSTS Report amount of time you spent this week	INDIRECT COSTS* Report amount of time spent by <i>other</i> staff this week	MISSED OPPORTUNITIES Record things you could not do because of dealing with turnover-related issues
Departure				
Interviewing staff about incidents leading to staff departure				
Informing and conferencing with parents, board members, staff, volunteers re: departure				
Re-arranging duties and schedules				
Locating substitute or replacement staff				
Classroom coverage (substitute costs or staff time including director)				
Writing communications for personnel files; other forms or documentation for grievance procedures				
Updating library, attending workshops re: labor laws, unemployment information				
Talking with licensing Re: unusual incidents				
Meditation services if needed				
Legal consultation if needed				
Severance package				
Paying out accumulated leave for sick or personal days				
Higher unemployment or worker's comp rates, continuation of medical coverage for separated employee				
Loss of enrollment capacity (can't meet ratios)				

Appendices

COST CATEGORY Leave blank if category Is not applicable	DIRECT COSTS Report amount of money spent by the Center	INDIRECT COSTS Report amount of time you spent this week	INDIRECT COSTS* Report amount of time spent by <i>other</i> staff this week	MISSED OPPORTUNITIES Record things you could not do because of dealing with turnover-related issues
Loss of families (damage to reputation)				
Going away party or gift				
More stress, illness, more substitutes				
Other, please describe				
SUBTOTAL				
Recruitment/Hiring Phase				
Advertising (ads, mailings, calls or visits to colleges)				
Screening and interviewing applicants				
Checking references				
Processing fingerprint and TB tests				
Processing new hire payroll, benefits				
Classroom coverage (substitutes or staff time including director)				
Overtime if staff covers for separated employee				
Arranging for substitutes to cover staff participation in hiring interviews				
Loss of enrollment capacity (can't meet ratios)				
Loss of families (damage to reputation)				
Recruitment of new families				
Double staffing to insure overlap between old and new staff				
Other, please describe				
SUBTOTAL				
Post-Employment Phase				
Orientation				
Introduction of new employees to agency, parents, and children				
Training				

The Value of Caregiving

COST CATEGORY Leave blank if category Is not applicable	DIRECT COSTS Report amount of money spent by the Center	INDIRECT COSTS Report amount of time you spent this week	INDIRECT COSTS* Report amount of time spent by other staff this week	MISSED OPPORTUNITIES Record things you could not do because of dealing with turnover-related issues
Set up (assigning cubby, voice mail, personnel policies)				
New classroom materials				
Parent meetings and conferences				
Classroom observation				
Other, please describe				
SUBTOTAL				
SUBTOTAL: Departure, Recruitment/Hiring and Post-Employment Phases				
SUBTOTAL: Indirect Teaching Staff Costs (from teacher logs)				
TOTAL: ALL COSTS				

Adapted from the *Center for the Child Care Workforce*, pages 65-67.

Appendices

Teacher – Cost of Turnover Log

Week Beginning _____ - _____ - _____

Person completing form _____ Title _____

Number of positions changing* _____

If you wish to track costs by each event or if more than 2 events are occurring at one time, use additional forms.

**If there is more than one staff member for whom you are recording time, place each person’s initials next to the amount of time they spent, to assist whomever makes the final calculations.

COST CATEGORY Leave blank if category is not applicable	Amount of time you spent this week	Amount of time spent by other staff in your classroom this week**	MISSED OPPORTUNITIES Record things you could not do because of dealing with turnover-related issues
Before/During the Departure Meeting or discussion with director, other staff, parents			
Planning how to prepare children for the departure			
Rearranging duties and coverage			
Planning, attending farewell party			
Hiring and Beyond Screening and interviewing applicants			
Orienting new employee			
Training new person			
Meeting with parents, co-workers, directors			
Buying new equipment			
Throughout the Process Calling substitutes			
More stress, more illness, more absences			
Other, please describe			
TOTAL			

Adapted from the *Center for the Child Care Workforce*, page 68.

Appendix N Cost Benefit Analysis

Cost Benefit Analysis

http://www.childcarenet.org/cost_benefit_analysis.htm

On the Positive Side

In its October 30, 2000 publication, The National Report on Work & Family affirmed that investments in child care have a positive effect in the work place. A survey of nearly 1,500 employees at companies participating in the American Business Collaboration (ABC) for Quality Dependent Care found that nearly two-thirds believe their productivity has improved as a result of the child care programs supported by their employers. According to the survey:

- 40% of the respondents felt less stressed by family responsibilities and spent less time at work worrying about their family because of the child care programs;
- 35% were better able to concentrate on work; and
- 30% left work less often to deal with family situations.

The manager of the program for ABC, Betty Purkey of Texas Instruments, said the survey confirms the belief of the participating corporations that dependent care programs help attract and retain "a more productive and motivated workforce."

Purkey further stated, "The study reinforces our belief that investing in dependent care programs for our employees is beneficial in attracting and retaining a more productive and motivated workforce."



"It costs 75% to 150% of the average annual salary to replace a working parent, but only 32% to provide parental leave." Friedman, Dana, et al., *Parental Leave and Productivity: Current Research*, Families and Work Institute

Cost Benefit Analysis

Before embarking on a new work/life policy, you may wish to do a cost benefit analysis on each of the specific options you are considering. It is important to realize that in most cases such an analysis is not an exact science as it often involves estimates. However, by comparing estimated costs with expected benefits, you can begin to get an idea of which options would be more cost-effective to implement in your company or organization. You may wish to work with your accountant or a work/life consultant in this process. Cost-benefit analysis may provide a useful tool to evaluate a proposed child care policy. This type of analysis works well in assessing the impact of child care policies and programs on factors that are easily quantifiable, such as reduction in turnover and absenteeism, and productivity gains. The worksheet below may be used for calculating costs of turnover and absenteeism.

CALCULATING EMPLOYEE TURNOVER COSTS

Step 1: Calculate the Current Rate of Turnover

- A) # of employees leaving per year _____
- B) average number of employees _____
- C) divide line A by line B _____
- D) % of turnover = line C x 100 _____

Step 2: Calculate the Annual Cost of Employee Turnover to the Company

Employment advertising – all recruitment advertising and related costs	_____
Employment agency and search fees – fees to employment agencies, search firms, and recruitment consultants	_____
Internal referrals – costs for bonuses, fees, gifts, etc., awarded to employees participating in a company sponsored referral program	_____
Applicant expenses – travel and subsistence costs	_____
Relocation expenses – moving expenses and all other costs associated with relocation	_____
Employment staff compensation – all salaries, benefits and bonuses of the employment staff involved in recruiting, interviewing, hiring and training new employees	_____
Other employment expenses – all other related expenses, such as the cost of facilities, telephone, consultants, etc.	_____
Orientation and training – include management time, trainer fees, materials, and other costs for training new employees	_____
Estimated total costs	_____
Number of new employees	_____
Average turnover cost per new employee – divide total costs by the number of new employees	_____

Step 3: Calculate Estimated Reduction in Turnover

Use data collected from needs assessment surveys, focus groups, exit interviews, etc., to **determine how many of your separating employees typically leave because of dependent care or other work/life issues**

Deduce how many of these people probably would not have left had your proposed program or policies been in place. (Remember that employees often are reluctant to name child care as a reason for leaving. Therefore, your needs assessment may understate the problem.)

Estimated reduction in turnover: subtract line 2 from line 1

Step 4: Calculate the Expected Savings in Turnover Costs

Multiply the expected reduction in turnover (step 3) by the average turnover costs per new employee (step 2) to determine the expected savings in turnover costs.

Calculate the Expected Savings in Turnover Costs

$$\frac{\text{_____}}{\text{(reduction in turnover)}} \times \frac{\text{_____}}{\text{(average turnover cost)}} = \text{_____}$$

CALCULATING THE COST OF ABSENTEEISM

Step 1: Calculate the Annual Cost of Absenteeism Per Year

$$\frac{\text{_____}}{\text{work days lost/year}} \times \frac{\text{_____}}{\text{(cost per work day)}} = \text{_____} \quad (\#)$$

Step 2: Calculate the Expected Reduction in Absenteeism

Estimate the percentage of current absences that might be due to child care problems

Step 3: Calculate Expected Savings in Absenteeism Costs

Multiply the annual cost of absenteeism (step 1) times the estimated reduction that might result from proposed work/life policies (step 2) to determine expected savings

$$\frac{\text{_____}}{\text{(Annual cost)}} \times \frac{\text{_____}}{\text{(expected reduction)}} = \frac{\text{_____}}{\text{(total savings)}}$$

Appendix O Suggestions for Further Reading

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