Taking a Strategic View of Employee Child Care Assistance: A Cost-Benefit Model

Ellen Ernst Kossek, Michigan State University
Paulette Grace, Dow Chemical

Executive Summary
A growing number of organizations offer employee child care assistance, but few analyze the impact of these programs on productivity and organization effectiveness. Human resource managers should adopt a business planning approach when initiating child care programs to evaluate the feasibility and usefulness of alternatives. A model based on utility theory is developed and used to assess the costs and benefits of an employer-sponsored center. The utility analysis directs management to take a strategic approach to the adoption of child care initiatives instead of merely copying competitors' programs.

The Boom in Employer-Sponsored Child Care

As a result of changing work force demographics, the number of employers providing child care assistance has mushroomed during the past decade. A recent government study of employer-sponsored child care (U.S. Department of Labor, 1988a) notes that the figure has grown from about 100 employers sponsoring child care programs nationwide in 1978 to nearly 61% of all establishments offering at least one program that aids working parents. A study by The Conference Board (1989) indicates that over 4000 large employers in the U.S. provide child care support in the form of financial assistance (50%), information and referral (25%), and on-site or near-site child care (25%). Other forms of assistance include: support of licensed family home care, parental leave, sick care, flexible work arrangements such as flextime and part-time work, and flexible benefits (cf. Bureau of National Affairs, 1984; Levine, 1988; Conference Board, 1989). Adoption of such benefits has been called "clearly a growing trend" by labor relations experts. More benefits designed to ease conflicts between family life and work have been negotiated in 1989 than any previous year (Bureau of National Affairs, 1990).

Environmental Pressures Fostering Adoption and Experimentation

A combination of environmental forces has fostered increased adoption of dependent care programs as a means to gain advantage in attract-

Please cite as: Kossek, E. E., Grace, P.* 1990. Taking a strategic view of employee day care assistance: a cost- benefit model. Human Resource Planning Journal, 13(3): 189-202.

ing and retaining quality employees. These environmental forces include: (1) increased competition for skilled workers due to shifts in the gender, race, age, and skill mix of the work force, (2) changing employee expectations, (3) growing research evidence about the negative impact of work-family conflict on productivity, and (4) the short supply of quality care.

The widely-read *Workforce 2000* (Hudson Institute, 1987) and other studies (Schneider & Rentsch, 1988) suggest
that organizations adopt HR policies to help manage demographic diversity and to obtain the best new workers. A decline in the number of work force entrants is predicted between now and the year 2000 due largely to the decrease in the number of young workers (16–24 years) entering the labor force (Fullerton, 1985). Of the new entrants, about 80% will be female or minority (Hudson Institute, 1987). Women will account for 63% of new labor force growth (U.S. Department of Labor, 1988b). Also, a dramatic increase in single parent and dual career families is expected; the traditional two-parent household with only one spouse employed no longer will be the norm (Galinsky 1989). Currently about two-thirds of all children under six years old have working mothers (U.S. Department of Labor, 1988a) and, the aging of the baby boomers over the next decade will place increasing pressure on firms to offer benefits that take into account baby boomers' growing financial responsibilities for their families (Klein & Hall, 1988). Lastly, an increase in high school drop out rates (Hudson Institute, 1987) combined with the growing service orientation of many jobs, which will require motivated and multi-skilled employees (Schneider & Rentsch, 1988), translates into the bleak fact that it will be increasingly difficult for firms to get the "cream of the crop."

Employees' expectations are changing as well. Today's workers want employers to offer more than just a job (Lawler, 1989). They want to work for a socially responsible company that recognizes (even values) the importance of home, family and personal time. Research on work-family conflict suggests that employers' HR policy efforts in this domain can influence on-the-job performance. Work-family conflict can have a negative effect on stress at work (Gutek, Repetti, & Silver, 1988), role conflict/overload (Pietromonaco, Manis & Frohardt-Lane, 1986), job satisfaction and commitment (Sexton, 1977; Magid, 1983; Burud, Ashbacher, & McCroskey, 1984), absenteeism (Brooke & Price, 1989), tardiness (Magid, 1983; Burud et al., 1984), and turnover (Hock, Christman, & Hock, 1980; Curry, Wakefield, Prince, Mueller, & McCloskey, 1985). Certainly, the quality of an employee's child care arrangements will moderate these problems. Unfortunately, as public policy scholar Alice Cook (1989) observes, the United States has been conspicuously slow among advanced industrialized countries to develop national child care policies, despite the fact that national experts (cf. Friedman, 1989) contend that the shortage in the supply of quality child care is very real. Because government has not jumped to deal with child care concerns—

namely the problems of quality and supply—many employers will de facto sponsor more options.

For all of the aforementioned reasons, employers will be contemplating assistance programs for years to come. In light of the many options available and the large investments that such programs can require, future-oriented companies will attempt to estimate the expected payoff of new initiatives and also take a multifaceted, localized approach to child care. Achieving the latter objective may be increasingly difficult, for as Schneider and Renstch (1988: 192) point out, traditional human resource policies have "implicitly homogenized the work force resulting in the artificially 'equal treatment' of all." Clearly, however, child care requirements can vary substantially between firms and for various employee groups within firms. As a result, child care policy cannot be addressed in an aggregate fashion (U.S. Department of Labor, 1988b).

Rationale for Cost-Benefit Model

Evaluation of the costs and benefits of child care alternatives may seem like an awesome task; however, micro computer-based financial spreadsheet models (e.g., LOTUS) can be invaluable tools in the planning process. The remainder of this article presents a model to estimate the costs and benefits of offering child care assistance that can be used for the evaluation and selection of assistance programs. The model is a planning tool to tailor child care support to unique employer and employee needs. By estimating the feasibility and expected level of utilization of various options, companies will be more likely to reap the fullest benefits of adopted programs in a time of fewer available dollars for competing HR policy areas.

The framework presented estimates the expected payoff from an increasingly popular program, an employer-sponsored near-site center. It could be easily applied to other child care options. An employer-supported center was chosen for our example because it represents an effort to increase the *supply* of quality day care, which typically requires a sizable allocation of resources. Employer-sponsored centers are seldom financially self-sufficient and are usually subsidized throughout their lives (LeRoux, 1986). Employers view cost as the number one disincentive to providing such child care benefits (Solomon, 1988), so a center may be rejected out of hand if no attempt is made to estimate the financial benefits of offering assistance. (For a review of the advantages and disadvantages of on-site and near-site centers, see Burud et al., 1984; Bureau of National Affairs, 1984).

The growing trend of employee child care assistance is occurring with little systematic analysis of the potential financial impact of these programs on the "bottom line." A U.S. Department of Labor Task Force report (1988a) states that scholarly "research relating child care to productivity, absenteeism, tardiness, turnover, recruitment, quality and competitiveness is almost nil." To date, the best evidence on the benefits of employer-sponsored child care involves gut feelings, speculative testimony by human resource managers and inadequate empirical study (Miller, 1984; National Council of Jewish Women, 1988; La Fleur and Newson, 1988).

Notwithstanding the need for more empirical research, preliminary reports indicate that companies with programs tailored to their particular labor markets may have a competitive advantage in attracting and retaining employees. Given the predicted demographic and skill shifts in the labor market, firms taking aggressive efforts to address employees' child care needs will be more attractive to the new labor force entrants, who are largely female or minority. Also, such programs have been estimated to save firms thousands of dollars in recruitment and retention (cf. Scott, 1987; LeRoux, 1986; Solomon, 1985). Companies that retain workers who otherwise might have left the company for childrearing reasons can also avoid investing heavily in workers who leave and then have to be replaced with new, less experienced workers (Fenn, 1985). Obviously, however, firms can only reap these benefits from programs that are *accepted* and *used* by their workforce. In Fenn's (1985) study, for example, 75% of eligible company parents used the facility.

The model we present is designed to encourage employers to approach child care in terms of the needs of their unique work force populations and to avoid the temptation to mimic competitors' programs. It provides a practical application of how to evaluate the utility of child care initiatives, which is valuable because employer support does not guarantee effective use of programs nor does support guarantee that child care problems will be solved. Flexible spending accounts, a popular benefit that allows employees to use pre-tax dollars for child care expenses, typically have low utilization rates, for example (cf. Kossek, Sperber and Sullivan, 1989; Kossek, 1989a). Another example of poor utilization is Transamerica's experience of disappointing initial usage of its sick care program (Halcrow, 1986). Another alternative, participating in a child care consortia, may result in assistance for only a handful of a company's employees. Even building an on-site center may not solve all of a firm's problems, because space availability limits enrollments. In addition, it is likely that the lowest paid workers, who are probably in serious need of child care assistance, may not be able to afford usage fees, without company subsidization (LeRoux, 1986). Thus, programs that work well for one firm may be ineffective at another.

Assessing Child Care Needs, Costs, and Benefits

A survey conducted by the Bureau of National Affairs (1984) indicated that 11% of firms with on- or near-site care rated their programs as unsuccessful, largely because they did not meet the needs of employees. To avoid these problems and to begin to estimate the utility of child care alternatives, the first step in planning for any program is assessing current and potential employee needs for child care. Needs assessment focuses on determining the gap that exists between supply and demand (Burud et al., 1984). Exhibit 1 summarizes some key issues related to needs assessment (cf. Adolf & Rose, 1986). Organizational assessment of child care needs might involve collecting data on workforce demographics, the link between child care needs and work problems, employee preferences for and likely use of child care options, and special issues such as the concerns of employees with handicapped children or the feasibility of work-at-home arrangements.

Needs assessment is typically done through a task force and employee surveys, methods that must be carefully managed. In addition to raising expectations, they may fail to accurately identify needs and predict utilization of alternatives (Bureau of National Affairs, 1984). Key to compiling accurate data on employee needs is the use of carefully worded questions that avoid bias. These can be developed with the help of a consultant or existing validated instruments can be used (cf. Divine-Hawkins, 1989). One needs assessment study, for example, found significant differences in the child care assistance preferences of employees who currently had children and those who were likely to be parents within the next two years (Kossek, 1989). Parents-to-be thought they would be more likely to use nearly all possible forms of employer assistance compared to employees who actually had children. Also essential is the assessment of current child care resources within the community and examination of the current degree to which absenteeism, turnover, recruitment, and productivity are being affected by child care problems.

Exhibit 2 lists the common costs for an employer-sponsored near-site center, which relate to staffing, set-up, fixed and on-going costs, and deductions from costs such as tax advantages. It is by no means exhaustive, but should be used as a guide for thinking about the types of costs that may be incurred. Other than the large investment required in the physical plant, ensuring that administrator and staff salaries and benefits remain competitive will be the major on-going cost, particularly because the quality of staff is highly related to the overall quality of care. Obviously, the greater the number of day care staff that work for the com-

Exhibit 1
Needs Assessment Issues

Demographics:	• Gender, age, residence location, means of getting to work, marital status, total family income, number and age of children, type of care currently used, hours of use, cost, how care was found.
Attitudes:	• Employee definition of quality care, preference for type of care.
Link Between Child Care Needs and Work Problems	• Time needed to find care, lateness, absenteeism or productivity decline as a result of child care problems.
Special Issues:	• Children with special needs, sick child care, interest in and feasibility of flexible hours or work at home arrangements.

(Adapted from Adolf and Rose, 1986.)

Exhibit 2
Cost Factors for an Employer-Sponsored Child Care Center

Staffing:	• Desired teacher/child ratio • Required level of staff education • Compensation and benefit levels • Number of children to be served • Administrator salary
Fixed Costs:	• On-site or off-site location • Purchase, lease or utilize space • Utilities and maintenance • Insurance
Set-Up Costs:	• Furniture and fixtures • Utility hook-up • Materials and equipment • Supplies • Licensing Fees
Ongoing:	• Educational materials • Supplies (food)
Deductions from Costs:	• Parental contributions • Tax advantages or savings • Use of corporate resources

pany, the greater the staffing costs—but also the greater control the company has over the quality of personnel hired.

Exhibit 3 identifies the possible benefits organizations might evaluate when considering alternatives to child care (Peterson & Massengill, 1988). Human resource accounting theory (Cascio, 1987) enable one to estimate the dollar savings related to benefits, such as decreased turnover, absenteeism, and recruitment effects. In addition, benefits such as improved morale, favorable public relations, and social contribution to the community should be considered (Solomon, 1988).

Using the Model to Calculate the Utility of a Near-Site Center

The model is based on utility theory, which has been used to measure the payoffs expected from training and selection. Utility theory stimulates a decision maker to consider the expected consequences of alternative courses of action (cf. Cascio, 1987; Cronbach & Gleser, 1965). Like training or selection, employer-sponsored child care is a long term in-

Exhibit 3
Measurement of Benefit Elements

Decrease in Turnover: *Turnover as a result of child care problems should be isolated.* Rates are easily calculated using simple formulas. The cost of turnover is identified as the dollar amount per job of separation, replacement and training.

Decreased Absenteeism: Absenteeism attributable to child care should be identified. Using compensation and benefit costs as well as indirect costs such as temporary help and production downtime, dollar amounts can be calculated.

Increased Productivity: Measurable increases to a reduction in hours lost, personal phone calls and reduced production or service lag time can be identified. There are several methods available to quantify changes in productivity and performance.

Recruitment Effects: Decreases in the time spent recruiting new employees as well as the number and type of selection devices used as a result of an employer-sponsored child care alternative.

Adapted from: Cascio, 1982 and 1987.

vestment that is adopted to add value to employees' contributions to the firm. In addition to adding value, preliminary research indicates that failure to have a program may increase turnover, absenteeism, and lower productivity—all important considerations in deciding whether to have a program. A recent study (Huffman & Schrock, 1987) of the restaurant and hotel industry found that, on average, employee-parents were absent five days a year due to child care problems. Each year one-third of all employees needed to change or locate care. Similarly, in a study at ATT, Fernandez (1986) found that 94% of the women and 77% of the men with child care problems reported lower productivity stemming from dealing with child care issues while at work. The specific utility model we use here was adapted from a program assessing the utility analysis of training (Boudreau & Milkovich, 1988) and has been applied to a case example for Mid-America Corporation.

Example: Mid-America Corporation

Mid-America Corporation is a bank located in the Midwest, which employs 500 people. Based on a management review of child care alternatives and a needs assessment, the company determined that a near-site center was the most desirable option. The initial estimate for the center's needed capacity was 60 children. The number of employees who would use the center was estimated at 50. The average salary at the bank was $20,000 or $9.61/hour. Separation, replacement and training costs were estimated at $20,000 per employee. This was a conservative estimate of 100% of the annual salary. A study by Merck and Co. estimated that turnover costs for their firm were 1.5 to 2.5 times the annual salary paid (Solomon, 1988). The turnover estimate used in our example is based on the 1980 annual average of 22% (Cascio, 1987). Assuming that turnover of bank employees, particularly lower level workers such as tellers and proof operators is typically quite high, our figure is conservative.

Calculating the Cost Factor

Exhibit 4 shows the annual costs for operation of a near-site day care center in Lansing, Michigan and Exhibit 5 presents a breakdown of these costs (XYZ Child Care Center Board Minutes, 1989; Crawley, DePietro, & Sullivan, 1989). To estimate costs, assumptions need to be made regarding (a) the teacher-child ratio, which will be partially dependent on state licensing requirements; and (b) the probable age configuration of the group of the children cared for, since child care costs and ratios vary by age with infant care being the most costly and having the lowest ratio. Obviously, salary costs will vary de-

Exhibit 4
Calculating the Cost Factor

Total Annual Costs for an Off-Site Day Care Center

Staffing (including benefits)	$223,054.
Fixed Costs (includes rent, utilities, maintenance and insurance)	22,750.
Set-Up Costs	3,300.
Ongoing Costs	8,400.
Deductions (75% Parental contribution)	193,128.
Total Cost to Employer	$64,376.

Exhibit 5
Calculating the Cost Factor

Annual Cost Breakdown of a Near-Site Child Care Center

Rent of building: 1450/mo.	17,400
Utilities:	3,500
Maintenance: including snow removal and yard	650
Equipment:	300
Supplies:	500
Educational costs:	600
Kitchen (supplies, equipt.)	7,800
Set up: (licensing, equipment utility hook-up, furniture)	2,500
Insurance:	1,200
Salaries:	213,200
Benefits: (Workers Comp. 6,942 + Other benefits 2,912)	9,854
TOTAL	257,504

Assumptions:

a. Teacher/Child Ratio
   9 infants (0–1)—1 teacher, 2 assistants, (1–3 ratio)
   30 toddlers ($1–2^1/_2$) 2 teachers, 1 assistant, (1–7 ratio)
   21 pre-school ($2^1/_2$–5) 3 teachers, 2 assistants, (1–6 ratio)

(Based on State of Michigan Requirements: Infants—1 adult/3 infants, Preschoolers—1 teacher/10 children)

b. Cost of Care
   Parents subsidize 75% = $64.37 cost to parent weekly.
   Employer annual cost (25%) = $64,376.

257,504 divided by 60 children = $4291.73 per child, divided by 50 weeks = $85.83 avg. weekly cost per child

(According to Crawley, DePietro, & Sullivan, 1989), the average weekly costs per child for a child care center are: Infant $65–115; Toddler $65–105; Pre-school $52–95)

c. Salary Breakdown
   6 teachers at $18,000.
   5 assistant teachers at $14,000.
   1 Administrator at $22,000.
   1 Kitchen worker at $13,200.

Source: XYZ Child Care Center Board Meeting Minutes, 1989

pending on local labor market conditions and fixed, set-up and on-going costs will vary according to cost of living conditions in the geographic area. Assumptions also must be made regarding the ratio of parent-company contribution to the cost of day care. Our model assumes a ratio of 75–25%, but a ratio of 90–10% is not uncommon. Thus, the total cost of operating the center for one year is $64,376 after being offset by parental contributions.

Calculating the Benefit Factor

Our model estimates the benefit of child care assistance for turnover, absenteeism rates, and public relations value based on recent literature, because these results have been documented the most clearly. Given that we are not including estimation of the impact on morale, and on-the-job productivity, we are probably underestimating the benefits.

Turnover

Based on reports of estimated turnover decreases from 23% (La Fleur & Newsom, 1988) to 86% (Schmidt & Tate, 1987) as a result of employer support, an average estimate of a 50% decrease is used for the example. Assuming 50 employees use the center, this decrease will result in 5 employees remaining with the company who otherwise would have left. Multiplying 5 by the $20,000 (the average annual cost of recruiting, hiring and training), the resulting savings is $100,000.

Absenteeism

Based on a recent study done to assess dependent care needs (Kossek, Sperber & Sullivan, 1989), it is estimated that parents of young children lose an average of 7.8 days per year as a result of child care problems. (This figure is taken from survey data on over 1000 employees.) Using this assumption, Mid-America would obtain a savings of $29,983, an estimate that might be viewed as a modest figure. Nyloncraft, Incorporated of Mishawaka, Indiana, for example, has attributed a drop in absenteeism to about 3% to its child care programs (Petersen & Massengill, 1988). In addition, one study (Solomon, 1988), estimated that the return from maternity leave was 6 days sooner for employees who had access to a child care center. Assuming that one third of Mid-America employees had the child while employed by the bank, the resulting savings would be $7,842.

Value of Public Relations

The public relations value of child care has been estimated to range from $12,000 (Schmidt & Tate, 1987) to $40,000 (Solomon, 1988). A conservative figure of $12,000 will be assumed for purposes of the model. Thus, the total savings in the first year of operation is $149,825.

Computing Leverage, Break Even, and Utility Values

The impact of a human resource program is a function of the number of employees that will benefit from the program, along with the effects of the availability of a day care facility on those employees. Computing the leverage of the day care alternatives provides the quantitative advantage of the program to employees over the year. Leverage can be viewed as the sum of the person-years affected (Boudreau & Milkovich, 1988).

Recall that this example assumes that 50 employees will use the employer-sponsored day care facility. Given turnover under these circumstances of 11%, Exhibit 6 shows that the total leverage of the program for one year is 44. It should be noted that leverage can be calculated for a period of years, if costs and benefits are determined to be similar to those of the first year. Thus, the model can also analyze the long-term effects of child care alternatives.

Using the analysis of the benefits derived for supporting a near-site center, Exhibit 6 also shows the values of the minimum and maximum utility, which can be developed on a total and per-person year basis. The utility of the child care center is the degree to which its use increases the quality of the individuals who utilize it (Blum and Naylor, 1968). To obtain the estimated minimum and maximum utility, the person-year utility amounts are multiplied by the leverage. Total employer costs are then subtracted. The estimated minimum utility per person-year is calculated by dividing the total savings or benefit by the number of employees using the center. The maximum benefit estimate per person-year is based on turnover costs of 1.5% of annual salary and a value of publicity of $20,000 (cf. Solomon, 1988). The break even point is determined by dividing the employer's cost by the total leverage. Because the estimated minimum payoff is well above the break even point even when using conservative estimates, it appears the child care center will be beneficial to the organization.

Summary

Given the increased competition for skilled employees in the future and the documented concerns about the availability of quality child care, it is inevitable that future-oriented companies will sponsor more child care options. This article encourages firms to plan for expected payoff from human resource initiatives to

Exhibit 6
Computing Leverage, Break-Even, & Utility Values

I. Computing the Leverage

Year	Usage # of Employees Using	Turnover # of Employees Leaving	Total
1989	50	6	44

II. Break-Even and Utility Computations

Break-Even Analysis per Person-Year

Breakeven Point	Estimated Minimum	Estimated Maximum
$1,463	$2,997	$3,400

Utility Analysis

Employer Cost	Total Leverage	Minimum Utility	Maximum Utility
$64,376	44	$67,492	$85,224

address work/family conflict in order to reap the greatest benefits. Our framework is feasible for use in both small and large firms. Multi-location organizations can consider different options for different sites, given the local environmental conditions and financial and productivity situation. In this way flexibility in implementation can be encouraged across work units.

Another benefit of the approach advocated in this article is that changing costs and benefits can be easily entered into the spreadsheet to re-evaluate each program. Hopefully, the model will encourage managers to collect data that help quantify the costs and benefits of assistance, which in turn will aid in planning for future policies and programs to address work-family issues. Using the model should help firms avoid implementing band-aid solutions. Organizations that estimate the impact of assistance for their "Workforce 2000" will be better able to evaluate future costs/benefits of programs and the need for expansion and alteration in child care policies as their workforce changes and diversifies.

Applying utility analysis to assess child care options will enable human resource managers to better predict the short and long term financial implications of these decisions. As in other business decisions, weighing the costs and benefits of alternatives is crucial to making an effective choice and garnering top management support. Considering the economic return of human resource investments such as child care assistance strengthens the impact of decisions (Dahl, 1988) and enables human resource departments to act as "springboards" to corporate effectiveness (Mercer, 1989).

References

Adolf, B., and Rose, K. "Childcare: Perceiving the Need, Delivering the Options." *Personnel Journal*, June, 1986.

Blum, M.L., and Naylor, J.C. *Industrial Psychology: Its Theoretical and Social Foundations*. Revised Ed. (New York: Harper and Row, 1968).

Boudreau, J., and Milkovich, G. *Personnel Computer Exercises in Personnel/Human Resource Management*. (Plano, Texas: Business Publications, Inc., 1988).

Brooke, Jr., P.P., and Price, J.L. "The Determinants of Employee Absenteeism: An Empirical Test of a Causal Model." *Journal of Occupational Psychology, 62*, 1989, pp. 1–19.

Bureau of National Affairs. "Higher Wage Hikes Negotiated in 1989: Family Benefits Called Growing Trend." *Daily Labor Report*, January 3, 1990.

Burud, S., Aschbacher, P., and McCroskey, J. *Employer-Supported Child Care—Investing in Human Resources*. (Dover, Mass.: Auburn House Publishing Co., 1984).

Cascio, W.F. *Costing Human Resources: The Financial Impact of Behavior in Organizations*. First and second editions. (Boston, Mass.: Kent Publishing Co., 1982 & 1987).

———, *Child Care, A Work Force Issue*. Report of the Secretary's Task Force, (Wash., D.C.: U.S. Dept. of Labor, April, 1988).

Cook, A.H. "Public Policies to Help Dual-Earner Families Meet the Demands of the Work World." *Indus-*

trial and Labor Relations Review, 42, 2, January, 1989, pp. 201–215.
———, The Conference Board's Management Briefing: Human Resources, Special Report: Work-Family Issues. 5, 5, (New York: The Conference Board, May 1989).
Curry, J.P., Wakefield, D.S., Prince, J.P., Mueller, C.W., and McCloskey, J.C. Determinants of Turnover Among Nursing Department Personnel. *Research in Nursing and Health, 8*, 1985, 397–411.
Crawley, M., DePietro, L., and Sullivan, J.M. *Child Care in Michigan: A Profile* Michigan. (East Lansing Michigan: 4C Association, 1989).
Cronbach, L.J., and Gleser, G.C. *Psychological Tests and Personnel Decisions.* Second ed., (Urbana, Illinois: University of Illinois Press, 1965).
Dahl, H.L. "Human Resource Cost and Benefit Analysis: New Power for Human Resource Approaches." *Human Resource Planning, 11*, 1988, 69–78.
Divine-Hawkins, P. "Child Care Needs Assessment Available." *National Head Start Bulletin*, January, 1989.
———. *Employers and Child Care: Development of a New Employee Benefit, A BNA Special Report.* (Washington, D.C.: The Bureau of National Affairs, Inc., 1984).
———. *Facts on U.S. Working Women.* Women's Bureau Fact Sheet No. 88-1, (Wash. D.C.: U.S. Department of Labor, January, 1988).
Fenn, D. "The Kids Are All Right." *Inc., 7*, 1, 1985, pp. 48–54.
Fernandez, J. *Child Care and Corporate Productivity.* (Lexington, MA.: Lexington Books, 1986).
Friedman, D.E. "Addressing the Supply Problem: The Family Day Care Approach." In *Investing in People: A Strategy to Address America's Workforce Crisis*, Commission on Workforce Quality and Labor Market Efficiency, Volume 2, pp. 1261–1311 (Washington, D.C.: U.S. Department of Labor, 1989).
Fullerton, N.H. "The 1995 Labor Force: BLS's Latest Projections." *Monthly Labor Review*, November, 1985, pp. 17–25.
Galinsky, E. "Labor Force Participation of Dual-earner Couples and Single Parents." In *Investing in People: A Strategy to Address America's Workforce Crisis*, Commission on Workforce Quality and Labor Market Efficiency, Volume 2, 1989, pp. 1261–1311 (Washington, D.C.: U.S. Department of Labor).
Gutek, B.A., Repetti, R.L., and Silver, D.L. "NonWork Roles and Stress at Work." In C.L. Cooper and R. Payne, (Editors) *Causes, coping and consequences of stress at work* (New York: Wiley, 1988).
Halcrow, A. "A New Twist on Child Care." *Personnel Journal, 65*, 11, November, 1986, pp. 8, 11.
Hock, E., Christman, K., and Hock, M. "Factors Associated With Return to Work in Mothers and Infants." *Developmental Psychology, 16*, 1980, pp. 535–???
Huffman, L.M., and Schrock, J.R. "Corporate Day Care: An Answer to the Labor Shortage." *Cornell Hotel and Restaurant Administration Quarterly, 28*, 1, May 1987, pp. 22–24.
Hudson Institute Report. *Workforce 2000.* (Indianapolis, Indiana: Hudson Institute 1987).
Klein, K.J., and Hall, R.J. "Innovations in Human Resources Management: Strategies for the Future." In J. Hage, (Editor), *Futures of Organizations.* (Lexington, MA., Lexington: 1988).
Kossek, E.E. *The Acceptance of Human Resource Innovation.* (Westport, CT: Quorum Books, 1989a).
Kossek, E.E. Feedback Report to the State of Michigan Department of Commerce. (Unpublished Manuscript, Lansing, Michigan, 1989b).

Kossek, E.E., Sperber, K., and Sullivan, J.M. *Board of Water and Light Dependent Care Needs Assessment-Preliminary Report* (Unpublished Manuscript, Lansing, Michigan, 1989).

La Fleur, E., and Newsom, W. "Opportunities for Child Care." *Personnel Administrator,* June, 1988.

Lawler, E.E. *High Involvement Management.* (San Francisco: Jossey-Bass, 1989).

LeRoux, M. "California Bank Offers On-Site Day Care." *Business Insurance, 20,* 37, September 15, 1986, pp. 13.

Levine, R. "Child Care: Inching Up the Corporate Agenda." *Management Review.* (New York: American Management Association, January, 1989).

Magid, R.Y. *Child Care Initiatives for Working Parents: Why Employers Get Involved.* (New York: American Management Association, 1983).

Mercer, M. "The HR Department as a Profit Center." *Personnel, 66,* 4, April, 1989.

Miller, T. "The Effects of Employer Sponsored Child Care on Employee Absenteeism, Turnover, Productivity, Recruitment or Job Satisfaction: What is Claimed and What is Known." *Personnel Psychology, 37,* 2, 1984, pp. 277–289.

———. "Employer Supports for Child Care." (New York: National Council of Jewish Women Center for the Child, 1988).

Petersen, D., and Massengill, D. "Child Care Programs Benefit Employers Too." *Personnel,* May, 1988.

Pietromonaco, P., Manis, J., and Frohardt-Lane, K. Psychological Consequences of Multiple Social Roles. *Psychology of Women Quarterly, 10,* 1986, pp. 373–82.

Schmidt, S., and Tate, D. "Employers Supported Day Care: An Ecological Model For Supporting Families." In L. Bond and B. Wagner (Ed.) *Families in Transition, Primary Prevention Programs that Work.* (Newbery Park: Sage Publications, 1987).

Schneider, B., and Rentsch, J. "Managing Climates and Cultures: A Futures Perspective." In J. Hage (Ed.), *Futures of Organizations.* (Lexington, Mass. Lexington, 1988).

Fullerton, N.H. "The 1995 Labor Force: BLS's Latest Projections." *Monthly Labor Review,* November, 1985, pp. 17–25.

Galinsky, E. "Labor Force Participation of Dual-earner Couples and Single Parents." In *Investing in People: A Strategy to Address America's Workforce Crisis,* Commission on Workforce Quality and Labor Market Efficiency, Volume 2, 1989, pp. 1261–1311 (Washington, D.C.: U.S. Department of Labor).

Gutek, B.A., Repetti, R.L., and Silver, D.L. "NonWork Roles and Stress at Work." In C.L. Cooper and R. Payne, (Editors) *Causes, coping and consequences of stress at work* (New York: Wiley, 1988).

Halcrow, A. "A New Twist on Child Care." *Personnel Journal, 65,* 11, November, 1986, pp. 8, 11.

Hock, E., Christman, K., and Hock, M. "Factors Associated With Return to Work in Mothers and Infants." *Developmental Psychology, 16,* 1980, pp. 535–???

Huffman, L.M., and Schrock, J.R. "Corporate Day Care: An Answer to the Labor Shortage." *Cornell Hotel and Restaurant Administration Quarterly, 28,* 1, May 1987, pp. 22–24.

Hudson Institute Report. *Workforce 2000.* (Indianapolis, Indiana: Hudson Institute 1987).

Klein, K.J., and Hall, R.J. "Innovations in Human Resources Management: Strategies for the Future." In J. Hage, (Editor), *Futures of Organizations.* (Lexington, MA., Lexington: 1988).

Kossek, E.E. *The Acceptance of Human*

Resource Innovation. (Westport, CT: Quorum Books, 1989a).

Kossek, E.E. Feedback Report to the State of Michigan Department of Commerce. (Unpublished Manuscript, Lansing, Michigan, 1989b).

Kossek, E.E., Sperber, K., and Sullivan, J.M. *Board of Water and Light Dependent Care Needs Assessment-Preliminary Report* (Unpublished Manuscript, Lansing, Michigan, 1989).

La Fleur, E., and Newsom, W. "Opportunities for Child Care." *Personnel Administrator,* June, 1988.

Lawler, E.E. *High Involvement Management.* (San Francisco: Jossey-Bass, 1989).

LeRoux, M. "California Bank Offers On-Site Day Care." *Business Insurance, 20,* 37, September 15, 1986, pp. 13.

Levine, R. "Child Care: Inching Up the Corporate Agenda." *Management Review.* (New York: American Management Association, January, 1989).

Magid, R.Y. *Child Care Initiatives for Working Parents: Why Employers Get Involved.* (New York: American Management Association, 1983).

Mercer, M. "The HR Department as a Profit Center." *Personnel, 66,* 4, April, 1989.

Miller, T. "The Effects of Employer Sponsored Child Care on Employee Absenteeism, Turnover, Productivity, Recruitment or Job Satisfaction: What is Claimed and What is Known." *Personnel Psychology, 37,* 2, 1984, pp. 277–289.

———. "Employer Supports for Child Care." (New York: National Council of Jewish Women Center for the Child, 1988).

Petersen, D., and Massengill, D. "Child Care Programs Benefit Employers Too." *Personnel,* May, 1988.

Pietromonaco, P., Manis, J., and Frohardt-Lane, K. Psychological Consequences of Multiple Social Roles. *Psychology of Women Quarterly, 10,* 1986, pp. 373–82.

Schmidt, S., and Tate, D. "Employers Supported Day Care: An Ecological Model For Supporting Families." In L. Bond and B. Wagner (Ed.) *Families in Transition, Primary Prevention Programs that Work.* (Newbery Park: Sage Publications, 1987).

Schneider, B., and Rentsch, J. "Managing Climates and Cultures: A Futures Perspective." In J. Hage (Ed.), *Futures of Organizations.* (Lexington, Mass. Lexington, 1988).

Scott, M.B. "Demand Exceeds Capacity in Child Care Centers." *Employee Benefit Plan Review, 42,* 3, September, 1987, pp. 15–18.

Sexton, P.C. *Women and Work.* (R and D Monograph 46.) (Washington, D.C.: U.S. Department of Labor. Education and Training Division. U.S. Government Printing Office, 1977).

Solomon, B.A. "Personnel Winners: A Company That Benefits from Child-Care Benefits," *Personnel, 62,* 2, February, 1985, pp. 4–6.

XYZ Child Development Center. Minutes from Board Meeting of April 17, 1989, East Lansing, Michigan.