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# Antecedents and consequences of basic versus career enrichment benefit satisfaction

GARY BLAU<sup>1</sup>\*, KIMBERLY MERRIMAN<sup>1</sup>, DONNA SURGES TATUM<sup>2</sup> AND SALLY V. RUDMANN<sup>3</sup>

<sup>1</sup>HRA Department-Fox SBM, Temple University, Philadelphia, U.S.A.

#### Summary

Using a sample of 250 medical technologists (MTs) over a four-year time period, this study presents initial evidence for differentiating two different facets of benefit satisfaction—basic and career enrichment. Basic benefit satisfaction exhibited stronger relationships to subsequent general benefit satisfaction, organizational withdrawal intent, and turnover behavior, while career enrichment benefit satisfaction exhibited a stronger relationship to subsequent affective organizational commitment. Copyright © 2001 John Wiley & Sons, Ltd.

## Introduction

The cost of employee benefits in the United States (United States Chamber of Commerce, 1994), and other countries (e.g., Richerson, 1991) has increased dramatically over the decades as businesses have offered more and more benefits. For example, in the U.S. the cost of employee benefits as a percentage of an employer's payroll increased from 3 per cent in 1929 to approximately 41 per cent by 1993 (U.S. Chamber of Commerce, 1994). With these increasing costs, companies are experimenting with such ideas as: benefits outsourcing (Anonymous, 1997), integrated benefits plans (Gjertsen, 1997), and voluntary benefits programmes (Anonymous, 1999). Research has shown that a company's benefit programme features can directly impact on employee attitudes and behaviors. For example, Schiller and Weiss (1979) found that pension vesting and portability rules affected employee turnover. Williams and Dreher (1992) found that a benefit programme's features affected the number of applicants applying for a bank teller position. The purpose of this paper is to investigate antecedents and outcomes based on specific facets of employee benefit satisfaction. First, a summary of benefit satisfaction research will be given.

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<sup>&</sup>lt;sup>2</sup>ASCP-Board of Registry, Chicago, U.S.A.

<sup>&</sup>lt;sup>3</sup>Medical Technology Division, Ohio State University, Columbus, U.S.A.

<sup>\*</sup> Correspondence to: Gary Blau, HRA Department-Fox SBM, Speakman Hall 384, Temple University, Philadelphia, PA 19122, USA.

# **Benefit Satisfaction Research**

## Measuring employee benefit satisfaction

One prominent measure used thusfar has been the four-item general benefit satisfaction scale from Heneman and Schwab's (1985) Pay Satisfaction Questionnaire (PSQ). While the factor analytic and reliability results for this scale are good (e.g., Dreher *et al.*, 1988; Judge, 1993; Lust, 1990; Williams, 1995), it is important to note, that this is a very 'general' measure of employee benefit satisfaction. The four items are: 'my benefit package', 'amount the company pays toward my benefits', 'the value of my benefits' and 'the number of benefits I receive', which are answered from 1 (very dissatisfied) to 5 (very satisfied). By 'general' measure we mean there is no distinction among *facets or types* of benefits in the PSQ items. There are other similar measures of employee general benefit satisfaction (i.e., Barber, *et al.* 1992; Spector, 1985) with strong supporting statistics (e.g., reliabilities, factor analyses). Again, however, no distinction among specific benefits as facets of benefit satisfaction is made in such general measures.

These measures of employee general benefit satisfaction (i.e., Barber *et al.*, 1992; Heneman and Schwab, 1985; Spector, 1985) are unidimensional. There are also multidimensional measures of employee general benefit satisfaction. One multidimensional measure is by Lust and Danehower (1992). In a theoretical paper, Danehower and Lust (1992) argued that there were two dimensions of employee general benefit satisfaction – satisfaction with benefit cost and benefit quality. This is consistent with the two benefit programem features – quality and cost – discussed by Dreher *et al.* (1988). However, the 11-item measure which Lust and Danehower (1992) used to operationalize these two dimensions had mixed results. Specifically, three items ('benefits available', 'value of the benefit plan', and 'form of benefits available') loaded on the cost factor instead of the assumed quality factor.

Tremblay *et al.*, (1998) used the Lust and Danehower (1992) scale in their study. However, their factor analysis did not validate the separate cost and quality components, since all items loaded on one factor. In a later article, Danehower and Lust (1996) modified their original 11-item scale and added two additional items. Their factor analysis revealed three dimensions – cost, quality and employer communication. However, this third factor, employer communication, has been shown to be an antecedent of general employee benefit satisfaction (Danehower and Lust, 1992; Rabin, 1994; Tremblay *et al.*, 1998).

Other multidimensional scales of general benefit satisfaction, i.e., Reactions to Employee Benefits Scale – REBS (Harris, 1993 paper presentd at the 1993 Industrial Relations Research Association, Anaheim, C. A. U. S.), and Attitudes Toward Benefits Scale-ATBS (Hart and Carraher, 1995) have been proposed. REBS (Harris, 1993) measures seven dimensions of a benefits programme: value, cost to employees, information provided to employees, access to help with questions, speed and efficiency of reimbursements, amount of paperwork, and choice among benefits, as well as three other variables – degree to which benefits meet employee needs, employee knowledge of benefits offered, and overall benefit satisfaction. ATBS (Hart and Carraher, 1995) is a six-item scale measuring three dimensions – perceived importance of benefits, ease of replacing benefits, and satisfaction with benefits. However, across all of these multidimensional measures (Danehower and Lust, 1992, 1996, Harris, 1993; Hart and Carraher, 1995), research has not examined specific benefits as different *facets* of benefit satisfaction.

## Distinguishing facets of employee benefit satisfaction

Research (Danehower and Lust, 1995) has shown that satisfaction with different individual benefits, i.e., retirement, medical plan, and time off, can significantly explain an employee's general benefit

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satisfaction beyond demographic variables (e.g., gender, age, education). It may be useful to consider aggregating satisfaction with individual benefits into larger facets (scales) of benefit satisfaction. Following Milkovich and Newman (1999, p.395), we define employee benefits as 'that part of the total compensation package, other than pay for time worked, provided to employees'. To the authors' knowledge, distinguishing among facets of benefit satisfaction has not yet been done. Such facet scales would seem to represent a more parsimonious way of representing satisfaction with different benefits than working with each benefit separately (Danehower and Lust, 1995; Lust and Danehower, 1990).

Current career theory (Altman and Post, 1996; Hall and Moss, 1998; Sullivan, 1999) suggests a distinction between facets of employee benefit satisfaction which parallels the recent distinction between 'traditional' versus 'protean' careers. Since the 1980s, the traditional career view is becoming increasingly replaced by the protean career view in many organizations. Traditional careers emphasized: employee job security with the company in exchange for employee loyalty; an employee benefits entitlement mentality; and the organization assuming responsibility for employee career management (Sullivan, 1999). In contrast, the protean career emphasizes: continued employee employability based on maintained performance; increased organizational responsibility to provide developmental opportunities for employees; and the employee assuming responsibility for managing his/her own career (Altman and Post, 1996; Hall and Moss, 1998; Sullivan, 1999).

The traditional careers view suggests a 'basic' employee benefit satisfaction facet. Basic benefit satisfaction is defined as 'an employee's attitude towards organizational benefits focusing on employee safety and security-related needs'. Such safety and security-related needs would include such traditionally offered benefits as vacation, sick leave, disability insurance, health insurance, life insurance, retirement plans, and family leave. These benefits are still viewed as very important by employees (Danehower and Lust, 1996). However, the protean careers view suggests that a newer 'career enrichment' benefit satisfaction facet is becoming increasingly important to employees (Sullivan, 1999).

Career enrichment benefit satisfaction is defined as 'an employee's attitude towards organizational benefits focusing on employee employability and skill development needs'. Employability and skill development needs can be met by organizations providing such benefits as sponsorship of employee education, and developmental experiences for employees (Hall and Moss, 1998). Different types of organizational employee development activities promote employee job-related learning (Noe, et al., 1997), which is part of the protean career (Sullivan, 1999). Recent research (Birdi et al., 1997) has found that such development activities (e.g., tuition-reimbursed courses, work-based development activity) are positively associated with employee overall job satisfaction and organizational commitment.

Prior empirical benefit satisfaction studies (e.g., Danehower and Lust, 1996; Williams, 1995) have employees indicate which benefits are/are not available in their organization. It is assumed that 'availability' as well as actual 'use' influence employee satisfaction with benefits. For example, many employees may never need to use disability insurance or have their dependents use the employee's life insurance benefit, yet employees are happy knowing that they have this coverage (Danehower and Lust, 1996; Fredericksen and Soden, 1998).

In their model linking employee benefits to benefit satisfaction and attitudinal/behavioral outcomes, Harris and Fink (1994) speculated two reasons as to why there would be relationships between employee benefit satisfaction and attitudinal/behavior outcomes: (1) benefits serve as a 'reward' and (2) benefits serve as a 'signal' to employees. This 'reward' versus 'signal' role for benefits supports the basic versus career enrichment benefit satisfaction facet distinction. The basic benefits satisfaction dimension argued for here consists of more traditionally offered benefits, e.g., vacation, sick leave, health insurance, retirement plan, that comprise one type of 'reward' (Rusbult and Farrell, 1983),

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which employees associate with their job/organization. Research (Danehower and Lust, 1996) suggests that many organizations typically offer such basic benefits and that employees are very aware of (feel entitled to) these basic benefits. As their satisfaction with the 'rewards' based on these basic benefits increases, employees are more likely to stay where they are (Rusbult and Farrell, 1983).

Career enrichment benefits represents a less traditional 'signal' which the organization sends to employees to indicate concern/support for the employee's development (Birdi *et al.*, 1997; Eisenberger, *et al.*, 1986). Such benefits as release time for continuing education, developmental experiences, and tuition reimbursement are being increasingly offered by organizations, but are still less common than basic benefits (Henderson, 2000; McCaffery, 1992). Employee satisfaction with organizationally 'signalled' career enrichment benefits should lead to increased employee commitment to their organization (Birdi *et al.*, 1997; Harris and Fink, 1994).

#### Relationship of benefit satisfaction facets to overall benefit satisfaction

It is important to note that the proposed basic and career enrichment benefit satisfaction facets, if summed, are not equivalent to general or overall benefit satisfaction. This is analogous to job satisfaction research which has shown that general or overall job satisfaction is not equivalent to summed job satisfaction facets, such as work, pay, promotions, supervision and co-workers (Ironson *et al.*, 1989). However, the distinction between the two proposed benefit satisfaction facets can be tested by examining their relationships to general benefit satisfaction. Just as the work satisfaction facet was found to have a stronger relationship to overall or general job satisfaction than other satisfaction facets (Ironson *et al.*, 1989), we would argue that basic benefit satisfaction will have a stronger positive relationship to general benefit satisfaction than career enrichment benefit satisfaction. This is partially based on research (Danehower and Lust, 1995) showing that employee satisfaction with more 'basic' or traditional individual benefits (i.e., retirement, medical plan, time off) affects general benefit satisfaction.

Towards a partial nomological net of basic and career enrichment employee benefit satisfaction

Much of the previous empirical research on antecedents and outcomes of general employee benefit satisfaction can be integrated within the Harris and Fink (1994) model (e.g., Dreher *et al.*, 1988; Judge, 1993; Rabin, 1994; Tremblay *et al.*, 1998; Williams, 1995) in which employee general benefit satisfaction mediates the relationship of benefit programme features to outcomes. Our model for distinguishing basic versus career enrichment benefit satisfaction facets is based on the same general antecedent—outcome framework as the Harris and Fink (1994) model.

Concerning benefit satisfaction facet antecedents, the proposed career enrichment benefit satisfaction is a more individual, discretionary affected variable than basic benefit satisfaction. Thus, it is expected that the antecedents of employee professional participation activity and perceived outcome expectancy would significantly affect this facet. As professional-level employees become more involved in professional activities (e.g., holding office in a professional organization) they should be more satisfied (hopefully) with their career enrichment benefits. Organizations often sponsor such employee professional participation based on the increased visibility it gives to the organization (Hibbert, 1997; Younger and Sandholtz, 1997). In addition, if employees perceive that their good work will be recognized, i.e., outcome expectancy, then they are more likely to feel satisfied with any personal advancement benefits which the organization offers. Riggs, *et al.*, (1994) found a significant positive relationship between outcome expectancy and overall job satisfaction.

Professional participation activity and outcome-expectancy would be less likely to influence basic benefit satisfaction, since this type of benefit is more 'constant' across employees (Lust and

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## **Contextual Sidebar**

#### Time Frame

Several waves of data were gathered from 1994 to 1998.

#### National

These were robust years for the U. S. economy. Many sectors experienced tight labor markets, putting pressure on employers to create more attractive benefits packages to recruit and retain workers. In health care settings, where this study is focused, labor shortages motivated employers to offer sign-on bonuses, relocation expenses, educational assistance, and other benefits not previously provided.

## **Medical Technologists**

Medical technologists were sampled from hundreds of different health care organizations (e.g., hospitals, independent laboratories). The traditional career model for MTs for the first five years is to perform a set of basic tasks (tests to determine the presence/absence of disease, including collecting and preparing specimens, performing routine lab tests, repairing lab equipment, and analysis of test results). Greater variation in career opportunities occurs after five years where MTs begin to perform more advanced tests and managerial tasks. These later activities include implementing new test procedures, selecting new instruments and methods, and supervising other personnel. Tuition reimbursement for advanced education is particularly relevant to MTs at this later point in their careers.

### Benefits

American workers in this period largely looked to thier employers for retirement and health care benefits. Professionals and other upwardly mobile workers also looked to employers for tuition reimbursement and other supports for career development. During this period, large American employers such as BellSouth and Cigna reported decreasing benefit satisfaction. Health care organizations increasingly switched from Defined Benefits retirement plans, emphasizing employer supports, to Defined Contribution plans more closely tied to worker-pay-ins.

Danehower, 1990) and is less influenced by an individual's discretionary actions. However, often full-time scheduled employees receive more essential need benefits than part-time employees, so that one could expect greater satisfaction with basic benefits for full-time employees (Feldman, 1990). Full-time versus part-time schedule would not be expected to impact as greatly on career enrichment benefit satisfaction because part-time employees have a 'built-in' time off factor to take advantage of learning/advancement opportunities (Feldman, 1990), although these expenses may not be reimbursed.

Research has found that general employee benefit satisfaction can impact on employee attitudes and behaviors, such as organizational commitment (Lane, 1993; Ward and Davis, 1995), trust in management and turnover intent (Lane, 1993 – Paper presented at the 1993 Industrial Relations Research Association Anaheim, C. A., U. S. A.). Looking at type of benefit satisfaction – outcome relationships, based on its salient 'reward' perception (Harris and Fink, 1994; Rusbult and Farrell,

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1983), basic benefit satisfaction would be expected to show a stronger relationship to organizational withdrawal intent and turnover behavior than career enrichment satisfaction. As noted above, basic benefit satisfaction should also have a stronger relationship than career enrichment benefit satisfaction to employee general benefit satisfaction. This reflects employee concern with benefits focusing on safety- and security-related needs (McCaffery, 1992).

However, based on its 'signal' of employee concern/support (Eisenberger *et al.*, 1986; Harris and Fink, 1994), career enrichment benefit satisfaction would be expected to show a stronger relationship to affective organizational commitment than basic benefit satisfaction. Such organizational 'concern' is offered in exchange for greater employee loyalty, i.e., affective organizational commitment (Bernstein, 1998; Blau, 1964).

Cumulatively, this leads to two study hypotheses:

Hypothesis 1. Employee benefit satisfaction is a multifacet construct, consisting of two benefit satisfaction facets, basic and career enrichment.

Hypothesis 2. Basic and career enrichment benefit satisfaction will exhibit differential relationships to antecedents and outcomes such that:

Hypothesis 2a. Basic benefit satisfaction will have a stronger relationship to schedule, general benefit satisfaction, organizational withdrawal intent and turnover behavior versus career enrichment benefit satisfaction.

*Hypothesis 2B.* Career enrichment benefit satisfaction will have a stronger relationship to professional participation, outcome expectancy, and affective organizational commitment versus basic benefit satisfaction.

Figure 1 shows the relationships being tested in a model format.

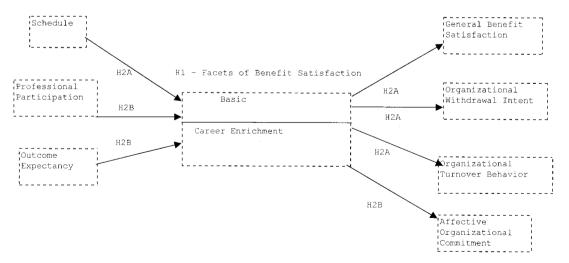


Figure 1. Towards a partial nomological net of basic and career enrichment benefits satisfaction

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# Method

## Sample and procedure

This study is part of a longitudinal study on the career patterns of recently graduated medical technologists (MTs) by the Board of Registry of the American Society for Clinical Pathologists (ASCP). MTs work in a laboratory in a variety of health-related settings (e.g., hospitals, independent laboratories). They are responsible for the accurate performance of tests that help to determine the presence or absence of disease. The basic requirement for entry into medical technology is a baccalaureate degree and initial training or work experience in the laboratory. Medical technology has the characteristics of a profession (Kerr *et al.* 1977), i.e., expertise, autonomy, belief in regulation of a profession by its members, and belief in importance of the professions' service provided, as determined by the National Labor Relations Board (1995).

Surveys were repeatedly distributed to a randomly stratified sample of MTs across hundreds of different organizations in 1994, 1995, 1996, 1997 and 1998. Surveys were sent to individuals' home addresses. In 1994, 832 of 1156 (72 per cent) surveys containing personal background (i.e., gender, age, marital status, education level), professional participation and type of benefit satisfaction items were voluntarily returned. In 1995, 739 of the 1156 (64 per cent) matched (by social security number) MTs responded to this survey collecting demographics, and general benefit satisfaction data. In 1996, for 672 of 1156 (58 per cent) matched respondents, demographic and outcome expectancy data were collected. In 1997, 646 of 1156 (56 per cent) matched MTs responded allowing demographic, schedule and type of benefit satisfaction data to be collected. Finally in 1998, 553 out of 1156 (48 per cent) MTs returned their survey containing demographic, general benefit satisfaction, affective organizational commitment, organizational withdrawal intent, and turnover behavior data.

Although there were 553 repeat-respondents across five surveys, based on the variables used in this study and controlling for job change from 1994 to 1997 (i.e., MTs remaining with one employer), complete data were available for 250 MTs. A 1994 demographic variable comparison on gender, age, marital status and education of the 250 complete-data MT sample to the 906 (1156 - 250) remaining MT sample indicated no significant demographic differences.

A 1994 demographic breakdown of this sample of 250 MTs showed the median age as 26, with a range from 22 to 56 years old; 82 per cent were women; 96 per cent had a baccalaureate degree, and 4 per cent had an advanced degree; 60 per cent were not married, and 59 per cent worked in an urban location, 23 per cent in a suburban location, and 18 per cent in a rural location. By 1998, 67 per cent of the sample were married. The other demographics either remained stable or increased as expected (e.g., age).

#### Survey items

## Type of Benefit Satisfaction (At 1994 and 1997)

A benefits coverage domain of 24-items was generated, based on several sources, including previous research (e.g., Dreher *et al.*, 1988; Lust and Danehower, 1990; Miceli and Lane, 1991), practitioner sources (e.g., Henderson, 1989; McCaffery, 1992), and a consensus of experts in medical technology (American Society of Clinical Pathologists, 1993). The 24-item measure was pilot tested among medical technology experts at the 1993 Research and Development meeting (American Society of Clinical Pathologists, 1993). *Type of benefit satisfaction* was measured by asking respondents to 'indicate their

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satisfaction with each of the following 24 benefits', where 1 = dissatisfied, 2 = somewhat satisfied, 3 = satisfied, and 4 = very satisfied. If a benefit was not available in their organization, MTs were asked to indicate 0 = not available. Following other research (e.g., Danehower and Lust, 1995) this data was treated as missing. For all multi-item scales in this study, items were averaged to form scale scores.

#### 1994 Antecedents

Gender was measured by 1 = female (82 per cent), 2 = male (18 per cent). Age was measured by asking MTs to fill in their year of birth. This information was transformed to the individual's age in 1994. These variables were tested since past research (e.g., Danehower and Lust, 1995; Lust and Danehower, 1990) has shown they can be related to general benefit satisfaction (males and older employees more satisfied). Professional participation was measured using a three-item scale based on prior work (Morrow and Goetz, 1988) and discussion (American Society of Clinical Pathologists, 1993). MTs were asked to 'indicate the level at which you participated in the following activities related to your profession during 1994'. Sample items are 'I held office in a professional organization' and 'I served as a committee member'. Item responses were made using a three-point scale, where 1 = never (0 times), 2 = sometimes (1–3 times), 3 = frequently (4 or more times).

#### 1995 Antecedent

General Benefit Satisfaction was measured using Spector's (1985) four-item scale. Sample items include: 'I am not satisfied with the benefits I receive' (reverse-scored) and 'the benefits we receive are as good as most other organizations offer'. A four-point response scale was used, where 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree.

#### 1996 Antecedent

Outcome Expectancy was measured using a three-item scale based on a study by Riggs et al., (1994). Sample items are: 'doing good work here is worth the effort', and 'most of my good work is noticed'. A four-point response scale (1 = strongly disagree to 4 = strongly agree) was used.

#### 1997 Antecedent

Schedule was measured as 1 = full-time (86 per cent) and 2 = part-time (14 per cent).

#### 1998 Outcomes

General Benefit Satisfaction was again measured using Spector's (1985) four-item scale. Affective organizational commitment was measured using a three-item scale based on Meyer, et al. (1993). A sample item is 'I feel emotionally attached to this organization'.

Organizational withdrawal intent was measured by a three-item scale (Michaels and Spector, 1982). A sample item is 'I intend to leave the organization where I am currently employed as soon as possible'. A four-point response scale was used for these three variables (1 = strongly disagree, 4 = strongly agree).

Turnover Behavior was obtained by asking MTs 'did you change employers during 1998', where 1 = yes (5 per cent) and 2 = no (95 per cent).

## Validity check

In the 1997 survey, the item 'does your organization provide you with standard benefits (e.g., health insurance)' was asked, where 1 = yes (93 per cent) and 2 = no (7 per cent). This suggests that MTs should be able to assess how satisfied they are with their benefits (Danehower and Lust, 1996).

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# **Results**

## Factor analyses of benefit satisfaction items

As noted above, the 1994 benefit satisfaction domain consisted of 24 items. Of these 24 items, in 1994 four items had at least 50 per cent of the MTs indicating that these benefits were 'not available' in their organization. The four items were: 'child daycare', 'uniform allowances', 'travel support', and 'job sharing options'. Based on the large percentage of 'not available' (missing data), these four items were removed from further scale development (Roth, 1994). The remaining 20 items were kept for scale construction because each item had less than 38 per cent missing data. Following Hinkin (1995), exploratory factor analysis (Norusis, 1998) was used on these 1994 items to eliminate poor or multiple loading items while creating benefit satisfaction facet scales. The results of the exploratory factor analysis are presented in Table 1. For each item in Table 1, the percentage of MTs who indicated that this item was 'not available' (missing) is shown in the third column. As Judge (1993) noted, benefit coverage within an organization is generally constant across employees. However, this assumption can not be made for this sample because MT respondents are from many different organizations.

Scree and eigenvalue greater than one tests (Ford, et al. 1986) on a principal components analysis of the 20 items indicated that a two-factor solution was the most appropriate. This two-factor solution accounted for 42 per cent of the total variance. Varimax rotation was used after the two factors were

Table 1. Results of exploratory factor analysis for 1994 benefit satisfaction items

Iten	ns	Factor 1	Factor 2	'Not available' percentage
1.	Vacation (paid annual leave)	0.49	0.22	3.4
2.	Sick leave	0.46	0.18	4.8
3.	Retirement plans	0.62	0.17	8.2
4.	Parking	0.05	0.24	1.9
5.	Release time for continuing education/professional meetings	0.15	0.64	11.6
6.	Educational assistance/tuition reimbursement	0.30	0.63	17.6
7.	Pension plan	0.69	0.22	17.0
8.	Flexible benefits package	0.73	0.19	12.5
9.	Life insurance	0.77	0.13	9.0
10.	Disability insurance	0.76	0.11	10.5
11.	Credit union availability	0.47	0.13	25.1
12.	Wellness programme	0.53	0.27	33.2
13.	Health insurance	0.68	0.14	3.5
14.	Dental insurance	0.61	0.11	11.1
15.	Maternity/family leave	0.58	0.21	8.9
16.	Tuition/grants for continuing education	0.29	0.64	28.3
17.	Special/flexible work schedules	0.19	0.57	11.2
18.	Rewards for additional certification(s)	0.09	0.81	36.8
19.	Rewards for advanced degrees	0.07	0.75	37.6
20.	Safe work environment	0.28	0.37	0.6
Eig	envalue (unrotated)	6.41	1.94	
Per	centage variance explained	32.08	9.71	

Note: Boldtype indicates factor loadings at least 0.40.

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extracted (oblique rotation yielded similar results). As can be seen in Table 1, two items, 4 (parking) and 20 (safe work environment), had insufficient (<0.40) loadings (Ford *et al.*, 1986). Loadings of at least 0.40 are in bold in Table 1. The work environment of MTs, i.e., exposure to infectious diseases, suggested the need for the 'safe environment' item. These two items were dropped from further analysis, allowing 18 items to be retained. Based on Table 1, the two factors (scales) identified were named: *Basic benefit satisfaction* (12 items -1, 2, 3, 7, 8, 9, 10, 11, 12, 13, 14 and 15; eigenvalue = 6.41); and *career enrichment benefit satisfaction* (six items -5, 6, 16, 17, 18 and 19; eigenvalue = 1.94). Item content for each scale is consistent with the broader definitions of basic and career enrichment benefit satisfaction. Items were averaged to form each scale. Inspection of Table 1 indicates that career enrichment benefit items generally have a higher 'not available' percentage than basic benefit satisfaction items (Henderson, 2000).

Items 3, (retirement plans) and 7, (pension plan) were not identical. The correlations between these 1994 items was 0.70, indicating more unshared (51 per cent) than shared (49 per cent) variance. As shown in Table 1 for the same set of respondents, the percentage of MTs indicating 'not available' column is different for these two items (8.2 versus 17.0). The 'retirement plans' item includes early retirement as well as an organization helping a retiree with his/her benefits, while 'pension plan' focuses on money paid to employees after they leave the organization (McCaffery, 1992). The correlation between these items in 1997 was 0.69. Item 17, 'special/flexible work schedules' is somewhat ambiguous. A flexible work schedule for all employees would not be considered a career enrichment benefit, but the 'special' emphasis reflects more of an exception than rule. The inclusion of this item within this factor should reflect its application to employability and skill development (e.g., being able to leave work early on occasion to attend a class). The sample size of 250 exceeds the 10:1 (subject-s:items) ratio recommended (Ford *et al.*, 1986) for stable results. Subsequent 1997 12-item basic and 6-item career enrichment benefit satisfaction scales were constructed based on these factor analyses.

#### **Tests of Study Hypotheses**

Variable means, standard deviations and correlations for study variables are shown in Table 2. As the results in Table 2 indicate, there were significant mean decreases (p < 0.05) in repeat-respondent basic benefit satisfaction from 1994 (M = 2.44) to 1997 (M = 2.35), t(249) = 2.25, and career enrichment benefit satisfaction from 1994 (M = 1.72) to 1997 (M = 1.62), t(249) = 2.13. Multi-item scales, with the exception of 1996 outcome expectancy (0.67), had internal consistencies of at least 0.70 (Nunnally, 1978). The alpha coefficients of the 1994 and 1997 basic and career enrichment benefit satisfaction scales exceeded 0.80. Convergent validity for each facet is shown by finding higher correlations within facets over time (r = 0.43, 1994 with 1997 basic benefit satisfaction; r = 0.36, 1994 with 1997 career enrichment benefit satisfaction) versus across facets (r = 0.26, 1994 basic with 1997 career enrichment benefit satisfaction; r = 0.12, 1994 career enrichment with 1997 basic benefit satisfaction).

Looking at differential antecedents of basic and career enrichment benefit satisfaction, the pairs of adjacent correlations (shown in bold) in Table 2 indicate significant differences at p < 0.05 (one-tailed). These results are supportive of hypotheses 2A and 2B. 1994 professional participation showed a stronger positive relationship to 1994 career enrichment (r = 0.20) versus basic benefit satisfaction (r = 0.02), t(247) = 2.14, and to 1997 career enrichment (r = 0.15) versus basic benefit satisfaction (r = 0.01), t(247) = 1.79. 1997 schedule had a stronger relationship to 1997 basic (r = -0.28) versus career enrichment benefit satisfaction (r = -0.03), t(247) = -3.74.

Turning to outcomes, 1994 basic benefit satisfaction had a stronger positive relationship (r = 0.27) than career enrichment benefit satisfaction (r = 0.07) to 1998 general benefit satisfaction, t (247) = 3.21. 1994 career enrichment had a stronger relationship (r = 0.14) to 1998 affective organizational commitment than basic benefit satisfaction (r = -0.02), t (247) = 2.19. 1994 basic benefit satisfaction had a stronger relationship (r = 0.15) than career enrichment benefit satisfaction (r = 0.01),

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Table 2. <sup>†</sup>Means, standard deviations, reliabilities and correlations for study variables

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Variables	М	SD	1	2	3	4	5	9	7	8	6	10	11	12	13	14
1. Age (1994)*	29.42	86.9	(NA) <sup>§</sup>													
2. Gender (1994)	1.18	0.39	0.04													
3. Prof. particip. (1994)	1.15	0.30	0.07	0.25	(0.70)											
4. Basic bft sat. (1994)†	2.4	89.0	-0.09		0.05∥	(0.88)										
5. Career enrich	1.72	0.74	-0.13		0.70∥	0.37	(0.81)									
bft sat (1994) <sup>‡</sup>																
6. Gen bft sat (1995)	2.71	0.59	0.05	-0.02	0.03	0.44	0.20	(0.80)								
7. Outcome expect (1996)	` '	0.54	0.07	0.05	0.14	0.07	0.14	0.19	(0.67)							
8. Schedule (1997)	1.14	0.35	-0.17	-0.08	-0.06	- 0.08	-0.11	-0.03	0.04	(NA)						
<ol> <li>Basic bft sat (1997)<sup>†</sup></li> </ol>	2.35	0.74	-0.05	0.05	0.01∥	0.43	0.12	0.24	0.25	$-0.28^{\parallel}$	(0.60)					
10. Career enrich	1.62	0.75	-0.03	0.0	0.15	0.26	0.36	0.13	0.21	-0.03	0.48	(0.82)				
bft sat $(1997)^{\ddagger}$																
11. Gen bft sat (1998)	2.69	0.58	-0.05	-0.03	0.11	0.27	0.07∥	0.40	0.12	-0.07	0.37∥	0.17∥	(0.82)			
12. Affective org																
commit (1998)	2.21	09.0	0.08		0.10	-0.02	0.14∥	0.07	0.28	0.01	0.08∥	0.27		(0.76)		
13. Org with	2.10	89.0	-0.07	0.11	0.05	-0.10	-0.07	-0.09	-0.26	-0.12	- 0.22		-0.18	-0.17	(0.80)	
Intent (1998)																
14. Turnover(1998)	1.95	0.22	0.07	-0.01	-0.02	0.15	0.01	0.12	0.02	0.03	0.10	0.03	0.19		0.06 - 0.27 (NA)	(¥)

\*Gender (1 = female, 2 = male). Prof particip = professional participation; basic (career enrich) (gen) bft sat = basic (career enrichment) (general) benefit satisfaction; outcome Note. N = 250; r > 0.12 (p < 0.05, two-tailed); r > 0.15 (p < 0.01, two-tailed).

expect = outcome expectancy; schedule (1 = full - time, 2 = part-time); affective org commit = affective organizational commitment; org with intent = organizational withdrawal intention; change jobs (1 = yes, 2 = no).

**Bolded pair** of adjacent correlations significantly different, t(247) > 1.64 (p < 0.05, one-tailed).

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<sup>†</sup>Significant difference 1994 versus 1997 basic benefit satisfaction, t(249) = 2.25 (p < 0.05, two-tailed). †Significant difference 1994 versus 1997 career enrichment benefit satisfaction, t(249) = 2.13 (p < 0.05, two-tailed). \*Coefficient alpha: NA = not applicable.

Table 3. Hierarchical regression testing for the impact of time distal to proximal variables on 1998 general benefit satisfaction, affective organizational commitment and organizational withdrawal intent

Predictors <sup>‡</sup>	1998 General benefit satis			1998 Affective org commit			1998 Org withdrawal intent		
	β	$R^2$	Overall F	$\beta$	$R^2$	Overall F	β	$R^2$	Overall F
Gender (1994)	- 0.07			0.12*			0.10		
Age (1994)	-0.01			0.04			-0.06		
Prof particip (1994)	0.09			0.06			0.01		
Basic bft sat (1994)	0.14*			-0.02			-0.07		
Career enrich bft sat (1994)	0.01			0.11			-0.01		
Gen bft sat (1995)	$0.24^{\dagger}$			0.04			0.07		
Outcome expect (1996)	0.01			$0.19^{\dagger}$			$-0.17^{\dagger}$		
Schedule (1997)	-0.03			0.01			-0.12*		
Basic bft sat (1997)	$0.24^{\dagger \$}$			$0.01^{\ }$			-0.20*	Ī	
Career enrich bft sat (1997)	$0.03^{\S}$			$0.20^{\dagger \parallel}$			$-0.02^{\P}$		
		0.19	$5.22^{\dagger}$		0.10	$2.75^{\dagger}$		0.11	3.01 <sup>†</sup>

Note. N = 250.

t(247) = 2.07, to 1998 turnover behavior. 1997 basic benefit satisfaction had a stronger relationship (r = 0.37) than career enrichment satisfaction (r = 0.17), t(247) = 2.90, to 1998 general benefit satisfaction. 1997 career enrichment benefit satisfaction had a stronger relationship (r = 0.27) than basic benefit satisfaction (r = 0.08), t(247) = 2.11, to 1998 affective organizational commitment. Finally, 1997 basic benefit satisfaction had a stronger relationship (r = -0.22) than career enrichment satisfaction (r = -0.11), t(247) = -1.79, to 1998 organizational withdrawal intent. Overall, these results collectively support hypotheses 2A and 2B.

Table 3 presents hierarchical regression results which test for the impact of time distal to proximal variable sets (i.e., 1994, 1995, 1996 and 1997 antecedents) on the 1998 outcome variables. 1994 basic benefit satisfaction, 1995 general benefit satisfaction, and 1997 basic benefit satisfaction are significant antecedents of 1998 general benefit satisfaction. Testing the difference between partial regression coefficients from the same sample (Cohen and Cohen, 1983, p.479), shows that 1997 basic benefit satisfaction has a stronger relationship to 1998 general benefit satisfaction ( $\beta = 0.24$ ) than 1997 career enrichment benefit satisfaction ( $\beta = 0.03$ ), t(239) = 2.38, p < 0.05. For 1998 affective organizational commitment, gender (males higher), 1996 outcome expectancy and 1997 career enrichment benefit satisfaction are significant antecedents. 1997 career enrichment benefit satisfaction has a stronger relationship to affective organizational commitment ( $\beta = 0.20$ ) than 1997 basic benefit satisfaction  $(\beta = 0.01)$ , t(239) = 2.21. Finally, 1996 outcome expectancy, 1997 schedule (full-time lower) and 1997 basic benefit satisfaction are significant antecedents of 1998 organizational withdrawal intent. Also, 1997 basic benefit satisfaction has a stronger relationship to organizational withdrawal intent  $(\beta = -0.20)$  than career enrichment benefit satisfaction  $(\beta = -0.02)$ , t(239) = -2.05. These results provide additional support for hypothesis H2. Overall, 19 per cent of the variance in 1998 general benefit satisfaction was explained, while 10 per cent of the variance in 1998 affective organizational commitment, and 11per cent of the variance in 1998 organizational withdrawal intent were explained.

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<sup>\*</sup>p < 0.05 (two-tailed); †p < 0.01 (two-tailed).

<sup>&</sup>lt;sup>‡</sup>Standardized beta weights reported.

<sup>§</sup> Significant difference in betas, t(239) = 2.38 (p < 0.05, one-tailed).

Significant difference in betas, t(239) = 2.21 (p < 0.05, one-tailed).

<sup>¶</sup>Significant difference in betas, t(239) = -2.05 (p < 0.05, one-tailed).

Table 4. Logistic regression results with turnover, (1998) as the outcome

Variable	Beta <sup>‡</sup>	Standard error
Gender (1994)	- 1.56	1.28
Age (1994)	0.08	0.07
Professional participation (1994)	-0.08	1.11
Basic benefit satisfaction (1994)	1.75*	0.76
Career enrichment satisfaction (1994)	0.49	0.65
General benefit satisfaction (1995)	0.10	0.52
Outcome expectancy (1996)	0.21	0.60
Schedule (1997)	0.73	1.35
Basic benefit satisfaction (1997)	0.18	0.78
Career enrichment satisfaction (1997)	0.80	0.69
General benefit satisfaction (1998)	1.44*	0.71
Affective organizational commitment (1998)	0.65	0.68
Organizational withdrawal intent (1998)	$-2.11^{\dagger}$	0.64
Goodness-of-fit	251.71	
Chi-square	24.99*	
$R^2$ (Cox and Snell)	0.12	
Percentage of cases correctly classified	96%	

Note. N = 250.

Since the 1998 turnover variable is dichotomous, logistic regression was used (Cohen and Cohen, 1983). The results are shown in Table 4. Chi-square results indicate that the overall model was significant (p < 0.05), and had a 96 per cent accuracy rate between the actual and predicted values for MTs' turnover behavior. 1994 basic benefit satisfaction, 1998 general benefit satisfaction, and 1998 organizational withdrawal intent had significant relationships to 1998 turnover behavior, such that as basic benefit satisfaction and general benefit satisfaction increased, and organizational withdrawal intent decreased, MTs were less likely to change employers in 1998. Overall, 12 per cent of the variance in 1998 turnover behavior was accounted for.

## Missing data

As discussed above, since MTs can indicate that a benefits item is 'not available' in their organization, the cumulative impact of adding these items into either the basic or career enrichment benefit satisfaction scale reduces the sample size. One can assume that the data are missing 'completely at random' (Roth, 1994) if the missing values are not related to study variables or other variables (e.g., demographic) that may somehow bias the observed data (Hair, et al., 1995). By recoding 1994 and 1997 basic and career enrichment benefit satisfaction scales to indicate 'missingness' (0) versus presence (1) of a benefit satisfaction and then correlating these variables to study variables and other demographic variables, finding a lack of significant relationships would support that the data are missing completely at random (P. Roth, personal communication, March 26, 1999). Correlation and cross-tabulation results indicated no significant relationships between missingness/presence of a benefit satisfaction scale and study variable antecedents, as well as gender, marital status, wage, age, workplace location and education. This supports assuming that the data are missing completely at random.

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<sup>\*</sup>p < 0.05; †p < 0.01 (two-tailed).

Standardized beta weights reported.

#### Other results

Additional analyses were conducted to test for the decline in repeat-respondent basic and career enrichment benefit satisfaction being 'real' as opposed to a function of sample mortality. First, overall for the 1994 sample there were 773 MTs who completed the 1994 basic benefit satisfaction scale. Of these 773, 466 MTs also responded to the 1997 basic benefit satisfaction scale while 307 MTs did not. An independent samples t-test comparison between these two groups on 1994 basic benefit satisfaction was non-significant t(771) = -0.35, p > 0.05. The 466 continuing respondents had a mean of 2.41 while the 307 'drop outs' had a mean of 2.40.

Overall, for 1994 career enrichment benefit satisfaction there were 779 MTS who completed this scale. Of these 779 MTs, 472 responded to the 1997 career enrichment scale while 307 MTs did not. An independent samples t-test comparison between these two groups on 1994 career enrichment benefit satisfaction was non-significant t(777) = 0.49, p > 0.05. The 472 continuing MTs had a mean of 1.71 while the 307 'drop outs' had a mean of 1.74. These non-significant 1994 basic and career enrichment benefit satisfaction differences between continuing respondents and drop-outs at least indicates that the continuing respondents did not start out in the longitudinal study more 'unhappy' with their basic and career enrichment benefits than those MTs who at least temporarily dropped out of the sample.

## Discussion

Collective support for the study hypotheses were found, i.e., basic and career enrichment seem to represent two related but distinct types of benefit satisfaction. This distinction parallels the recent delineation of traditional versus protean careers in career theory (Sullivan, 1999). We feel that this study represents an important contribution to the benefit satisfaction literature because there has not been a distinction in specific benefit combinations as *facets* of benefit satisfaction by either general (e.g., Heneman and Schwab, 1985) or multidimensional (e.g., Lust and Danehower, 1992) benefit satisfaction measures. Previous research has focused on either individual benefit satisfaction items (e.g., Lust and Danehower, 1990), dimensions of benefit satisfaction (Harris, 1993 – Paper presented at the 1993 Industrial Relations Research Association Anaheim, C. A., U. S. A.), or has argued for linking individual benefits to general benefits satisfaction (e.g., Williams, 1995).

As noted by one Reviewer, based on the items used, it is more appropriate to conceptualize basic and career enrichment benefit satisfaction scales as composite variables rather than latent constructs (Bollen and Lennox, 1991; MacCullum and Browne, 1993). Composite variables are linear combinations of the items comprising the composite. As such, confirmatory factor analysis is not appropriate for testing such composite variables.

Particularly in today's business environment, employee benefits being offered can change quickly (Anonymous, 1999; Bernstein, 1998; Hein, 1999). Basic benefit satisfaction has been defined as 'an employee's attitude towards organizational benefits focusing on employee safety- and security-related needs'. Specific additional items to consider adding to this scale would include satisfaction with: early retirement plans, termination pay, accidental death and dismemberment and vision care, as well as differentiating between short and long-term disability (Danehower and Lust, 1996; Fredericksen and Soden, 1998). Yet, even with greater benefit item inclusion, basic (and career enrichment) benefit satisfaction would still be a composite variable and not a latent construct (MacCallum and Browne, 1993). However, a higher (>0.40) percentage of study respondents may also indicate that some of

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these additional benefits are 'not available' (Danehower and Lust, 1996; Fredericksen and Soden, 1998). In this study, the item 'child daycare' was deleted due to a high percentage of MTs saying this was 'not available'. If the percentage of missing data for an item is less than 40 per cent, one can probably use this item in a scale, while checking for the impact of missing data (Roth, 1994). A similar argument can be made for potentially adding items, e.g., 'on-site work-related seminars' or 'career planning activities' (Birdi *et al.*, 1997; Fredericksen and Soden, 1998) to the career enrichment benefit satisfaction scale. Career enrichment benefit satisfaction has been defined as 'an employee's attitude towards organizational benefits focusing on employee employability and skill development needs'.

The issue of missing data for benefit satisfaction items becomes more problematic when one is drawing respondents from many different organizations, as in this study. Often past benefit satisfaction research has focused on one organization (e.g., Barber *et al.*, 1992; Danehower and Lust, 1995; Judge, 1993; Lust and Danehower, 1990; Ward and Davis, 1995). When respondents come from one organization, benefits coverage is more consistent across employees (Judge, 1993). However, only sampling one organization can restrict the generalizability of study results. Alternatively, if one could somehow 'predetermine' benefits coverage across the organizations being sampled, then by only including higher percentage (e.g., > 80 per cent) coverage items, missing data would be less problematic (Roth, 1994).

We have offered broad definitions of basic and career enrichment benefit satisfaction partially because in today's work world, benefits represents a 'moving target' for many organizations as they struggle to attract, motivate and retain good employees (Kelly, 1999; Sladek, 1999). Depending on the sample, the specific item content may well fluctuate to a degree within these broader definitions of basic and career enrichment benefit satisfaction. Thus, we are *not* suggesting that the items used to measure these two facets will be universal or fixed. This is contrary to typical attitudinal scale research (Price, 1997). However, because we can not 'fix' the exact item content for facet scales across all organizations does not mean we should not investigate these benefit satisfaction facets. We believe that at least two distinct facets or types of benefit satisfaction exist, and that the definitions for these facets are generalizable across organizations.

Nature of the sample being studied may also give rise to a new, third type of benefit satisfaction, i.e., personal amenities, which is different from basic or career enrichment. Currently in the U.S. the pool of information technology (IT) workers is too small to meet current demand and many companies are increasingly offering such personal convenience benefits as: pet insurance, on-site car washing and dental services, and dry cleaning delivered to offices, to attract and retain such 'high demand' IT employees (Hein, 1999). Personal amenities benefit satisfaction could be defined as 'an employee's attitude towards organizational benefits focusing on personal convenience'. This scale would be relevant for 'high demand' employee samples.

The results here indicate that benefit satisfaction facets may have implications for different outcomes. Applying Herzberg's two-factor theory (Herzberg, 1968) framework to benefit satisfaction suggests that basic benefit satisfaction may help keep employees from leaving their organization, but career enrichment benefit satisfaction may be necessary for employees to feel truly committed to their organization. This would be consistent with Harris and Fink's (1994) idea that benefits can serve as a 'reward' versus 'signal' to employees.

Given that employees are generally more aware of basic needs benefits such as vacation, retirement, and health and life insurance (Danehower and Lust, 1996), such basic benefit satisfaction made a stronger contribution to explaining general benefit satisfaction than did career enrichment benefit satisfaction. Satisfaction with basic benefits also has a stronger impact on organizational withdrawal intent, perhaps partially because of the more 'visible' costs associated with giving up certain benefits (e.g., vacation, sick leave, pension) by leaving an organization (Rusbult and Farrell, 1983). However, career enrichment benefit satisfaction had a stronger impact on affective organizational commitment. Some

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organizations are actively implementing various career development programmes to instill greater professional employee loyalty (Bernstein, 1998), and such employees may perceive this as a proactive 'signal' of company concern (Harris and Fink, 1994). Future research testing the linkages between benefit satisfaction facets to other outcomes such as dimensions of organizational commitment (Allen and Meyer, 1996) or organizational citizenship behavior (Williams and Anderson, 1991) is needed. Such testing may help to further delineate the nomological net of each benefit satisfaction facet.

From a practical perspective, this study found declines from 1994 to 1997 in both basic benefits and career enrichment satisfaction. MTs remaining with one employer over this time frame was controlled for, so that the explanation for this decline being partially caused by MTs changing employers can be ruled out. These results are consistent with other intra-organization studies in which employees from organizations, e.g., BellSouth (Block, 1991) and CIGNA (White, 1995), noted that their benefit satisfaction had decreased over time. Several explanations for the decline found here are possible, including that benefits offerings within organizations may have been reduced over this time period, or that benefits offerings remained constant but respondents' benefit expectations increased. Employers have long been concerned about benefit costs and providing the right 'mix' to attract and retain employees, as well as keep unions out (Huseman and Hatfield, 1978). Finding that certain benefits may not be valued by employees at least to the extent of costs borne by the employer, may suggest that such benefits be dropped or that the money could be better spent as direct payments to employees (Hart and Carraher, 1995).

There are various study limitations to note. Only one type of job was sampled, medical technologist. Testing the generalizability of these benefit satisfaction facet scales using other samples is needed. Also, MTs were in their early career stage (Greenhaus and Callanan, 1994). As these MTs move into more advanced career stages their career enrichment benefit satisfaction may increase. All data collected were self-report. However, such data were collected across hundreds of different organizations which is unique for this literature. Using respondents' home addresses made it impossible to collect record-based data by going to one central organizational source, as is typically done in job turnover research (Hom and Griffeth, 1991). The longitudinal design of this study helps to mitigate common method variance as an explanation for the results found (Podsakoff and Organ, 1986). Typical benefit satisfaction research has been either cross-sectional (e.g., Lust and Danehower, 1990; Tremblay *et al.*, 1998) or had a very short time interval (i.e., three weeks) between measures (e.g., Williams, 1995).

We did not gather dual wage earner information. Over the four year period the sample changed from being mostly unmarried to married. Williams (1995) has suggested that duplicate benefits' coverage provided by a spouses' employer could impact on employee attitudes towards their benefits. The reliabilities of several scales used, i.e., professional participation and outcome expectancy were 'borderline' (Nunnally, 1978). Lower scale reliability is an alternative explanation for lack of hypothesized findings. Although we checked on benefits provision in 1997, we did not measure employee 'use' of their benefits (Williams, 1995). Given the younger median age of this sample and four year study time period, MTs may not have made much use of certain benefits (e.g., retirement plans, rewards for advanced degrees). However, Williams (1995) did not find a significant relationship between use of benefits and general benefits satisfaction.

We inferred the 'reward' versus 'signaling' effect of basic versus career enrichment benefit satisfaction facets (Harris and Fink, 1994). Asking respondents to assess the perceived reward or signaling effect of individual benefits would have been more direct. Finally, time differences in measurement periods between antecedents and outcomes may have affected the results. Repeated measures of predictors to create equal predictor—outcome time intervals would have controlled for this. Such additional variable inclusion in this study would have allowed for explaining a greater percentage of the 1998 outcome variables.

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Despite these study limitations, we believe that it is important to make a distinction in type of benefit satisfaction. Employee benefit coverage is an ongoing, costly and dynamic issue of importance to employers (Davy, 1998; Hein, 1999), and the use of attitude surveys to gauge employees' interest in and satisfaction with different benefits has greatly increased in recent years (Sahl, 1991). Our study results support that one useful distinction to make in type of benefit satisfaction is basic versus career enrichment. We hope that this study will stimulate additional research in this area.

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# **Author biographies**

**Gary Blau** received his PhD in Organizational Behavior from the University of Cincinnati. He is currently a Professor of Human Resource Administration in the Fox School of Business and Management at Temple University. His research interests include studying employee attitudes and behaviors.

**Kimberly Merriman** is a PhD candidate in Human Resource Management and Organizational Behavior at the Fox School of Business and Management at Temple University. Her research interests include macro and micro compensation issues, and virtual employment relationships.

**Donna Surges Tatum** received her PhD in Communications from Purdue University. She is currently the Director of Testing for the Board of Registry, American Society of Clinical Pathologists. Her research interests include test item analyses and longitudinal analyses of the medical technologist prospective study.

**Sally V. Rudmann** received her PhD in Health Education from Ohio State University. She is currently the Program Director for the Medical Technology Division at Ohio State. Her research interests include cognition and learning, error prevention, and technology in education.

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