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**INFORMAL DEVELOPMENTAL EXPERIENCES
AND CAREER SUCCESS: A STUDY OF
QUALITATIVE DIFFERENCES IN WORK
EXPERIENCE**

**CEO PUBLICATION
T 06-14 (503)**

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**INFORMAL DEVELOPMENTAL EXPERIENCES AND CAREER SUCCESS:
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ABSTRACT

This study examines the informal developmental experiences and career success of current and former employees of a large professional services firm. We find that certain work experiences including high-profile work assignments, having a coach or mentor, and international work assignments are significantly related to both subjective career satisfaction and objective career success measured through compensation, wage growth and, for former employees, the attainment of top-level executive jobs. We find that these experience measures explain additional variance over the traditional work experience measures used in studies of career success.

Work experience is central to most models of careers and career success, as well as more general theories of work behavior and human resource management (Ng, Eby, Sorensen, & Feldman, 2005; Quinones, Ford & Treachout, 1995; Tesluk & Jacobs, 1998). This is based on a general theory of human capital in which work experience develops knowledge and skills over time that improve job performance. In practice years of experience requirements are often used in selection, promotion, and compensation systems as an indication of an individual's skills and abilities (Ash & Levine, 1985; Medoff & Abraham, 1980; Milkovich & Newman, 2004). In research, organizational tenure and years of work experience are also the most common measures used to predict individual compensation, career success and career satisfaction (Ng, et al., 2005).

Work experience is most often measured as the number of years in a job or with an organization (e.g. Hurley & Sonnenfeld, 1998; Judge, Cable, Boudreau, & Bretz, 1994). This reliance on years of job and organizational tenure to measure work experience continues even though theoretical models (Quinones, et al., 1995; Tesluk & Jacobs, 1998) and empirical research (McCall, Lombardo, & Morrison, 1988; McCauley, Ruderman, Ohlott, & Morrow, 1994; Morrison & Brantner, 1992) suggest that experience gained and skills learned on-the-job vary significantly across situations, jobs, and time in a person's working life. Research in managerial development, for example, shows that certain situations carry more developmental impact than others (McCauley, et al., 1994). Tesluk and Jacobs (1998) proposed a general model of work experience that describes experience not only as time in a job, organization, or career, but also the occurrence and timing of certain specific experiences that are known to be important to an individual's career development. They called for an expanded view of work experience and the variables used to measure experience in research.

One area where a more detailed look at work experience is merited is research on individual career success. Despite the fact that a recent review and meta-analysis identified 140 studies completed since 1980 on career success (Ng, et al., 2005), this research has almost exclusively used years of organization or job tenure as measures of work experience. The notable exceptions are a small number of actual work experiences identified as particularly important predictors of career success such as working with an influential mentor (Chao, Waltz & Gardner, 1992; Dreher & Ash, 1990; Whitley, Dougherty & Dreher., 1991) and international work experience (Judge, et al., 1995). However, to better measure individual human capital Ng, et al. (2005) call for a “larger, more heterogeneous set of predictors in future research” and suggest that a finer-grained look at specific types of work experience could help to improve our understanding of objective and subjective career success.

In this study we examine the work experience and career success of 981 current and 931 former employees of a large professional services firm. In addition to general measures of human capital including years of experience and educational attainment, we explored an additional set of specific work experiences along two dimensions. First, we asked employees how often they had experienced certain situations at work, and second we asked employees whether those experiences had contributed to their professional development. Beginning with experiences that McCauley and colleagues (1994) found particularly developmental for managers, we developed a set of experience measures specific to the professional services sampled for this study. We find that developmental experiences including work on high-profile assignments, coping with change, and overcoming obstacles are significantly related to both current and future subjective career satisfaction and objective career success. Moreover, we find that both measures of whether or not employees reported having these experiences and ratings of

their developmental impact explained additional variance over the human capital measures most commonly used in studies of career success. Implications for research in career success and a general model of work experience are discussed.

THEORY AND HYPOTHESES

Seibert and Kraimer (2001) define career success as the accumulated work and psychological outcomes of work experience. Career success is most often operationalized as a combination of objective measures such as pay and promotion, and subjective success is measured as perceived career satisfaction (Ng, et al., 2005; Seibert, Kraimer & Linden, 2001). Although subjective career satisfaction is based partly on achievements and compensation (Judge, et al, 1995) it is also thought be influenced by perceptions of professional development and progress towards career goals (Seibert, et al, 2001). Ng, et al. (2005) confirmed that while subjective and objective career success are related, they are independent outcomes that should be investigated separately. Some researchers have suggested expanding the measures of career success to better suit the changing nature of organizational careers (Eby, Butts & Lockwood, 2003; Sullivan, 1999), but most of the previous research on career success has examined compensation, compensation growth, promotions and perceived career satisfaction. Similar measures of career success are examined in this study.

There has been a great deal of research on career success from a variety of perspectives. One such perspective is called the “sponsored-mobility” norm (Wayne, Lider, Kraimer & Graf, 1999). The sponsored-mobility perspective suggests that employees need organizational sponsors such as supervisors or mentors at higher levels to make promotions available to them. This stands in contrast to a “contest mobility” norm which assumes there is an open and fair

competition and promotions within an organization are based on skills and performance. Particular studies have predictors ranging from simple demographic characteristics such as marital status (Judge, et al., 1995), to networking behavior (Seibert et al., 2001), to proactive personalities (Seiber, Kraimer & Crant, 2001), among others. A recent meta-analysis by Ng, et al. (2005) found consistent relationships with four major categories of career success predictors: organizational sponsorship, socio-demographic characteristics, stable individual differences, and human capital. The relationships reflect a combination of the sponsored-mobility and contest-mobility predictors. The results also show that the predictors of career success differ for career satisfaction versus objective measures of career success.

Perceived career success is most strongly related to organizational sponsorship variables and stable individual differences. Ng, et al. (2005) found that variables grouped as “organizational sponsorship” were the strongest predictors of career satisfaction. These include supervisory support, career sponsorship, and training and development opportunities. Career satisfaction is also strongly related to proactivity and personality characteristics including extraversion and conscientiousness. Ng, et al. (2005) suggest that organizational sponsorship and individual characteristics such as personality have more direct impact on an employee’s sense of psychological well-being and therefore have greater influence over his or her subjective assessment of their career satisfaction.

Objective career success, on the other hand, is more directly related to human capital and demographic predictors. Demographic characteristics most often used to predict career success include age, gender and family status. For example, age and gender in particular have been shown to be consistently related to salary and promotion (Kirchmeyer, 1998; Lyness & Thompson, 2000; Stroh, Brett & Reilly, 1992). The strongest predictors of objective career

success, however, are human capital measures including educational attainment and work experience (e.g. Judge, et al., 1995). Education is clearly related to career success as those with college and advanced degrees tend to earn more and advance farther (Judge, et al., 1995; Shaw, 1984).

In terms of work experience, Ng, et al. (2005) found that the most common measures were organizational tenure, job tenure, hours worked and years of work experience. This is typical of research in labor economics, psychology and management that most often defines work experience in terms of tenure and seniority (Hoffman, Jacobs & Gerras, 1992; McDaniel, Schmidt & Hunter, 1998). This practice persists despite evidence that the amount of time spent in a job or organization does not affect every employee in the same way. For example, learning curves and time to proficiency vary greatly among employees and across jobs (Hoffman, et al., 1992). Kostiuk and Follmann (1989) found that most learning takes place over the first two years in a job and then drops off significantly in later years. From a human capital perspective, learning and skill development are clearly not linearly related to job and organizational tenure.

Researchers have also long argued that there are important qualitative differences in work experience that cannot be captured by simply looking at time spent doing a job (Hoffman, et al., 1992; Tesluk and Jacobs, 1998; Quinones, et al., 1995). For example, Ford, and colleagues (1992) showed that employees with similar jobs and organizational tenure vary significantly in the complexity and difficulty of the tasks they encounter. This matches research which shows that factors like access to formal training classes and the opportunities to build a relationship with an influential mentor vary significantly across jobs (Chao, et al. 1992; Tharenou, 1997). Finally, there is also evidence that some job situations and experiences may actually hinder or prevent learning on the job (McCall, et al., 1988; McCall, 2004). Taken together this suggests

that even employees who do the same job in the same organization are likely to accumulate different sets of experiences across careers that might look very similar when comparing measures like years of work experience and organizational tenure. Based on this, we predict that information on specific developmental experiences should be more predictive of perceived and objective career success than more general measures of years of experience.

H1: Information on how often employees report having specific development work experiences significantly increases the explained variance in both perceived and actual career outcomes over information only on total years of work experience.

This prediction fits with Tesluk and Jacobs (1998) who proposed that work experience has distinct quantitative and qualitative components. The quantitative component is represented by whether or not employees report certain experiences at work in addition to the more common tenure and seniority measures of experience. The qualitative component recognizes that there are different aspects to every job and every employee's experience. Thus some jobs and experiences should be more important than others when it comes to professional development. Tesluk and Jacobs (1998) argue that there is an interaction between the amount of time spent and the qualitative aspects of work experiences. That is, the more time spent doing a particularly developmental task, the greater the impact on an employee's learning and skills. They describe this interaction as the '*density*' of experience (Teskuk and Jacobs, 1998, p. 323). Experiences with greater density are thought to have greater impact on employees. Based on this, we predict that information on whether or not employees felt that a certain experience contributed to their professional development should be more predictive of perceived and objective career success than general measures of work experience and the frequency that they experienced specific learning experiences at work.

H2: Information on the developmental impact of specific work experiences significantly increases the explained variance in both perceived and actual career outcomes over information only on total years of work experience.

While the predominant measures of work experience in research on career success have been quantitative or time-based, there are a few specific work experiences which have been identified as important for career success. First, research shows that international experience may be particularly important for future promotion to executive jobs (Spreitzer, McCall & Mahoney, 1997; Judge, et al., 1995). For some time now, researchers have predicted that the increasing globalization of business should create a premium for professional experience working in other countries or working in multi-national teams (e.g. Ilgen & Pulakos, 1999). Judge, et al. (1995) found international experience is an important predictor of executive success and Ng, et al. (2005) found significant consistent relationships between international experience, salary, and promotion.

Second, the variables categorized by Ng, et al. (2005) as organizational sponsorship might also be considered a type of work experience. Specifically, the most common forms of career sponsorship are working with a mentor or supportive supervisor (Dreher & Ash, 1990). There is a large literature which finds that mentoring is related to positive career outcomes including compensation and promotion (Dreher & Ash, 1990; Whitely, et al., 1991). Mentors are thought to provide both skills and social support to help a protégé's career (Chao, et al. 1992). Ng, et al. (2005) concluded that career sponsorship is the strongest predictor of perceived career success. Based on this research we predict:

H3: Controlling for other factors, those who report more international experiences will have greater perceived and objective career success.

H4: Controlling for other factors, those who report greater access to coaches or mentors will have greater perceived and objective career success.

Beyond this small number of specific experiences linked to career success, however, there has been little systematic development of measure of work experience that cut across different jobs. For example, Quinones, et al. (1995) and Tesluk and Jacobs (1998) both propose dimensions through which we can measure experiences (i.e. time and intensity or focus through task, job and organizational experience) but not actual experiences themselves. Both sets of authors also suggest that the influential work experiences are likely to vary across job or different types of work. One literature that has scientifically addressed qualitative difference in work experience is the research on management development (McCall, et al., 1988; McCauley, 1996). This work looks at the on-the-job learning associated with certain aspects of managerial jobs (Davies & Easterby-Smith, 1984; McCauley, et al., 1994). Work experience from this perspective is the informal on-the-job training that serves as the primary source of skill development and learning for managers (Morrison & Hock, 1986).

McCauley, et al. (1994) developed a detailed measure of the different work experiences commonly encountered by managers rated by the amount of on-the-job learning and professional development they provide. The resulting *Development Challenge Profile* contains a large number of facets but groups them into three major “components” of developmental jobs. They divide positive developmental experiences into two of the components: (a) work transitions such as taking a new job, and (b) task-related demands. Tasks-related demands are described as challenges which managers face stemming from the tasks required in the job itself including dealing with change and high-levels of responsibility among others. These experiences in turn were found to be positively related to self-reported learning on the job (McCauley, et al., 1994).

The third major component of developmental jobs they identified were obstacles, such as dealing with a bad boss or insufficient resources (McCall, et al., 1988; McCauley, et al., 1994).

Obstacles are described as “contextual elements of the job that can be experienced by the incumbent as painful and over which the incumbent has little control” (McCauley, et al., 1994, p. 547). In spite of research that finds that adverse job situations provide significant learning opportunities, obstacles are negatively related to self-rated professional development overall and to on-the-job learning (McCauley et al., 1994). That is, while task-related demands and job transitions contribute to managerial development, obstacles are work experiences that have negative impacts on managerial development

This research provides a strong guide for examining the differences in experience across jobs that might contribute to career success with a few important differences. First, job transitions as described by McCauley, et al. (1994) cannot be used to predict career success because job transitions that move an individual up through an organizational hierarchy or increase job responsibilities are part of what defines career success. While receiving a promotion to a higher level of responsibility is likely to result in important professional development, we are more interested in the experiences that help predict that transition. Second, this work focuses on managerial development which may or may not generalize to non-managerial jobs. It is likely that many of experiences identified by McCauley, et al. (1994) are universally developmental, but there may be others that are job specific. Nonetheless, this work suggests that if there are specific task-related demands that are relevant to the professional development of a group of employees, they should help to predict perceived and objective career success for those employees who report having had the work experiences. Similarly, identifying the obstacles to development common to a group of employees should help predict career success for those employees who have been able to avoid them. Therefore we predict:

H5: Controlling for other factors, those who report greater amounts of task-related demands will have greater perceived and objective career success.

H6: Controlling for other factors, those who report fewer experiences of overcoming obstacles will have greater perceived and objective career success.

METHODS

Sample

The data for this study were collected in 2003-04 at a large professional services firm. Data were collected through surveys of both current and former employees matched to archival personnel data where available for current employees. All current and former employees from three large representative offices were surveyed using both web and paper-based surveys. Only professional employees were selected (support staff were excluded) meaning that all of the current and former employees performed very similar jobs. A total of 2,777 current employees were surveyed with 1,662 surveys returned for a response rate of 60%. The decision was made to exclude Partners in the firm from the analyses as their career dynamics and compensation differed markedly from the rest of the sample. Excluding Partners and those with missing data, 981 employees were examined.

We also surveyed all former employees from the same three offices for whom contact information was available. A total of 9,238 mail and web-based surveys were administered and 1,785 were returned, for a response rate of 19.3% percent. Of those, 212 surveys were excluded from the analysis because the responses came from people who worked in a line of business that had been divested by the firm years before the study. For the analyses, former employees who left the firm as Partners, reported that they were not currently working, or who left the firm more than 10 years prior were excluded. These exclusions and missing data brought the final sample of usable responses to 934 former employees.

Analyses

Separate analyses were run for current and former employees. Survey data from current employees was merged with company archival records allowing us to include both performance evaluations and formal training time. Including these two predictors of career success allows us to control for other potential sources of the skills and learning provided through developmental work experience. Data from former employees do not include these two control variables. However, asking former employees about their job experience at the firm and analyzing their career outcomes after leaving allows us to control for the ordering of developmental experiences and career outcomes. It may be that developmental experiences lead to career success, but it may also be the case where better performing employees are given better opportunities which lead to both developmental experiences and career success. In the former employee sample we measure career success in subsequent jobs after the developmental experiences occurred.

Separate sets of hierarchical regressions are run with perceived career satisfaction, compensation, and attainment of a top-level executive job as dependent variables. For the current employee sample, career satisfaction, current compensation, and average annual wage growth are regressed first on a set of control variables and human capital measures in step 1, then five variables representing the frequency that the developmental work experiences occurred are included in step 2, and then the ratings of the impact of the developmental work experiences are entered in step 3. Control variables entered in step one include demographics for gender and minority status, and whether or not the respondent holds a graduate degree and a professional certification. Average performance ranking and total hours of formal training are included in the analyses of current employees. Human capital is measured as years of professional experience (i.e. years of experience within the professional services field), total years of managerial

experience, and years of tenure with the firm. In steps 2 and 3 developmental work experiences entered into the model are learning from change, doing high-profile work, overcoming obstacles, international experience, and having a coach or mentor. In step 2 ratings of the frequency of these experiences were entered and in step 3 ratings of the developmental impact of these experiences were entered. Similar techniques are used for the former employee data with career satisfaction, and current compensation as dependent variables and additional control variable for the number of years since the employee left the firm. Finally, a PROBIT analysis is used to analyze the impact of these developmental experiences on the likelihood of currently having a top-level executive job using the same sets of predictors.

Measures

Career Satisfaction. Perceived career satisfaction was measured using four items from the survey with five-point Likert scale responses. These items include, “I am satisfied with the progress I have made towards meeting my overall career goals,” and “I am satisfied with the success I have achieved in my career.” The four item scale has a reliability of .85.

Compensation. Employee compensation data was drawn from archival personnel records provided by the firm. Current total annual compensation for employees averaged \$74,289 per year. Due to the wide range of compensation among current employees, compensation was *ln* transformed to minimize the impact of outliers at the upper tail of the compensation distribution. Average annual compensation growth was calculated by subtracting the first salary recorded in the personnel records from the employees’ current compensation and dividing by the first salary and the number of years of tenure with the firm. Average annual compensation growth averaged 12% for all current employees. Former employee respondents

were asked through the survey to provide their total annual compensation in their current jobs. Current salaries ranged from \$4,700 to \$4,200,000 with an average of \$206,947. Current compensation was also *ln* transformed to minimize the impact of outliers.

Attaining a Top Level Executive Job. Former employee respondents were asked to provide a number of details about their current jobs. These included job title and the size of the firm in annual sales. Job titles were then coded independently by two researchers as representing a top-level executive job. Titles coded as top-level executives were: President, Vice-President, Director, Controller and CFO. The two sets of coding were generally consistent and differences among coders were resolved through discussion. To ensure that these jobs reflected top-level executives, only those worked for companies with more than \$500 million in sales or assets under management were selected and coded into an indicator variable (1/0).

Demographics. The large number of studies on the career paths of women require that gender be controlled in the model as a dummy variable with females coded as 1 and males coded as zero. Similarly, minority status is controlled using a dummy variable coded 1 for minorities and 0 for non-minorities (Greenhaus, Parasuraman & Wormley, 1990). Additionally, location was controlled by using two dummy variables representing the southwestern and western offices with the eastern office as the referent category. Location was coded by the office where the current employees are based and where the former employees were last employed by the firm. Finally, line of service was also controlled using two dummy variables representing two of the three professional services specialties of the firm.

Average performance rating. The firm provided data on employee performance ratings for the last five years. Employees were rated on a 1 (best) to 5 (worst) on a number of factors and given an overall rating. Overall ratings for the last five years were averaged for use in the

regressions. While the average performance ranking for the sample was 2.06, performance ranking is correlated with tenure and organizational level. Controlling for performance is critical to isolate the impact of the informal developmental experiences on career success. Without controlling for performance, it would be impossible to know whether the findings were due to the best employees being assigned these developmental experiences

Education. Education was controlled using self-reports from respondents. This is important as Hunton and Wier (1996) found that professionals who had received a masters degree had a higher probability to be promoted than professionals with bachelor degrees. Educational attainment for both current and former employees was relatively high with nearly all having a college degree. Education was therefore coded as a dummy variable indicating whether or not the employee or former employee holds a graduate degree. In the samples analyzed, 44% of employees and 46% of former employee reported having a graduate degree. Of those with graduate degrees, the vast majority were masters and the remaining are law degrees and PhD's.

Formal employee development. Tharenou, Latimer and Conroy (1994) found training and development participation related to salary growth for both men and women managers. Archival data on training participation was provided by the firm for all current employees. The company provided a wide range of classroom and online training activities and employees averaged approximately 100 hours of training per year. Classes included orientation training after each promotion, soft skills training, methodology classes such as quality control, updates on laws and regulations, and technical training in computers, finance, and accounting. Professional certification requirements also require employees to earn a certain number of continuing professional education (CPE) credits annually. Data were provided on the number of CPE credits earned by class for each employee. These were converted into hours in training and

summed for 2003. Total hours of formal training ranged from 2.5 hours per employee to over 500 hours for three employees which were recoded to 500 to normalize the distribution. Data on hour of training were not available for former employees.

Years of work experience. Three measures reported by survey respondents were used to capture occupational skills, general managerial skills, and firm-specific skills which have all been shown to be related to compensation and wage growth. These are years of professional experience, years of managerial experience, and years of tenure with the firm. In addition, the number of years since leaving the firm was included for former employees. These provide the base measures of work experience that we seek to supplement with qualitative measures of developmental work experience to test Hypothesis 1.

Developmental work experience. This study takes a qualitative approach to measure developmental work experiences for this sample of professional accountants and consultants. This is because, as Tesluk and Jacobs (1998, p.324) argued that, “Experience involves a continuous flow of events across different aspects of our lives, [and] any systematic development of the construct must start with a specific area of interest.” Similarly, Quinones and colleagues (1995) argue that the specific experiences that comprise the qualitative components of work experience will differ from context to another.

Survey items were developed for this study based on items from McCauley et al. (1994) and a series of series of 63 interviews in which current and former employees were asked to describe key developmental experiences while at the firm. These responses were summarized and written into survey items which were tested using groups of former employees and current managers. In the survey respondents were given descriptions of 12 work experiences and asked both “Have you experienced these?” (Not at all, somewhat, very definitely) and “What was their

impact on your professional development?” (1 “Did not contribute” to 5 “absolutely critical”). For former employees, the questions were modified to ask about the experiences while employed at the firm. Items included “work on complex client assignments,” “work with top management teams or committees in clients,” and “learn from mistakes” among others.

Developmental work experience was then analyzed using a combination of scales and single-item measures drawn from survey items. “Having a coach or mentor” and “working on international assignments” are both used in the regression analyses as single item measures. In addition to these two single item measures, three scales were created with the remaining ten items. Experiences were combined based on exploratory factor analysis of the developmental impact ratings reported in Table 2. The first scale ($\alpha = .68$) was labeled “overcoming obstacles” and contains three items including, “working with difficult staff.” The second two scales represent the task-related challenges defined by McCauley et al. (1994). “High profile work” ($\alpha = .73$) contains three items including, “working on high profile assignments” and “working with top management teams or committees in clients.” The third scale ($\alpha = .61$) labeled “learning from change” includes four items such as “frequently changing type of work.”

Initial analyses indicated that the ratings of time and developmental intensity of the informal developmental experiences were strongly correlated by $r = .43$ and $r = .92$. This is most likely due to a certain degree of recall bias as employees and former employees tended to more easily remember experiences that occurred more frequently or those that carried more developmental impact than others. Due to potential multicollinearity problems created by using these highly correlated scales together in the same regressions, the decision was made to transform the developmental impact ratings using a residual centering procedure (Jong, Ruyter, & Wetzel, 2005; Lance, 1988). The transformation was done by regressing the developmental

impact ratings on the frequency of the experience ratings and saving the residuals. The resulting residuals represent the portion of the developmental impact ratings that is uncorrelated with the frequency of experience ratings. These residuals were then used in the regression in place of the developmental impact ratings. (Jong, et al., 2005).

RESULTS

Descriptive statistics and correlations are presented in Tables 2 and 3. Perceived career satisfaction is examined in Table 4 for both the employee and former employee samples. In step 1 for both samples demographic variables for gender, minority status, business unit, and location are added as controls. Step 1 also controls for human capital by including whether the respondent has a graduate degree, a professional certification, years of professional experience, years of managerial experience and years of tenure with the firm. For employees, controls for average performance ranking and hours of formal training in 2003 are also included. For former employees, an additional control variable was included for the number of years since the former employee left the firm. Similar models are presented in Table 5 for employee compensation, Table 6 for former employee compensation, and Table 7 for job attainment of former employees.

Informal developmental experiences had the strongest relationships with perceived career satisfaction. In step 2 the time spent in five developmental experiences explained an additional 5.7% variance ($p < .001$) in employee career satisfaction. Those employees who reported more frequently learning from changes on the job were significantly more satisfied with their careers. Similarly, those employees who reported spending time with a coach or mentor reported higher career satisfaction. On the other hand, employees who reported spending more time overcoming obstacles reported significantly lower career satisfaction. Entering the developmental impact

ratings of these same experiences in step 3 explained a small but significant 1.9% additional variance in career satisfaction. The developmental impact of learning from changes on the job and working with a coach or mentor both had significant positive relationships with career satisfaction.

Developmental experiences were more weakly related to career satisfaction among former employees. In step 2, developmental experiences were significant ($F = 2.587, p < .001$) and explained 1.6% ($p < .05$) additional variance in career satisfaction. Time spent doing high profile work was the only developmental experience positively related to career satisfaction among former employees. When the perceived impact of the experiences was entered in step 3, the impact of learning from changes on the job was positively related to career satisfaction, and overcoming obstacles was negatively related. For both of these experiences, the impact ratings were significantly related to career satisfaction among former employees independent of the number of times they occurred.

Table 5 details the regression results for current compensation and average annual compensation growth for current employees. Step 1 of the current compensation regression was significant ($F = 97.915, p < .001$) with 58.8% explained variance. Human capital variables were the strongest predictors of current compensation. Employees with graduate degrees and professional certifications earned more. Years of managerial experience and tenure with the firm were both strongly related to compensation. Despite the large variance explained by the control model in step 1, the developmental experiences entered in step 2 explained an additional 2.7% ($p < .001$) variance in total current compensation and two of the five experience measures were significantly related to current compensation. Time spent in high profile work was positively

related to compensation along with time spent in international assignments. The rated developmental impact of international assignments was also significant in step 3.

Developmental work experiences were more strongly related to compensation growth of current employees. In step 1 several general measures of experience predicted annual wage growth of current employees. Years of tenure with the firm was the strongest predictor of annual wage growth along with years of managerial experience. Wage growth was strongly related to average performance ranking and indicated that the compensation of better performing employees grew faster than other employees. Developmental experiences were entered in step 2 and explained an additional 4% ($p < .001$) in average annual compensation growth for current employees. Again, both high profile work and international assignments were significant and positively related to annual compensation growth. Time spent learning from change was also significant, but negatively related to annual compensation growth. None of the impact ratings of the developmental experiences were significant in predicting compensation growth of current employees.

Table 6 presents the regression results for compensation of former employees in their current jobs. The models of current compensation of former employees explained less variance (18.1%) for former employees than current employees. The years of experience variables traditionally used in career success research were all significant including years of managerial experience, years of tenure with the firm and years since leaving the firm. Years of professional experience, however, was negatively related to current compensation indicating that those former employees who left the professional services field for other jobs earned more. In step 2, the addition of time spent in international work assignments was significant and positively related to

current compensation of former employees. None of the impact ratings of developmental experiences were significant in predicting current compensation for former employees.

Table 7 contains the results of PROBIT analyses predicting whether or not former employees attained a top-level executive jobs. The reported coefficients in Table 7 are the transformed odds ratios. This means each coefficient can be interpreted as the change in probability of attaining a top-level job associated with a one-unit increase in the explanatory variable. Although the regressions predicting current top-level jobs of former employees had relatively low predictive power, whether or not former employees reporting having two types of developmental experiences while at their former firms significantly predicted whether or not they had a top-level executive job. Former employees who reported developing from high profile assignments and international assignments were more likely to hold top-level executive positions in companies with at least \$500 million in annual sales. These results are interesting given that that only 81 (8.7%) of former employees reported taking top-level jobs in large companies.

DISCUSSION

These results demonstrate that informal developmental experiences have independent and significant relationships with career satisfaction and objective career success beyond quantitative or time-based measures of experience in this sample of professional service employees.

Analyses of career satisfaction, compensation and job attainment all support Hypotheses 1 and 2 that including qualitative measures of the occurrence and impact of developmental experience in models of career success explains additional variance in career success beyond general measures of work experience alone. Although the influence of the qualitative ratings of how often certain experiences occurred and the perceived impact of those experiences on professional development

was generally much smaller than the more common measures of work experience, this study has shown that informal on-the-job developmental experiences also have a role to play in models of career success.

The results for each of the five experiences examined, however, were mixed. Hypotheses 3 and 4 tested whether international experience and working with a mentor contributed to actual and perceived career success. Similar to previous research, international experience was unrelated to perceived career success, but strongly predicted current compensation and compensation growth for current and former employees. International experience also predicted the likelihood that former employees would attain top-level executive jobs. Of all the work experiences examined, international work experience had the most consistent relationship with objective career success. A positive relationship between working with a coach or mentor and career success was supported among current employees, but not former employees. Hypothesis 4 was partially supported in that having a coach or mentor was positively related to career satisfaction but not current compensation or compensation growth among current employees.

Hypothesis 5 that task related challenges are related to career success was generally support by results from the two scales for “high profile work” and “learning from change.” While learning from change was associated with subjective career success among current employees, high profile work predicted career satisfaction for former employees. This suggests that there may be some unmeasured differences between current and former employee in their careers and the type of work that lead to satisfying careers. In terms of objective career success, high profile work experience was positively related to compensation and compensation growth among current employees and attainment of a high level executive job among former employees. Interestingly, learning from change actually had a negative relationship with compensation

growth for current employees. This suggests that frequently changing work leads to greater career satisfaction among employees even though it has a negative impact on their earnings. Hypothesis 6 that employees who faced obstacles at work would not be as successful in their careers was partially supported as current employees who had to overcome obstacles such as a bad boss reported lower career satisfaction. However, there must have been some positive parts of these experiences because employees who overcame obstacles reported higher compensation growth rates.

These findings make several important contributions to the literature on work experience and career success. First, the findings support Tesluk and Jacobs (1998) prediction that a finer-grained assessment of work experience predicts variance in work outcomes beyond tenure and years of experience measures alone. While such measures should not replace the years of experience measures, additional work is needed to develop a consistent set of measures for qualitative differences in work experience. For example future research should include a study of managers using the more complete set of items from the *DCP* (McCauley, et al., 1994). Pulakos, et al.'s (2000) taxonomy of "adaptive performance" requirements to measure demanding or challenging work experiences might also provide a starting point for a more comprehensive measure of work experience. These findings also indicate that researchers need to consider how employees perceive the impact of experiences in addition to whether or not employees report having certain work experiences. Particularly for subjective outcomes such as career satisfaction, measures of work experience should include the perceived developmental 'density' or impact of work experience (Tesluk and Jacobs, 1998).

Second, these findings show that the career success literature can sustain a larger set of predictor variables that deal with the content of work itself. These results echo those of

McCauley, et al. (1994) that particular assignments and experiences at work are more developmental than others. In other words, some experiences pay off more than others in terms of objective and subjective career success over time. Methodologically, the use of two samples from current employees and former employee helps to establish the sequence of the experiences and career success which is a step towards showing causality. The use of two samples reduces the possibility that the results are due to the fact that higher performing, more successful employees often have greater access to more developmental experiences (Kram, 1995). Inclusion of performance ratings and formal training time in the employee sample shows that informal developmental experience predicts career success independent of formal professional development activities and extra opportunities made available to high performing employees.

This study affirms past research which suggests that informal on-the-job learning is critical for career development (Morrison & Hock, 1986). Further research is needed to better understand whether the informal developmental experiences that are important for professional services employees are generalizable to other occupations and how exactly these specific work experiences translate into individual career development. Future research should investigate whether certain experiences actually develop skills that allow employees to perform better and take on jobs with higher responsibilities and pay, or whether the experiences act as signals to people making hiring and promotion decisions that the individual is competent and is qualified for a higher paying job. This study suggests we need a better understanding of how informal developmental work experiences interact with individual characteristics to influence career choices and attitudes towards work. One distinct limitation of the study is unmeasured variables for individual characteristics such as personality, cognitive ability and motivation. Research has shown that employees who have certain types of personalities (Boudreau, et al. 2001) and work

long hours (Wayne, et al., 1999) tend to earn more and be promoted more often. Other unmeasured individual differences that contribute to perceived and actual career success include locus of control, political skills, and attitudes towards learning on the job (Morrison & Brantner, 1992; Ng, et al., 2005).

Finally, these results are also important companies for seeking to develop talent and for employees who are increasingly being asked to manage their own careers. For companies the results suggest that awareness and management of specific work experiences should be important tools for employee development and career management. This fits with research showing that informal on-the-job learning is far more frequent and important for learning new skills than classroom training (Davies & Esterby-Smith, 1984; McCall, Lombardo & Morrison, 1988; Morrison & Hock, 1986). Once individuals leave school, they depend on their employers to develop new skills and this development takes place primarily through every day work experience and job assignments. For employees seeking to advance their career, these results suggest that seeking out certain developmental work experiences and avoiding certain obstacles may pay off down the road in objective career success and satisfaction.

Table 1: Descriptive Statistics and Factor Analysis of Informal Developmental Experiences

	Factor Loadings ^a		
	High Profile Work $\alpha = .73$	Learning from change $\alpha = .61$	Overcoming Obstacles $\alpha = .68$
Frequently changing type of work or client.		0.690	
Work on complex client assignments.		0.632	
Learn from mistakes.		0.683	
Retool your skills to work with clients in a new industry or line of service.	0.773	0.585	
Business development with clients or potential clients.	0.781		
Work with top management or committees in clients.	0.718		
Work in high profile assignments.			0.700
Work with a difficult boss.			0.771
Deal with insufficient staff to get the work done.			0.751
Manage difficult staff.			

Principal Component Extraction with Varimax Rotation

^a Loadings less than .3 are suppressed

Table 2. Descriptive Statistics and Correlations: Employee Sample

	Mean	s.d.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	
1. Career Satisfaction	3.58	0.71																	
2. Current Comp.	\$74,289	\$42,372	0.00																
3. Annual Comp. Growth	0.12	0.29	0.06	0.45															
4. Female	0.45	0.50	0.01	-0.15	-0.07														
5. Minority	0.21	0.40	-0.06	-0.11	-0.01	0.04													
6. Graduate Degree	0.44	0.50	-0.09	0.19	0.02	0.00	-0.02												
7. Professional Certification	0.44	0.50	0.12	0.22	0.15	-0.02	-0.07	0.17											
8. Yrs. of Professional Exp.	6.37	5.95	-0.04	0.59	0.30	-0.08	-0.10	0.14	0.34										
9. Yrs. of Managerial Exp	4.71	5.33	-0.03	0.71	0.30	-0.12	-0.13	0.14	0.28	0.78									
10. Years of Tenure w/ Firm	4.79	3.61	0.04	0.52	0.22	-0.03	-0.09	0.10	0.36	0.53	0.56								
11. Formal Training Hours	102.35	73.70	0.08	0.00	0.00	0.02	0.00	-0.02	0.15	0.01	0.02	0.04							
12. Performance Rating	2.06	0.65	-0.28	-0.32	-0.19	0.02	0.18	-0.10	-0.31	-0.17	-0.22	-0.32	-0.07						
13. Impact of Learning from Change	4.07	0.66	0.20	0.09	0.07	-0.03	0.06	0.02	0.08	0.07	0.10	0.10	0.07	-0.09					
14. Impact of High Profile Work	3.11	1.28	0.12	0.42	0.20	-0.15	0.00	0.08	0.26	0.35	0.43	0.35	0.11	-0.30	0.34				
15. Impact of Overcoming Obstacles	3.17	1.01	0.08	0.10	0.07	-0.07	0.11	-0.03	0.10	0.05	0.11	0.16	0.03	-0.14	0.28	0.27			
16. Impact of International Experience	1.95	1.49	0.09	0.30	0.20	-0.09	0.04	0.05	0.17	0.24	0.26	0.23	0.05	-0.19	0.20	0.41	0.15		
17. Impact of Coach or Mentor	3.99	1.19	0.23	-0.08	0.02	0.06	0.00	-0.02	0.09	-0.10	-0.13	0.01	0.06	-0.15	0.28	0.12	0.15	0.08	

Table 3. Descriptive Statistics and Correlations: Former employee Sample

	Mean	s.d.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	
1. Career Satisfaction	3.84	0.71																	
2. Current Compensation	\$206,947	\$260,534	0.21																
3. Current Executive	0.03	0.16	0.04	0.08															
4. Executive After Leaving	0.09	0.28	0.02	0.27	0.31														
5. Female	0.28	0.45	0.08	-0.28	-0.04	-0.07													
6. Minority	0.12	0.32	-0.03	-0.12	-0.06	-0.03	0.10												
7. Graduate Degree	0.46	0.50	0.00	0.00	0.04	-0.02	-0.02	0.01											
8. Professional Certification	0.85	0.36	0.03	0.11	0.05	0.04	-0.05	-0.09	-0.05										
9. Yrs of Professional Exp.	18.15	9.99	-0.02	0.23	0.02	0.05	-0.26	-0.12	-0.08	0.21									
10. Yrs of Managerial Exp.	4.94	4.23	0.03	0.16	0.26	0.11	-0.13	-0.10	-0.05	0.01	0.27								
11. Yrs of Tenure w/ Firm	5.33	3.39	0.07	0.17	0.15	0.15	-0.12	-0.12	-0.10	0.14	0.33	0.52							
12. Yrs Since Leaving Firm	13.80	9.19	0.04	0.29	-0.08	0.00	-0.27	-0.09	-0.03	0.18	0.73	-0.06	0.05						
13. Impact of Learning from Change	3.80	0.75	0.13	0.02	0.00	0.03	0.00	0.00	-0.07	0.07	0.03	0.05	0.17	0.04					
14. Impact of High Profile Work	2.94	1.16	0.10	0.12	0.10	0.12	-0.08	-0.03	-0.02	-0.02	-0.01	0.30	0.31	-0.12	0.44				
15. Impact of Overcoming Obstacles	3.19	0.97	0.00	0.00	0.02	0.02	0.07	0.06	-0.07	0.03	0.00	0.04	0.15	-0.05	0.42	0.27			
16. Impact of International Experience	1.64	1.26	0.05	0.11	0.07	0.14	-0.04	0.02	-0.01	-0.03	0.04	0.25	0.27	-0.09	0.14	0.29	0.12		
17. Impact of Coach or Mentor	3.15	1.49	0.07	-0.03	-0.03	-0.01	0.09	0.02	-0.03	0.03	-0.17	0.01	0.05	-0.18	0.31	0.28	0.16	0.07	

Table 4. Regression Analyses for Perceived Career Success

	Career Satisfaction: Employee Sample			Career Satisfaction: Former employee Sample		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
	Beta	Beta	Beta	Beta	Beta	Beta
Female	-0.019	0.002	0.003	0.115 ***	0.126 ***	0.126 ***
Minority	-0.009	-0.016	-0.033	-0.025	-0.028	-0.027
Business Unit #1	-0.053	-0.048	-0.050	0.057	0.059	0.060
Business Unit #2	-0.102 **	-0.120 ***	-0.118 ***	0.032	0.028	0.028
Location #1	0.037	0.027	0.023	-0.044	-0.049	-0.054
Location #2	0.044	0.051	0.049	0.001	-0.008	-0.007
Graduate Degree	-0.084 *	-0.086 **	-0.086 **	-0.017	-0.020	-0.019
Professional Certification	0.036	0.045	0.037	0.029	0.033	0.031
Yrs. of Professional Experience	-0.100	-0.095	-0.097	-0.189 ***	-0.166 **	-0.165 **
Yrs. of Managerial Experience	0.046	0.039	0.055	0.058	0.033	0.035
Yrs. of Tenure w/ Firm	0.027	0.012	0.002	0.196 ***	0.200 ***	0.205 ***
Yrs. Since Leaving (Former employee)				0.080 *	0.027	0.021
Performance Rating (Employees)	-0.302 ***	-0.260 ***	-0.247 ***			
Formal Training Hours (Employees)	0.077 *	0.060 *	0.055			
Time Spent Learning from Change		0.148 ***	0.152 ***		0.050	0.063
Time Spent High Profile Work		0.072	0.060		0.102 *	0.093 *
Time Spent Overcoming Obstacles		-0.119 ***	-0.103 **		0.000	0.003
Time Spent International Experience		0.042	0.040		0.026	0.030
Time Spent Coach or Mentor		0.126 ***	0.126 ***		0.013	0.017
Impact of Learning from Change			0.075 *			0.088 *
Impact of High Profile Work			-0.018			-0.006
Impact of Overcoming Obstacles			0.055			-0.086 *
Impact of International Experience			0.005			0.014
Impact of Coach or Mentor			0.080 *			-0.004
R ²	.133	.189	.208	.033	.049	.059
F	10.768 ***	11.804 ***	10.316 ***	2.410 ***	2.587 ***	2.396 ***
ΔR ²		.057	.018		.016	.010
ΔF		12.706 ***	4.210 ***		2.947 *	1.707
N	929	929	929	868	868	868

* $p < .05$

** $p < .01$

*** $p < .001$

Table 5. Regression Analyses for Compensation: Employee Sample

	Current Compensation: Employee Sample			Compensation Growth: Employee Sample		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
	Beta	Beta	Beta	Beta	Beta	Beta
Female	-0.106 ***	-0.081 ***	-0.081 ***	-0.067 *	-0.043	-0.043
Minority	0.005	-0.004	-0.007	0.066 *	0.059 *	0.055 *
Business Unit #1	0.096 ***	0.103 ***	0.106 ***	-0.031	-0.019	-0.033
Business Unit #2	0.132 ***	0.118 ***	0.117 ***	0.032	0.027	0.017
Location #1	-0.070 **	-0.067 **	-0.068 **	-0.066 *	-0.060 *	-0.059 *
Location #2	-0.002	-0.008	-0.010	-0.022	-0.030	-0.028
Graduate Degree	0.084 ***	0.084 ***	0.081 ***	-0.051	-0.051	-0.052
Professional Certification	0.036	0.021	0.024	0.108 ***	0.085 **	0.086 **
Yrs. of Professional Experience	0.068	0.059	0.054	0.054	0.052	0.053
Yrs. of Managerial Experience	0.399 ***	0.334 ***	0.332 ***	0.083 *	-0.006	-0.013
Yrs. of Tenure w/ Firm	0.209 ***	0.190 ***	0.188 ***	0.400 ***	0.372 ***	0.370 ***
Performance Rating (Employees)	-0.176 ***	-0.138 ***	-0.138 ***	-0.264 ***	-0.213 ***	-0.218 ***
Formal Training Hours (Employees)	0.011	0.003	0.001	0.067 *	0.059 *	0.053 *
Time Spent Learning from Change		-0.014	-0.011		-0.061 *	-0.053
Time Spent High Profile Work		0.142 ***	0.139 ***		0.162 ***	0.168 ***
Time Spent Overcoming Obstacles		-0.006	-0.008		0.082 **	0.079 **
Time Spent International Experience		0.104 ***	0.104 ***		0.114 ***	0.114 ***
Time Spent Coach or Mentor		-0.040	-0.037		-0.017	-0.033
Impact of Learning from Change			0.009			0.025
Impact of High Profile Work			-0.035			0.042
Impact of Overcoming Obstacles			-0.008			0.000
Impact of International Experience			0.062 **			0.008
Impact of Coach or Mentor			0.010			-0.052
R ²	.588	.615	.618	.493	.533	.538
F	97.915 ***	78.674 ***	62.137 ***	56.793 ***	47.828 ***	37.88 ***
Δ R ²		.027	.003		.040	.005
Δ F		12.393 ***	1618 N.S.		12.922 ***	1.516 N.S
N	905	905	905	772	772	772

* p < .05

** p < .01

*** p < .001

Table 6. Regression Analyses for Compensation: Former Employee Sample

	Current Compensation: Former Employee Sample		
	Step 1	Step 2	Step 3
	Beta	Beta	Beta
Female	-0.188 ***	-0.183 ***	-0.179 ***
Minority	-0.086 *	-0.094 **	-0.094 **
Business Unit #1	0.035	0.033	0.033
Business Unit #2	0.006	0.011	0.010
Location #1	-0.050	-0.049	-0.043
Location #2	0.050	0.053	0.056
Graduate Degree	0.016	0.013	0.011
Professional Certification	0.029	0.036	0.035
Yrs. of Professional Experience	-0.247 ***	-0.244 ***	-0.245 ***
Yrs. of Managerial Experience	0.137 ***	0.112 **	0.110 **
Yrs. of Tenure w/ Firm	0.390 ***	0.415 ***	0.422 ***
Yrs. Since Leaving (Former employee)	0.135 ***	0.101 *	0.103 *
Time Spent Learning from Change		-0.067	-0.066
Time Spent High Profile Work		0.066	0.072
Time Spent Overcoming Obstacles		0.025	0.026
Time Spent International Experience		0.081 *	0.082 *
Time Spent Coach or Mentor		0.028	0.031
Impact of Learning from Change			-0.025
Impact of High Profile Work			0.044
Impact of Overcoming Obstacles			-0.021
Impact of International Experience			0.008
Impact of Coach or Mentor			-0.007
R ²	.180	.192	.194
F	15.768 ***	11.234 ***	8.747 ***
Δ R ²		.012	.002
Δ F		2.437 ***	.428 N.S.
N	797	797	797

* $p < .05$

** $p < .01$

*** $p < .001$

Table 7. PROBIT Analyses for Attaining a Top Executive Level Job: Former employee Sample

	Top Level Job for Current Job		
	Step 1 Exp(B)	Step 2 Exp(B)	Step 3 Exp(B)
Female	-.034	-.030	-.030
Minority	-.008	-.013	-.013
Business Unit #1	-.050	-.050	-.054 ***
Business Unit #2	-.046	-.040 *	-.035
Location #1	-.003 *	-.004	.010
Location #2	.011	.008	.011
Graduate Degree	-.001	-.004	.004
Professional Certification	.018	.026	.024
Yrs. of Professional Experience	-.001	-.001	-.001
Yrs. of Managerial Experience	-.001	.001	.000
Yrs. of Tenure w/ Firm	.010 ***	.006 *	-.001
Yrs. Since Leaving (Former employee)		-.001	.006
Time Spent Learning from Change		-.011	.017
Time Spent High Profile Work		.034 *	.038 *
Time Spent Overcoming Obstacles		-.011	-.013
Time Spent International Experience		.031 **	.031 **
Time Spent Coach or Mentor		-.008	-.006
Impact of Learning from Change			.012
Impact of High Profile Work			.011
Impact of Overcoming Obstacles			-.001
Impact of International Experience			-.001
Impact of Coach or Mentor			-.010
Log likelihood	-257.885	-248.575	-235.253
χ^2	36.69 ***	49.70 ***	49.16 ***
Pseudo R ²	.066	.090	.094
N	970	938	892

* $p < .05$

** $p < .01$

*** $p < .001$

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