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# Assessing the role of internships in the career-oriented employment of graduating college students

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*Gerard Callanan and  
Cynthia Benzing*

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## The authors

Gerard Callanan is Associate Professor and  
Cynthia Benzing is Professor, both at West Chester  
University, West Chester, Pennsylvania, USA.

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## Abstract

This study assessed the relationship between the completion of an internship assignment prior to graduation and subsequent employment in a career-oriented job after graduation. Subjects for the study were 163 seniors graduating with a business degree from a large public university in the mid-Atlantic region of the USA. Results showed that the completion of an internship assignment was linked with finding career-oriented employment, but was not related to a higher level of confidence over personal fit with the position that was selected. The article presents implications for future research and discusses practical issues related to the use of internships and other forms of anticipatory socialization in the career management activities of college students.

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## Introduction

Existing theories of career management posit that the attainment of individual success and satisfaction is based on finding a job that is consistent with one's personal characteristics and expectations (Feldman, 2002; Greenhaus *et al.*, 2000). It is believed that career success and fulfillment are a function of the individual optimizing the "fit" between their personal characteristics and their work environment. Prior research supports this conclusion, with past studies showing that when their work and organizational experiences are in line with their needs, interests, values, and life-style preferences, people are more satisfied with their career choices and jobs (Bretz and Judge, 1994; DeFruyt, 2002; Ton and Hansen, 2001), have higher performance (Muchinsky and Monahan, 1987; Tziner *et al.*, 2002), have more favorable work attitudes (Cable and Judge, 1996), show reduced stress and burnout (Meir *et al.*, 1995), and have greater job stability in terms of tenure (Bretz and Judge, 1994). Tinsley (2000), in an extensive review of person-environment (P-E) research over the past five decades, concluded that P-E models are a valid and efficacious tool in understanding how people make career choices and manage their careers to maximize success and satisfaction.

In order for one to achieve a fit or consistency with the work environment, it is necessary to have awareness of one's personal characteristics and expectations as well as an understanding of various work environments (Greenhaus *et al.*, 2000). In theory, by taking this awareness of the person, as represented by interests, abilities, personality and life-style preferences, and comparing it with an understanding of various work environments, as represented by job responsibilities and demands, one should be able to determine whether a fit is possible. This awareness and understanding is facilitated in several ways, including the conduct of formal and informal self- and environmental-exploration activities, vicarious life and work experiences, and consultations with family, friends, and co-workers (Greenhaus *et al.*, 2000).

For college students, one of the primary mechanisms for the conduct of self- and environmental- exploration is the completion of



temporary “anticipatory socialization” work assignments. These assignments, which include internships, cooperative education programs, and apprenticeships, are designed to help students develop an accurate self-concept, gain a realistic understanding of various career fields and organizational environments, and allow a check for fit between individual characteristics and the demands of different jobs (Greenhaus *et al.*, 2000).

While the terms internship and cooperative education assignment are often seen as interchangeable, there are subtle differences between them (Gault *et al.*, 2000). For example, students in a cooperative education program usually alternate between a period of full-time academic study and a period of paid, full-time cooperative employment, with each period completed in a six-month block. Internship assignments, which can be paid or unpaid, typically involve a specified number of work hours per week (DiLorenzo-Aiss and Mathisen, 1996) and can be taken at the student’s discretion, but normally during the junior or senior year of study. Students completing an internship usually receive college credit for their efforts.

Over the past 20 years, internships and other forms of anticipatory socialization have become increasingly popular as a way to bridge the transition from the classroom to the work world. Presently, three out of four college students complete some form of an internship or cooperative education assignment, up markedly from just one in 36 students completing such assignments in 1980 (Coco, 2000).

Hiring organizations also benefit from anticipatory socialization programs. As both Coco (2000) and Hodgson (1999) point out, internships and related programs provide a “risk-free” method for companies to evaluate prospective hires and they provide a steady stream of motivated human resources who are comparatively less expensive than full-time staff. Further, anticipatory socialization practices can help organizations gain a positive recruiting image and ensure an available pool of talented newcomers (Greenhaus *et al.*, 2000). And they can play a secondary recruiting role, since students returning to school can “spread the word” to other students that a particular

organization is a favorable place at which to work (Pianko, 1996).

The wide acceptance of anticipatory socialization programs by students, universities, and employing organizations leads to several questions from a career management standpoint. First, do internships and related programs result in improved career management and decision-making outcomes for college students entering their first professional position? Second, does the participation in these programs, prior to graduation, lead to greater career success after graduation? Third, from an instrumental standpoint, do internships allow for improved chances of finding career-oriented employment after graduation? And, finally, for those students who have secured a career-oriented position, does the completion of an internship assignment produce a comparatively greater degree of comfort and certainty over the selected position? As discussed below, prior research has attempted to answer some, but not all of these questions.

### Past research on internships

Research assessment of internships and related programs has expanded over the past several years, reflecting greater interest both in the design of these programs as well as the consequences for individuals and organizations. In general, prior research has viewed internships as a positive developmental experience for college students, having found linkages with a number of favorable outcomes. For example, completion of internships and cooperative education assignments have been found to improve individual career decision-making self-efficacy, strengthen the crystallization of vocational self-concept (Brooks *et al.*, 1995; Taylor, 1988), and allow for the acquisition of job relevant skills (Garavan and Murphy, 2001).

In terms of post-internship effects, prior research has identified such subsequent outcomes as improved perceptions of job fit in the early career (Richards, 1984), greater objective success in the early career (Gault *et al.*, 2000), greater job stability in the early career (Richards, 1984), reduced

feelings of entry or reality shock on full-time employment (Paulson and Baker, 1999; Taylor, 1988), higher job satisfaction (Gault *et al.*, 2000), and a greater degree of ambition (Pedro, 1984).

One area where additional research is necessary, concerns the instrumental value of internships. More precisely, prior research has paid only limited attention to the question of whether the completion of an internship or related program actually helps students obtain full-time employment at graduation (Knouse *et al.*, 1999). Based on the belief that internships help students in the process of conducting self- and environmental-exploration, and that this greater awareness allows more informed career decision making, it is expected that those completing an internship would have a comparative advantage in gaining full-time employment at graduation. In addition, internships provide job experiences that are valued by hiring organizations and should provide the student with greater self-confidence in securing full-time employment (Knouse *et al.*, 1999). Given these expectations, the first hypothesis (*H1*) of this study proposes that students who have completed an internship assignment during their undergraduate years will show a significantly higher acceptance rate of career-oriented employment at graduation than those students who have not completed an internship.

Beyond the instrumental aspects of internships, it is also believed that these assignments provide students with a greater degree of confidence over their selection, since it is believed that the internship experience gives them the opportunity to develop a more accurate self-concept and test for a fit between their own individual characteristics and the demands of the real-world work environment. Accordingly, the second hypothesis (*H2*) of this study proposes that students who have accepted a full-time, career-oriented position and who have completed an internship will report a comparatively greater degree of confidence in their "fit" with the selection than those students who have accepted a full-time position, but who have not completed an internship.

## Methodology

Subjects for this study were 163 seniors graduating with undergraduate business degrees from a large, state university located in the mid-Atlantic region of the USA during 2002. A survey of the graduating seniors was used to collect data on a number of variables, including satisfaction with various aspects of their educational experience, their career status, and other background factors. Subjects represented four different majors:

- (1) economics/finance ( $n = 32$ );
- (2) marketing ( $n = 64$ );
- (3) accounting ( $n = 26$ ); and
- (4) management ( $n = 41$ ).

Survey respondents were asked questions related to their completion of an internship, usage of the campus career center, level of interviewing, and level of confidence that their selected job was a "good" fit. The relevant questions and the variables that represent them are shown in the Appendix. The correlations between pairs of variables were calculated to see if the direction of the correlations supported the hypotheses. Given the first hypothesis, one would expect a significant positive correlation between the completion of an internship and the acceptance of a post-graduation, career-oriented job. With the second hypothesis, it is expected that a significant positive correlation would be detected between completing an internship and confidence that the position selected is a good personal fit.

In addition to assessment of the correlations, logistic regression was used to further test both hypotheses and control for other previously uncontrolled variables. In a test of *H1*, the first regression analysis determined whether completion of an internship is significantly and positively related to securing a post-graduation job. *H2* was tested using a similar regression analysis with confidence over one's personal fit with the selected position as the dependent variable for all subjects who had secured a career-oriented job at graduation ( $n = 64$ ).

For the statistical test of both hypotheses, three other independent variables – number of visits to the university's career center, number of interviews taken, and age – were included to ensure that significant effects were not missed.

One might reasonably expect that students who visit the university's career center, have more interviews, are older and are more likely to have a job at graduation. One might also expect that these same variables could lead to more confidence in the perception of personal fit with the first career-oriented job after graduation.

## Results

Table I provides a profile of sample including various demographic and background factors.

To provide perspective on *H1*, Table II shows data on the number of students who had and had not completed an internship, and the associated results as to whether a full-time post-graduation position had been secured. Of the 88 students who had completed an internship, 51 had secured a post-graduation position, while the other 37 had not. For the 75 who had not completed an internship, only 13

**Table III** Profile on degree of confidence over selected position ( $n = 64$ )

	Job at graduation			
	Low or moderate confidence over fit		High confidence over fit	
	<i>n</i>	(%)	<i>n</i>	(%)
Completed internship ( $n = 51$ )	29	(57)	22	(43)
Did not complete internship ( $n = 13$ )	6	(46)	7	(54)

had secured a post-graduation position, while 62 had not.

To provide perspective on *H2*, Table III shows data on those students who had secured a post-graduation position, whether they had completed an internship, and the associated degree of perceived confidence over their personal fit with the selected position. Of the 51 students who had secured a post-graduation position and had completed an internship, 29 had low or moderate confidence over the perceived fit, while 22 indicated high confidence. For the 13 who had secured a post-graduation position and had not completed an internship, six had low or moderate confidence over the perceived fit, while seven indicated high confidence.

Table IV shows the correlations for the variables being assessed. As hypothesized, there was a significant positive correlation (0.335) between completion of an internship and securing a job. However, the second hypothesis was not supported. The correlation between completion of an internship and confidence in personal fit with the job was not significant.

The results of the regression analyses are shown in Tables V and VI. While the first hypothesis was supported, the second hypothesis was not. With respect to *H1*, the internship variable was significantly related to securing a job. In addition, the odds ratio indicated that the odds of securing a job were 4.43 times higher for those who completed an internship than for those who did not. Also, as shown in Table V, the only other variable with a significant effect on the securing of a job was the total number of interviews variable. Neither the number of visits to the career center nor one's age was significantly related to the securing of a post-graduation position.

The results of regression analysis to test *H2* did not provide sufficient statistical evidence to

**Table I** Characteristics of the sample ( $n = 163$ )

	<i>n</i>	(%)
<b>Gender (average age: 23.04 years)</b>		
Male	88	(54)
Female	75	(46)
<b>Major</b>		
Accounting	26	(16)
Economics/Finance	32	(20)
Management	41	(25)
Marketing	64	(39)
<b>Number of interviews before graduation</b>		
0	127	(78)
1-5	23	(14)
6-10	11	(7)
11-16	2	(1)
<b>Students who visited career center</b>		
Yes	61	(38)
No	102	(62)

**Table II** Profile on internship completion and job at graduation ( $n = 163$ )

	Job at graduation		No job at graduation	
	<i>n</i>	(%)	<i>n</i>	(%)
Completed an internship				
Yes ( $n = 88$ )	51	(58)	37	(42)
No ( $n = 75$ )	13	(17)	62	(83)

**Table IV** Correlations between paired variables (*p*-value appears in parentheses)

	Job	Fit	Intern	Center	Interviews
Fit	0.898* (0.000)				
Intern	0.335* (0.000)	-0.108 (0.394)			
Center	0.004 (0.961)	-0.028 (0.827)	0.115 (0.134)		
Interviews	0.208* (0.006)	0.054 (0.672)	0.121 (0.116)	0.459* (0.000)	
Age	0.114 (0.143)	0.040 (0.757)	-0.084 (0.280)	-0.028 (0.721)	0.040 (0.612)

Note: \* Indicates significance at the 99 per cent level

**Table V** Results of logistic regression: job = *f*(intern, center, interview, age) (64 had jobs; 99 had not)

Predictor	Coefficient	SE Coefficient	<i>p</i> -Value	Odds ratio
Intern	1.4875**	0.3703	0.000	4.43
Center	-0.7101	0.4206	0.091	0.49
Interview	0.1845*	0.0756	0.015	1.20
Age	0.0925	0.0550	0.092	1.10

Notes: Log-likelihood = -96.535, *G* = 27.322 *p*-value = 0.000; Goodness-of-fit tests: Hosmer-Lemeshow Chi-square = 2.819, *df* = 7, *p* = 0.901; Measures of association: concordant pairs = 70.7 per cent, discordant pairs = 24.2 per cent; Goodman-Kruskal gamma = 0.49; \* indicates significance at the 95 per cent level; \*\* indicates significance at the 99 per cent level

**Table VI** Results of logistic regression: fit = *f*(intern, center, interview, age) (29 had high confidence, 35 had low or moderate confidence)

Predictor	Coefficient	SE Coefficient	<i>p</i> -Value	Odds ratio
Intern	-0.4661	1.840	0.445	0.63
Center	-0.2271	0.6110	0.747	0.80
Interview	0.0891	0.1000	0.372	1.09
Age	0.0131	0.0719	0.856	1.01

Notes: Log-likelihood = -40.794, *G* = 1.523, *p*-value = 0.823; Goodness-of-fit tests: Hosmer-Lemeshow Chi-square = 21.309, *df* = 7, *p* = 0.003; Measures of Association: concordant pairs = 53.2 per cent, discordant pairs = 43.5 per cent; Goodman-Kruskal gamma = 0.10

support the hypothesis. Based on the results shown in Table VI, there was no strong evidence that any of the predictors had a significant influence on the perceived degree of personal fit with the selected job. Whether a student did an internship or not appeared to have no significant effect on whether the student had confidence in the suitability of his/her first post-graduate job.

## Discussion

In support of the first hypothesis, the results of the statistical analysis indicate that the completion of an internship assignment during the undergraduate years is a useful strategy in helping secure a career-oriented position for after graduation. Both the correlation analysis

and the regression analysis point to the completion of an internship as the most significant variable in terms of influence on the ability to obtain a career-oriented position. This finding is consistent with models of career management that propose a link between an awareness of oneself and the work environment and the ability to commit to a particular career goal or work position (Greenhaus *et al.*, 2000). Internships are an established mechanism to enhance self- and environmental-awareness (Brooks *et al.*, 1995; Garavan and Murphy, 2001). It should not be surprising, therefore, that the completion of an internship was linked with an improved ability to secure a career-oriented position. This finding is in line with past research indicating the favorable outcomes associated with internships and other forms of anticipatory socialization (Brooks *et al.*,

1995; Garavan and Murphy, 2001; Knouse *et al.*, 1999; Taylor, 1988).

The second hypothesis, proposing a link between the completion of an internship and an enhanced perception of a personal fit with the selected job, was not supported by the statistical analysis. In contrast to what was expected, students who had completed an internship and those who had not did not show a discernible difference in their perceived degree of fit with the job that was selected.

The lack of support for this hypothesis could be related to the nature of the subjects in this study. More precisely, as graduating seniors with a mean age of 23, the subjects in this study would likely be brimming with confidence as they move from the role of student to the role of an employed adult. It can be speculated that this naturally high level of confidence reflects a belief that one will achieve a personal fit with a particular job regardless of whether the prospective fit has been tested through an internship or related program. In other words, confidence over personal fit would be at a high level even for those seniors who are graduating without the benefit of an internship assignment, since work-related information would not be available to confirm or disconfirm the degree of personal fit with a work position.

### **Implications for future research**

This article highlights several areas where additional research could prove insightful. First, since the instrumental value of internships and related programs has received only limited empirical attention, future research should continue to examine the effects of these assignments on career-related outcomes, not only at the time of graduation, but at periodic intervals after graduation (Gault *et al.*, 2000).

Second, future research should examine the effects of anticipatory socialization programs on a wider array of career-related outcome variables. As indicated previously, prior research has examined the effects of these programs on a relatively narrow range of outcome factors. Future research could examine the effect of anticipatory socialization programs on such subsequent outcomes as career mobility, work motivation, organizational commitment, life stress, and others. In addition, although the present study

did not show a higher level of perceived fit with the chosen occupation at the time of graduation for those completing an internship, future research could assess the degree of perceived fit with the chosen occupation one or two years after graduation. It could be expected that the differential effects of internships on perceived fit might only surface after some reasonable amount of time on the job.

Third, since the subjects in the present study were strictly business majors, it is important for future research to determine whether the role of internships in gaining a career-oriented position can be generalized to other types of graduates beyond business majors. Finally, it is important for future research to look more deeply at internships from an employer perspective. Internships should be examined from a job content and challenge standpoint to determine which approaches allow for the greatest degree of job preparedness as graduates enter their first career-oriented positions. Through this additional insight, employers could then adjust their programs to better meet the learning and career management needs of their interns and in the process develop more well-rounded and productive employees.

### **Practical issues related to career management**

In today's world, the key to successful career management is the development of a clear self-identity, and then the setting of career goals and the pursuit of career strategies that are consistent with that identity (Callanan, 2003). Internships and related programs have proven to be an invaluable career management tool for college students in the development of a clear self-identity and in the setting of career goals. Further, as this research shows, internships have practical worth since they provide an advantage in securing career-oriented employment at the time of graduation. For all of these reasons, universities should wholeheartedly support internship and cooperative education programs as a service to their students and they should encourage all students who are able to pursue anticipatory socialization assignments.

For students themselves, internships should be used as an important tool in their career management process. Parents and others in the

social network should encourage students to participate in these programs in recognition of their instrumental and self-development value. Finally, organizations should continue to offer internships as a means to ensure a steady stream of motivated employees and to help students gain a better understanding of themselves and the ever more complex world of work.

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## Appendix

Table A1 Questions and variables

Question	Variable name	Measure
Did you complete an internship during your undergraduate studies?	Intern	0 = no; 1 = yes
Have you secured employment (career-oriented) for after graduation?	Job	0 = no; 1 = yes
How confident are you that the employment position you have selected is good fit for you?	Fit	0 = job with low or moderate confidence 1 = job with high confidence
Did you use the University Career Center in your job search?	Center	0 = no; 1 = yes
How many interviews did you have at the University Career Center?	Interview	Number of interviews
Age: _____ years of age	Age	Number of years