

USING EXTRACURRICULAR ACTIVITY AS AN INDICATOR OF INTERPERSONAL SKILL: PRUDENT EVALUATION OR RECRUITING MALPRACTICE?

Robert S. Rubin, William H. Bommer, and Timothy T. Baldwin

There is widespread agreement that success in organizations requires more than high intellect. Thus, college recruiters commonly examine job candidates' extracurricular activities in search of "well-rounded," emotionally intelligent, and interpersonally skilled students. Intuitively, extracurricular activities seem like valuable student experiences; however, research evidence is sparse, suggesting far more questions than answers. Is participation in extracurricular activity truly linked to interpersonal skill performance? Does leadership experience make a difference? Do extracurricular experiences yield higher skill development? Six hundred eighteen business students and the relationship of their extracurricular involvement to four interpersonal skills were examined. Significant relationships were found and recruitment implications are discussed. © 2002 Wiley Periodicals, Inc.

Over a century ago Mark Twain noted, "I never let my schooling interfere with my education." Twain's wry observation lives on, manifested in perceptions of corporate recruiters that course grades and coursework are often inadequate indicators of the skills needed for success in today's business reality. Surveys of recruiters regarding the characteristics they most value in graduating students consistently show interpersonal and/or leadership skills at the very top of the list (cf., Eberhardt, McGee, & Moser, 1997). In addition, an explosion of recent attention to concepts such as emotional and successful intelligence (cf., Goleman, 1995; Mayer, Caruso, & Salovey, 2000; Sternberg, 1999) has further fueled the notion that there is more to "real world" success than cognitive and/or academic ability. Moreover, interpersonal skills

are likely to demand increased attention by organizations as teams become a standard mode of operation (Cascio, 1995).

While there is growing consensus regarding the primacy of interpersonal skills, there is less agreement on the antecedents of such skills. One intuitive notion is that extracurricular activities are a place where students look to utilize, and perhaps refine and develop, their interpersonal skills. Career counselors, student advisors and recruiters commonly impress on students the importance of being "well-rounded" and the dangers of being perceived by recruiters as one dimensional or just "book smart." As one director of university internship programs commented, "I'd take a solid C+ marketing graduate who can shoot from the hip and is comfortable with people, and has a good work ethic, over a 3.5

Correspondence to: Robert S. Rubin, Department of Management, DePaul University, 1 East Jackson Boulevard, Chicago, IL 60604; telephone: 312-362-8783; e-mail: rrubin@depaul.edu

...the belief that extracurricular activity is a primary development context for important skills is not universally shared.

marketing graduate who is humorless and lacks common sense" (Felson, 2001, p. 15). Many corporate recruiters specifically target students who supplement their academic achievement with involvement as leaders of organizations and/or athletics, believing that they bring a more attractive profile than those with only exceptional academic performance (Cariaga, 1998).

The belief in the importance of extracurricular involvement even pervades the most academically respected institutions. For example, in a recent description of the University of Chicago's undergraduate admissions procedures (McCormick, 1999) it was noted that the university could annually fill the incoming freshman class entirely with Valedictorians. However, the university explicitly chooses *not* to do so. Instead, the University of Chicago values students who possess something more than high academic performance. This frequently takes the form of extracurricular involvement or other non-academic participation.

At the same time, the belief that extracurricular activity is a primary development context for important skills is *not* universally shared. First, there is a long history of educational research questioning whether extracurricular activities have any value at all (cf., Coleman, 1959). Some feel that extracurricular activities may serve no more than a social function and de-emphasize, or even subvert, more critical academic work (Gose, 1996). Others are concerned about devaluing bright, committed students who simply are not "joiners." Still others believe that out-of-class experiences serve a valuable social and personal growth function but hold no primacy over coursework, team projects, and assignments in facilitating the development of interpersonal skills (Kantrovitz, 2002).

Second, it may be that extracurricular activities attract those students who already have developed superior levels of interpersonal skill—and thus such activities are not necessarily contexts for the development of skills. Some level of self-selection might be expected in that students with existing skills are more likely to feel comfortable and gain positive reinforcement in extracurricular contexts.

The present study was designed to investigate three fundamental questions: (1) Do those students involved in extracurricular activity demonstrate better interpersonal skills? (2) Do students who hold leadership positions demonstrate stronger interpersonal skills than those who are only members? (3) Is extracurricular involvement a meaningful indicator of interpersonal skills even when tested together with other known performance predictors such as GPA, cognitive ability, personality, and affect? One of the constraints to research in this area has been the difficulty of obtaining consistent and systematic behavioral demonstrations of student interpersonal skills. This study takes advantage of a behavioral assessment center which enables reliable measures of interpersonal skills across a large sample of business students.

The study of life experiences such as extracurricular activities and individual performance/success has a long history in the behavioral sciences in the form of biographical data. Rich literature shows that biodata are among the most effective predictors of job performance (Asher, 1972; Hunter & Hunter, 1984; Owens, 1976). Presumably, biodata are effective predictors because prior experiences shape future behaviors and experiences (Owens & Shoenfeldt, 1979). Although many types of biodata instruments exist (cf., Stokes, Mumford, & Owens, 1994), the most widely used at the college recruitment level are resumés and applications. Although resumés are not standardized, validated instruments like job-specific biodata, they do represent a culmination of at least the last four years of a student's school and work experiences.

Unfortunately, there is little direct empirical research to inform the development of research hypotheses focused on the extracurricular activities of students and interpersonal skills. Though not focused specifically on interpersonal skill-development outcomes, one important study does provide support for the benefits of extracurricular involvement. Building upon the seminal studies of the AT&T managerial assessment center, Howard (1986) found significant relationships between extracurricular involvement and several career attainment and performance variables.

Specifically, she found significant correlations between extracurricular activities and administrative and interpersonal abilities, as well as motivation (e.g., need for advancement). Further, she reported moderate correlations ($r = .16-.20$) for general managerial effectiveness. Interestingly, Howard found a nonsignificant relationship between extracurricular activities and intellectual abilities. This finding may lend credence to the notion that extracurricular activities provide distinct opportunities for interpersonal and/or administrative growth.

Any casual observer of campus life would acknowledge that “extracurricular involvement” is an overly general descriptor and, clearly, not all activities are of equal import. Howard (1986) found that participation in school government, the school paper, and debating teams were most likely to relate to meaningful performance criteria, while participation in athletic activities showed no such relationships. In a review of the relationships between out-of-class experiences and academic performance, Terenzini, Pascarella, and Blimling (1999) found that memberships in fraternities and sororities had an overall significant negative effect on academic performance. Thus, the extant literature suggests differences in the outcomes associated with various forms of extracurricular involvement. We acknowledge these mixed findings by categorizing extracurricular involvement as did past researchers. To simplify the presentation, however, we posit just one omnibus hypothesis (predicting positive effects for all categories) but which will allow for the detection of any differences across involvement categories.

Hypothesis 1: Students who are members of on-campus clubs/organizations, fraternities/sororities, and/or sports teams will exhibit superior interpersonal skills (i.e., decision-making, teamwork, communication, initiative) compared to students who are not members in the aforementioned groups.

One intuitively compelling dimension of extracurricular involvement is whether the involvement included holding an officer/leadership position (i.e., chair, vice president, president). It seems straightforward that those who occupy leadership roles

will have additional opportunities (and pressure) to develop their interpersonal skills beyond that of members who do not occupy leadership roles. In addition, an organizational leadership role necessitates the display of a higher level of interpersonal skills to be successful and to remain in the position. Thus, although there are exceptions, individuals in leadership positions have both increased developmental opportunity and a structural mandate placed upon their exhibition of higher quality interpersonal skills.

Consistent with the above rationale, Boone, Kurtz, and Fleenor (1988) found that those who became CEOs had considerably higher involvement in extracurricular activity during their college years than did other students. Specifically, the authors surveyed CEOs from 243 of the 800 largest industrial corporations in the United States. They found that 70% of the CEOs had held at least one office in a club or organization during college. Further, biodata research suggests that holding leadership roles and gaining leadership experience at work and social settings are important in the prediction of job performance (Gandy, Dye, & MacLane, 1994; Glennon, Albright, & Owens, 1961).

In short, we believe that there is sufficient reason to argue that those holding officer or other leadership positions (i.e., chairs, vice presidents, presidents, athletic captains) will demonstrate stronger interpersonal skills than those not in leadership positions. We therefore hypothesize:

Hypothesis 2: Students who hold leadership positions within extracurricular activities will display better interpersonal skills than students who do not hold officer positions.

Over the past 50 years, a great deal of evidence has accumulated pointing to the significant relationship between cognitive ability and multiple measures of performance including leadership ability (Bass, 1974), training success (Ree & Earles, 1991), group effectiveness (Csoka, 1974), and assessment center performance (Gaugler, Rosenthal, Thornton, & Bentson, 1987; Klimoski & Brickner, 1987). In addition, there has been an explosion in interest devoted to affective

Any casual observer of campus life would acknowledge that “extracurricular involvement” is an overly general descriptor and, clearly, not all activities are of equal import.

In short, if extracurricular activities are not predictive of interpersonal skill when tested among a menu of known predictors, then no matter how conceptually appealing, extracurricular activities hold little utility for recruiting evaluation decisions.

research constructs such as positive and negative affect (e.g., George & Brief, 1992; Watson & Tellegan, 1999; Wright & Staw, 1999) and personality constructs such as conscientiousness (Barrick & Mount, 1993; Goldberg, 1992).

Although there has been increased research interest in the predictors previously discussed, college recruiters generally lack access and the resources to utilize these indicators in an initial recruiting context. More specifically, a more common situation facing the college recruiter is being presented with a number of resumés, which only provide information regarding technical skills and academic performance, when the recruiter is actually also interested in interpersonal skills. Moreover, the resumé information that may be desirable and available (e.g., grade-point average) is often severely restricted in range due to pre-interview screening decisions (i.e., minimum GPAs, major, etc.). Studies asking recruiters to articulate what they are looking for in resumé screening consistently show criteria such as communication skills, grades, and intelligence (Campion, 1978; Posner, 1981). Resumés, however, are generally absent of objective measures of intelligence and direct evidence of interpersonal skills. Nevertheless, research from the biodata literature shows that recruiters often *infer* from resumés attributes such as leadership and abilities such as intelligence (Brown & Campion, 1994). Indeed, these types of inferences on the part of recruiters may be warranted as some research has demonstrated relationships between biodata and ability tests (Brown & Campion, 1994; Pannone, 1984). Therefore, it seems reasonable to assume that recruiters also make inferences regarding underlying attributes and abilities from extracurricular activities information presented on resumés. Whether or not these inferences are valid for extracurricular activities is an unanswered question.

Thus, from the perspective of college recruiters, a key concern related to extracurricular involvement should be whether or not extracurricular activities are a valid predictor of interpersonal skill proficiency when tested alongside other accessible (e.g., GPA) or substantially less available variables like cog-

nitive ability, personality, and affect. That is, it is not especially provocative to suggest that it may just be the case that those with high cognitive ability simply translate that intelligence into the demonstration of interpersonal skills. There is a long, well-documented history supporting the relationship between cognitive ability and managerial success (cf., O'Reilly & Chatman, 1994). Similarly, it may be that those with superior positive energy and conscientiousness and industriousness (in part, reflected by GPA) simply invoke those attributes to demonstrate higher levels of interpersonal skill. In short, if extracurricular activities are not predictive of interpersonal skill when tested among a menu of known predictors, then no matter how conceptually appealing, extracurricular activities hold little utility for recruiting evaluation decisions.

The extant empirical research with respect to the above is rather scant. However, based on anecdotal accounts and the intuitive sense that extracurricular activities do hold value that extends beyond cognitive ability, grades, personality, and affective attributes, we hypothesize:

Hypotheses 3: Overall involvement in extracurricular activities will predict the demonstration of interpersonal skills when tested with other cognitive, personality, and affective variables.

Method

Participants

Six hundred and eighteen advanced undergraduate business students from a large Midwestern university participated in the study. These students were "traditional" college students who were almost exclusively full-time. A large majority of these students were business majors. Of these 618, complete information was available for 600. Of the final sample, 55% of participants reported being male, and 86% reported their ethnicity as White (non-Hispanic). Age of the participants ranged from 19 to 44 with the highest proportion (47%) reporting age 20.

Table I presents a summary of the degree to which the study's participants were

TABLE I Descriptive Statistics by Group

Variable	N
Member of club/organization	
Yes	363
No	237
Member of fraternity/sorority	
Yes	150
No	450
Member of sports team	
Yes	70
No	530
Officer of club/organization	
Yes	97
No	266
Officer in fraternity/sorority	
Yes	53
No	97
Captain of a sports team	
Yes	25
No	45

involved in extracurricular activities. It should be noted that these categories are not mutually exclusive (e.g., fraternity members could also be club/organization members).

As evidenced in the table, there are large numbers of students who participated in each of the activities. Not surprisingly, however, the number of students who serve in officer roles (especially as captains of sports teams) was relatively low.

Assessment Center Design

The assessment center required participants to take part in four exercises comprised of two group exercises (leaderless group discussions), a short oral presentation, and an in-basket exercise. Participants were assigned to groups via an employee identification number corresponding to their rank in the alphabet. The inbasket exercise was not utilized for this study because it is largely an individual rather than interpersonal activity.

Assessment center exercises. Participants attended two separate leaderless group discussions (LGDs) during the course of the assessment. One meeting required participants

to decide on their top three candidates (out of a pool of seven) for a new chief executive officer (CEO) position by evaluating candidate resumes. The other meeting instructed participants to solve a customer service issue the organization was facing. Both meetings were attended by a maximum of six students and each LGD lasted 20 minutes.

Participants were also asked to deliver a 3-minute oral presentation to four of their peers. The participants were informed that they were to make arguments based on information provided that would either support or discount the viability for global expansion into a particular market.

Assessment center rating and feedback. Participants were informed that the exercises would be videotaped. Further, they were informed that trained raters would view the videotapes to assess individual performance. Industrial/organizational psychology graduate students were employed as raters. Rater training consisted of a 2-day workshop designed to help the raters become proficient and highly familiar with the assessment center materials. Multiple videotaped examples were used for practice following a frame of reference training design (Bernardin & Buckley, 1981). Raters were tested for proficiency at the conclusion of training.

Performance scores were reported to participants in the form of five descriptive performance levels: (1) needs improvement, (2) competent, (3) good, (4) excellent, and (5) superior. In addition to their scores, each participant received a personalized development plan that included a description of each performance dimension assessed and specific feedback on how to improve the skills involved.

Measures

Interpersonal skill. Participants were rated on four interpersonal skill dimensions (i.e., oral communication, decision-making, teamwork, and initiative). The behaviors representing the dimensions were determined based on the input of 25 practicing managers who rated the behaviors regarding their importance to success/failure in an organizational setting. Each dimension was

Example behaviors for initiative included "refocuses others" and "clarifies group tasks," for decision-making "focuses group on decision criteria" and "helps group evaluate consequences," for teamwork "seeks input from others" and "validates others," and for communication "speaks clearly" and "uses appropriate grammar."

behaviorally defined and used in a behavior checklist rating system (Reilly, Henry, & Smither, 1990) such that the behavior was present or not present to varying degrees based on behavioral interpretations determined a priori. Example behaviors for *initiative* included "refocuses others" and "clarifies group tasks," for *decision-making* "focuses group on decision criteria" and "helps group evaluate consequences," for *teamwork* "seeks input from others" and "validates others," and for *communication* "speaks clearly" and "uses appropriate grammar."

Extracurricular activities. To measure involvement in extracurricular activities participants completed an online survey one week prior to meeting at the assessment center in conjunction with a sign-up procedure. This self-report measure asked participants to respond to questions from three major extracurricular areas: fraternities/sororities, clubs/organizations, and sports teams (both varsity and intramural). Within these areas, three specific questions were asked. First, participants were asked, "Are you a member of any of the following groups"? Response categories were (1) yes or (0) no for each group. Second, if participants respond "yes" to any of the groups, they were prompted with the follow-up question, "Do you hold a position or title in this group? If so, which of the following positions or titles do you hold"? Response categories for this question were (1) no or non-officer or (2) officer (i.e., chair, vice president, president). With respect to position or title held for team sports, the response category was either (0) not a team captain or (1) team captain.

An overall extracurricular index score was also created. The index score was derived by combining the response categories across all of the above questions. In addition, a degree of time spent within each extracurricular activity was included in the overall extracurricular index. The scores on this index ranged from 0 to 16 with a mean of 2.7 and a standard deviation of 2.8.

Grade point average. Participants self-reported their current grade point averages (GPA) as part of the Internet survey con-

ducted prior to the assessment center. The mean for GPA was 3.14 with a range of 1.5 to 4.0. As with all self-reports, there may be some reporting inflation as a result of social desirability effects for both GPA and extracurricular activities. However, those effects are randomly distributed in the sample and are unlikely to have systematic influence. In addition, students had no reason to believe that their GPA would not be verified by the researchers and therefore would be less likely to inflate their reporting.

Intelligence. The 12-minute, 50-item Wonderlic Personnel Test (1992) was administered under standardized conditions to each participant immediately before the assessment center activities. Items on the test include verbal ability problems (e.g., word comparisons, disarranged sentences, sentence parallelism, and direction following), and quantitative/logic ability (e.g., number comparisons, number series, analysis of geometric figures, and story problems). The Wonderlic (1992) has shown high predictive validity in measuring general mental ability and was originally developed as a tool for use in employment selection. Wonderlic (1992) reports a mean for college students of 25 and a standard deviation of 6. In the present study, $M = 25.79$ and $SD = 4.48$.

Positive and negative affect. Because we were interested in how affect might influence the display of interpersonal skills, we chose to measure state affect. The PANAS (Positive and Negative Affect Schedule; Watson, Clark, & Tellegen, 1988) was administered immediately before beginning the assessment center activities. The PANAS contains 20 adjectives, 10 assessing positive affect (e.g., enthusiastic) and 10 assessing negative affect (e.g., distressed). Participants respond to the degree to which the adjectives describe the way they feel at the time of administration. Watson et al. (1988) reported adequate internal consistency for both the PA ($\alpha = .89$) and NA ($\alpha = .85$) scales. Similar coefficients were observed in the present study (PA $\alpha = .91$; NA $\alpha = .82$). The administration of the Wonderlic and the PANAS were counterbalanced to avoid order effects.

Personality. Another portion of the Internet survey asked participants to complete a 10-item measure of conscientiousness and a 10-item measure of extroversion both taken from the Goldberg’s (1999) 50-Item Big Five Inventory. Participants responded on a 5-point Likert scale from 1 (“Not at all descriptive of me”) to 5 (“Very descriptive of me”). This measure has demonstrated comparable psychometric properties to other well-known measures of the Big Five (e.g., NEO-PI-R) and is readily available in the public domain. In the present study, both scales exhibited acceptable reliability (conscientiousness $\alpha = .81$; extroversion $\alpha = .89$).

Results

The correlation matrix associated with the study’s variables is presented in Table II.

To test our first two hypotheses, we conducted a series of MANOVAs. Specifically, the first hypothesis stated that participants who were members of on-campus clubs/organizations, fraternities/sororities, and/or sports teams would demonstrate better interpersonal skills than those who were not members of the aforementioned groups. Three separate MANOVAs were completed for membership in each extracurricular category. In other words, omnibus MANOVA tests were calculated to determine whether

or not membership in an activity was associated with more developed skills. More precisely, the MANOVAs evaluated the association between membership and skills across the skills types (group membership across the four assessed skills).

The results of these three MANOVAs are as follows. First, the results supported the hypothesis for clubs/organizations ($F(4, 596) = 5.98, p < .001$) and fraternities/sororities ($F(4, 596) = 3.32, p < .05$) but did not show support for sports teams ($F(4, 596) = 1.40, ns$). Overall, the MANOVA analyses suggested that the first hypothesis was supported in two of three cases. More specifically, members of clubs and organizations as well as fraternities/sororities had better skills than their counterparts (i.e., those not in clubs/organizations or fraternities/sororities). Being a member of sports team was not associated with increased skills, and thus failed to support the first hypothesis.

Looking at the individuals who were members of extracurricular activities, the second hypothesis posited that students holding officer positions within extracurricular activities would demonstrate stronger interpersonal skills than students not holding officer positions. The results of the MANOVA analyses supported the hypothesis for being an officer in a club/organization ($F(4, 358) = 2.85, p < .05$), while no

TABLE II Intercorrelations Among Study Variables^a

	1	2	3	4	5	6	7	8	9	10
1. Intelligence										
2. Negative affect	-.14**									
3. Positive affect	.04	-.04								
4. Grade point average	.36***	-.03	.08							
5. Conscientiousness	.00	-.06	.09	.23***						
6. Extraversion	.01	-.07	.25***	-.08	.08					
7. Extracurricular index	.13**	-.09	.14***	.20***	.12**	.23***				
8. Communication	.11*	-.04	.10*	.24***	.11*	.14**	.20***			
9. Initiative	.18***	-.10*	.13**	.16***	.01	.11*	.22***	.18***		
10. Decision-making	.25***	-.14**	.17***	.27***	.09*	.11*	.19***	.40***	.29***	
11. Teamwork	.11*	-.15***	.19***	.16***	-.02	.19***	.19	.32***	.39***	.53***

^aN = 600.

* $p < .05$. ** $p < .01$. *** $p < .001$.

support was found for officer status in fraternities/sororities ($F(4, 146) = .33, ns$) and sports teams ($F(4, 65) = .62, ns$). To provide further insight into the relationship between officer status of clubs/organizations and interpersonal skills, we examined the univariate results to determine whether or not the relationship between officer status and the interpersonal skills were consistent across the four skill dimensions. The univariate results indicated that officer status *was* significantly related to communication, decision-making, and teamwork skills but *not* to initiative.

The final hypothesis indicated that an overall index of extracurricular activity would be associated with increased interpersonal skill even when other known predictors were present in the regression equation. To adequately test this final hypothesis, a series of four ordinary least-squares regression models were conducted so that the relationship between extracurricular activities and the

specific skills could be assessed in the presence of a number of important variables. The results of the regressions are presented in Table III.

At an overall level, the regressions reported in Table III suggest that about one ninth (11.5% to be exact) of the variance in the skills could be accounted for by the variables explored in this study. While one ninth of the variance is of statistical and practical importance, it suggests that there are a wide variety of other factors that would need to be explored if we are to better understand the determinants of the skills examined in this research.

Before discussing the specific test of the third hypotheses, some of the relationships of the other predictor variables should be addressed. More specifically, grade point average was consistently associated with the skill dimensions, and on average, was the measure most associated with the skills. Although a number of other predictor variables

TABLE III Standardized Regression Results

	<i>Communication</i>	<i>Initiative</i>	<i>Decision-making</i>	<i>Teamwork</i>
Model 1				
Intelligence	.03	.12*	.16**	.03
Negative affect	-.02	-.07	-.10	-.13**
Positive affect	.05	.10*	.12**	.13**
Grade point average	.23***	.12*	.21***	.17***
Conscientiousness	.05	-.04	.03	-.09
Extraversion	.14**	.09	.09	.16***
R^2	.09***	.07***	.14***	.10***
Model 2				
Intelligence	.02	.11*	.15***	.02
Negative affect	-.01	-.06	-.09*	-.13**
Positive affect	.04	.09	.11**	.13**
Grade point average	.21***	.09*	.19***	.15**
Conscientiousness	.04	-.05	.02	-.09*
Extraversion	.11*	.05	.07	.14**
Extracurricular index score	.12**	.16***	.09*	.11*
Incremental R^2	.01**	.02***	.01*	.02**
Total R^2	.10**	.09***	.15***	.12***

^aN = 600.

* $p < .05$. ** $p < .01$. *** $p < .001$.

were associated with one or two of the skills (e.g., negative affect was associated with decision-making and teamwork), no other variable was a stable predictor of the skills across even three of the skills.

A further examination of Table III reveals that the extracurricular index score is significantly associated with each of the four interpersonal skill dimensions. More specifically, the extracurricular index was positively related to communication skills ($\beta = .12, p < .01$), initiative ($\beta = .16, p < .001$), decision-making ($\beta = .09, p < .05$), and teamwork ($\beta = .11, p < .05$). These findings provide consistent support for the third hypothesis. In other words, when examining a number of relevant predictors, extracurricular activities were associated with all of the skills measured in the current study.

A further analysis of the regression results suggests some other interesting patterns beyond those mentioned. It was noteworthy that intelligence was significantly related to only two of the four skills (decision-making and initiative). Moreover, affect was primarily associated with decision-making and teamwork skills. Interestingly, extraversion and conscientiousness were not as strongly related to the skills as one would think. Extraversion was related to teamwork and communication, but failed to be associated with initiative or decision-making. Moreover, conscientiousness was only significantly associated with teamwork and this relationship was *negative*.

Discussion

With some specific exceptions, the results of this study generally support the notion that participation in extracurricular activities is related to the demonstration of interpersonal skills. More specifically, the first hypothesis posited that students who were members of extracurricular groups (i.e., clubs, fraternities/sororities, sports teams) would exhibit superior skills. We found a significant relationship in two of three cases. More precisely, Hypothesis 1 was supported in the case of clubs/organizations as well as fraternities/sororities. Membership on sports teams, however, was not associated

with increased interpersonal skills. The second hypothesis suggested that students who held leadership positions within extracurricular activities would display better interpersonal skills than students who had not held hold officer positions. In only one case, that of clubs/organizations was being an officer associated with the increased skill levels predicted. The final hypothesis suggested that a student's overall extracurricular activity would be positively associated with the interpersonal skills assessed in this study. In all four cases, this hypothesis was supported, suggesting that extracurricular involvement is associated with stronger communication, initiative, decision-making, and teamwork skills.

Implications for HR Practice

The present findings have implications for HR practice both within and beyond the arena of college recruiting. With respect to the recruiting of college students, these data support the case that considering extracurricular involvement is clearly warranted for roles that will require refined interpersonal skills. These findings are consistent with the conventional wisdom regarding extracurricular involvement and provide some empirical support to a largely anecdotal dialogue.

At the very least, some focus on extracurricular involvement by corporate recruiters certainly does not constitute a waste of time, a dilution of the evaluation process, or recruiting malpractice. Moreover, given that we also measured and explored relationships of other antecedents of interpersonal skills (e.g., cognitive ability, personality), the relationships cannot be dismissed as a function of just, say, the smarter or more energetic students demonstrating higher skill levels. In fact, this finding appropriately complicates student evaluation for recruiters. For example, it may well be that holding a significant leadership position in an extracurricular activity could *detract* from GPA and yet *enhance* interpersonal skill development (Terenzini et al., 1999). For others, however, engaging significantly in extracurricular activity may not lead to interpersonal skill development, but may

At the very least, some focus on extracurricular involvement by corporate recruiters certainly does not constitute a waste of time, a dilution of the evaluation process, or recruiting malpractice.

work to increase overall investment and commitment to academic achievement.

The findings also provide a preliminary template for the extracurricular profile (clubs over athletics, importance of leadership role) most predictive of interpersonal skill performance. Recruiters can likely improve their "payoff" by putting a premium on candidates who have taken certain types of leadership positions and by focusing on activities that have the greatest alignment with the types of skills they are seeking. Further, although the findings are clear that "involvement" is clearly better than "no involvement," these data suggest that there are diminishing returns to over-commitment. Stated simply, there is no documented value in being what might be termed a "serial joiner" and recruiters are well-advised to screen candidates' background materials for evidence of that trap.

One limitation of the present study design is that it is impossible to determine whether the process of extracurricular activities contribute to interpersonal skill development or those with pre-existing interpersonal skills *self-select* into extracurricular activities. Either way, however, it *can* be said with some assurance that students who involve themselves in extracurricular activity (of the sort measured in this sample) will generally demonstrate a higher level of interpersonal skills. Indeed, from a recruiting perspective, the direction of causality should be less important than the low cost and high accessibility of data on extracurricular involvement. That is, using certain extracurricular activity as a surrogate measure for skill development is appealing in that such information is generally quite easy to obtain both objectively and cost effectively.

A related point concerns the size of the relationships found here. In most cases, the relationships were only modest, but that does not negate the potential practical significance of the results. For many organizations, college recruiting constitutes the single largest input of new employees. Moreover, prior research (e.g., Boudreau, 1991) has shown that, in selection contexts where individuals are likely to have significant tenure with the firm and have relatively high perfor-

mance variability, even small differences in predictive validity can have great utility over time. In short, effective college recruiting can really matter and the time and resources available to make informed decisions is often constrained. Therefore, every bit of performance-predicting information on college recruits, particularly that which is convenient and cost-effective to obtain (like that on extracurricular activity), should prove worth the effort to collect and evaluate.

The implications of the present findings also extend beyond the realm of college recruiting. For example, the distinction between academic and extracurricular activity in university settings is analogous to a distinction in organizational settings between "task" and "contextual" performance (Borman & Motowidlo, 1997; Motowidlo, Borman, & Schmit, 1997). Like extracurricular activity, contextual performance has long held strong intuitive appeal and certainly has been informally incorporated into managerial performance evaluations. For example, there is a popular and widely cited body of qualitative research, stemming primarily from the Center for Creative Leadership and its past and present associates (e.g., McCall, Lombardo, & Morrison, 1988) which points to the value of challenging experiences and extra-role activities (contextual performance) in developing leadership skills.

However, as with extracurricular activity, contextual performance is difficult to characterize and thus we suspect too often neglected in formal considerations of leadership development and succession planning. Based on the relationships to interpersonal skills we discovered for extracurricular activity, we think it is a logical extension to posit that contextual performance may be a key indicator of the type of interpersonal skills useful in distinguishing between managers with comparably high task-performance records in organizational contexts. In this regard, some recent authors (Lombardo & Eichinger, 2000) have suggested that learning new skills and learning from experience may be the key predictors of high-potential managers and such new learning may happen most significantly outside of formal task performance requirements. Put simply, like college recruiters

Stated simply, there is no documented value in being what might be termed a "serial joiner" and recruiters are well-advised to screen candidates' background materials for evidence of that trap.

looking beyond grades and classroom performance on campus, HR executives responsible for succession planning and leadership development would be well-advised to explore ways to go beyond the straightforward evaluation of job performance and seek measures of contextual performance and extra-role behaviors in that they are likely to be good predictors of the interpersonal skills requisite to effective leadership.

Two cautions are warranted in interpreting these findings. First, the assessment center method has received criticism that may have some impact on our results. Specifically, research has shown that although assessment centers demonstrate high construct validity, this validity is often not for the intended dimensions (Sackett & Dreher, 1982; Sackett & Tuzinski, 2001). That is, assessment centers may be measuring performance in the exercises, not the interpersonal skill dimensions they purport to measure. Some recent attempts to address dimension construct validity through design and procedures have provided incremental improvements (Lievens, 1998). We gave great deference to this literature in designing the present assessment center. For example, we employed behavioral checklists (Reilly, Henry, & Smither, 1990), provided rating aids (Lievens, 1998), and trained raters (Gaugler et al., 1987) via a frame-of-reference design (Bernardin & Buckley, 1981). In addition, we attempted to reduce the overall cognitive load of raters and increase dimension discrimination (Sackett & Hakel, 1979) by keeping the number of dimensions small (Gaugler & Thornton, 1989) and utilized within-exercise scoring to reduce the potential for halo (Sackett & Dreher, 1982). Further, it should be noted that assessment centers do demonstrate strong criterion-related validity and are predictive of important job-related performance (Gaugler et al., 1987; Klimoski & Brickner, 1987). Thus, although construct validity is an important concern, the assessment center method is likely to have no more associated methodological trade-offs than any other potential alternative (e.g., interviews, behavioral observations, etc.) of objective behavioral measurement.

Second, one distinguishing feature of this study is the opportunity to examine the effects of extracurricular involvement in a broader performance context. In particular, we were able to examine other variables thought to relate to interpersonal skill development (e.g., cognitive ability, affect, and some select personality characteristics) along with extracurricular activities. However, the relatively low variance accounted for and modest effect sizes for all the variables suggest that we still have far to go to fully understand the antecedents of interpersonal skills. In this vein, these findings should certainly not be interpreted as meaning that extracurricular activities should replace other evaluation predictors. Rather, extracurricular involvement is best conceived as providing additional information or supplementing other applicant information. Indeed, the use of extracurricular activity information will perhaps be of highest utility where certain thresholds on other predictors (e.g., GPA above 3.5) are set and thus restrict the range of that variable in the recruitment pool.

Conclusion

Extracurricular activity has long held intuitive appeal as an element in a well-rounded college education. Particularly with an increased corporate interest in interpersonal skills (Eberhardt, McGee & Moser, 1997; Porter & McKibbin, 1988)—skills that seem most uniquely suited to development in nonclassroom contexts—a research focus on extracurricular involvement is overdue. Based on the present findings, the familiar adage “experience is a great teacher” seems apt in the context of extracurricular involvement, as well as extra-role behavior in work organizations. However, we must also acknowledge that experience is also a terribly *inefficient* teacher.

Clearly, some external activities are a waste of time and detract from an appropriate educational mission. Others are valuable skill practice and/or development opportunities. Explorations of those activities that provide the biggest “bang for the buck” or seem to be the most beneficial in relation to skill practice and/or development would be well

Put simply, like college recruiters looking beyond grades and classroom performance on campus, HR executives responsible for succession planning and leadership development would be well-advised to explore ways to go beyond the straightforward evaluation of job performance and seek measures of contextual performance and extra-role behaviors in that they are likely to be good predictors of the interpersonal skills requisite to effective leadership.

directed and have important recruiting and leadership development implications. Moreover, it is not just the activity, per se, but the nature of a particular individual's experience within that activity which is of most interest.

Ultimately, the creation of a tool that allows for systematic categorization and valuing of extracurricular and contextual activities will provide great utility for corporate recruiters and talent pool managers.

ROBERT S. RUBIN is a Ph.D. candidate in Organizational Psychology at Saint Louis University and holds an M.A. in Industrial/Organizational Psychology from Southern Illinois University, Edwardsville. His research interests span human resource management and organizational behavior including transformational leadership, managerial development, academic assessment centers, and emotions at work. Bob has served as an instructor at Saint Louis University's Cook School of Business and is currently a visiting Assistant Professor in the Kelstadt Graduate School of Business, DePaul University. Bob has been an HR/OD consultant to a variety of industries including biotechnology, healthcare, and transportation. Bob is pursuing an academic career.

WILLIAM H. BOMMER holds a Ph.D. in Organizational Behavior from Indiana University and a master's degree in Organizational Development from Bowling Green State University. Bill is currently an Assistant Professor of Management and Leadership at Georgia State University. His primary areas of research include transformational leadership, organizational citizenship, and assessment centers. His research has been published in journals including *Journal of Applied Psychology*, *Personnel Psychology*, and *Journal of Management*. In support of his research and teaching interests, Dr. Bommer has conducted leadership assessments and training in a large number of American manufacturing and medical organizations.

TIMOTHY T. BALDWIN is Professor of Management and Subhedar Faculty Fellow at the Indiana University Kelley School of Business. Professor Baldwin holds a Ph.D. in Human Resource Management from Michigan State University. His research work has been published in leading academic and professional outlets such as *Academy of Management Journal*, *Personnel Psychology*, *Journal of Applied Psychology*, and *Human Resource Management*. Twice he has been the recipient of the Richard A. Swanson Excellence in Research Award presented by the American Society for Training and Development (ASTD). His current research interests include early career managerial development and the role of Chief Learning Officers.

REFERENCES

- Asher, E.J. (1972). The biographical item: Can it be improved? *Personnel Psychology*, 25, 251–269.
- Barrick, M.R., & Mount, M.K. (1993). Autonomy as a moderator of the relationships between the big five personality dimensions and job performance. *Journal of Applied Psychology*, 78(1), 111–118.
- Bass, B.M. (1974). *Bass and Stogdill's handbook of leadership: Theory, research and managerial applications* (3rd ed.). New York: The Free Press.
- Bernardin, H.J., & Buckley, M.R. (1981). Strategies in rater training. *Academy of Management Review*, 6, 205–212.
- Boone, L.E., Kurtz, D.L., & Fleenor, C.P. (1988). CEOs: Early signs of a business career. *Business Horizons*, 31(5), 20–25.
- Borman, W.C., & Motowidlo, S.J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, 10(2), 99–109.
- Boudreau, J.W. (1991). Utility analysis for decisions in human resource management. In M.D. Dunnette, & L.M. Hough (Eds.), *Handbook of industrial and organizational psychology*, Vol. 2

- (2nd ed., pp. 621–745). Palo Alto, CA: Consulting Psychologists Press.
- Brown, B.K., & Campion, M.A. (1994). Biodata phenomenology: Recruiters' perceptions and use of biographical information in resume screening. *Journal of Applied Psychology*, 79(6), 897–908.
- Campion, M.A. (1978). Identification of variables most influential in determining interviewers' evaluations of applications in a college placement center. *Psychological Reports*, 42, 947–952.
- Cariaga, V. (1998). Grades take back seat in evaluating job candidates. *Charlotte Business Journal*, 13(17), 30–33.
- Cascio, W.F. (1995). Whither industrial and organizational psychology in a changing world of work. *American Psychologist*, 50, 928–939.
- Coleman, J.S. (1959). Academic achievement and the structure of competition. *Harvard Educational Review*, 29, 330–351.
- Csoka, L.S. (1974). A relationship between leader intelligence and leader rated effectiveness. *Journal of Applied Psychology*, 59(1), 43–47.
- Eberhardt, B.J., McGee, P., & Moser, S. (1997). Business concerns regarding MBA education: Effects on recruiting. *Journal of Education for Business*, 72(5), 293–296.
- Felson, L. (2001). Undergrad marketers must get jump on networking skills. *Marketing News*, 35(8), 14–15.
- Gandy, J.A., Dye, D.A., & MacLane, C.N. (1994). Federal government selection. The individual achievement record. In G.S. Stokes, M.D. Mumford, & W.A. Owens (Eds.), *Biodata handbook. Theory, research, and use of biographical information in selection and performance prediction* (pp. 275–309). Palo Alto, CA: CPP Books.
- Gaugler, B.B., Rosenthal, D.B., Thornton III, G.C., & Bentson, C. (1987). Meta-analysis of assessment center validity. *Journal of Applied Psychology*, 72, 493–511.
- George, J.M., & Brief, A.P. (1992). Feeling good—Doing good: A conceptual analysis of the mood at work—Organizational spontaneity relationship. *Psychological Bulletin*, 112(2), 310–329.
- Glennon, J.R., Albright, L.E., & Owens, W.A. (1961). *A catalog of life history items*. Washington, DC: The Scientific Affairs Committee of the American Psychological Association.
- Goldberg, L.R. (1992). The development of markers for the big-five factor structure. *Psychological Assessment*, 4, 26–42.
- Goldberg, L.R. (1999). A broad-bandwidth, public-domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality psychology in Europe*, Vol. 7 (pp. 7–28). Tilburg, The Netherlands: Tilburg University Press.
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books.
- Gose, B. (1996). Promoting intellectual life. *The Chronicle of Higher Education*, 42(26), 33–35.
- Howard, A. (1986). College experiences and managerial performance. *Journal of Applied Psychology Monograph*, 71(3), 530–552.
- Howard, A. (1997). A reassessment of assessment centers: Challenges for the 21st century. *Journal of Social Behavior and Personality*, 12, 13–52.
- Hunter, J.E., & Hunter, R.F. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin*, 96, 72–98.
- Kantrovitz, B. (2002, April 8). The new college game. *Newsweek*, 46–50.
- Klimoski, R., & Brickner, M. (1987). Why do assessment centers work? The puzzle of assessment center validity. *Personnel Psychology*, 40, 243–260.
- Lievens, F. (1998). Factors which improve the construct validity of assessment centers: A review. *International Journal of Selection and Assessment*, 6(3), 141–152.
- Lombardo, M.M., & Eichinger, R.W. (2000). High potentials as high learners. *Human Resource Management*, 39(4), 321–329.
- Mayer, J.D., Caruso, D.R., & Salovey, P. (2000). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27, 267–298.
- McCall, M.W., Jr., Lombardo, M.M., & Morrison, A.M. (1988). *The lessons of experience*. Lexington, MA: Lexington Books.
- McCormick, J. (1999). Inside the admissions game. *Newsweek*, 133(14), 54–61.
- Motowidlo, S.J., Borman, W.C., & Schmit, M.J. (1997). A theory of individual differences in task and contextual performance. *Human Performance*, 10(2), 71–83.
- O'Reilly, C.A. III, & Chatman, J.A. (1994). Working smarter and harder: A longitudinal study of managerial success. *Administrative Science Quarterly*, 39(4), 603–627.

- Owens, W. (1976). Background data. In M.D. Dunnette & L.M. Hough (Eds.), *Handbook of industrial and organizational psychology*. Vol. 3 (2nd ed., pp. 61–138). Palo Alto, CA: Consulting Psychologists Press.
- Owens, W., & Shoenfeldt, L. (1979). Toward a classification of persons. *Journal of Applied Psychology*, 46, 569–607.
- Pannone, R.D. (1984). Predicting test performance. A content valid approach to screening applicants. *Personnel Psychology*, 37, 507–514.
- Porter, L.W., & McKibbin, L.E. (1988). *Future of management education and development: drift or thrust into the 21st century?* New York: McGraw-Hill.
- Posner, B.Z. (1981). Comparing recruiter, student, and faculty perceptions of important applicant and job characteristics. *Personnel Psychology*, 34, 329–339.
- Ree, M.J., & Earles, J.A. (1991). Predicting training success: Not much more than g. *Personnel Psychology*, 44, 321–331.
- Reilly, R.R., Henry, S., & Smither, J.W. (1990). An examination of the effects of using behavioral checklists on the construct validity of assessment center ratings. *Personnel Psychology*, 43, 71–84.
- Sackett, P.R., & Dreher, G.F. (1982). Constructs and assessment center dimensions: Some troubling empirical findings. *Journal of Applied Psychology*, 67, 401–410.
- Sackett, P.R., & Hakel, M.M. (1988). A further examination of the constructs underlying assessment center ratings. *Journal of Business and Psychology*, 3, 214–229.
- Sackett, P.R., & Tuzinski, K.A. (2001). The role of dimensions and exercises in assessment center judgements. In M. London (Ed.), *How people evaluate others in organizations* (pp. 111–134). Mahwah, NJ: Lawrence Erlbaum Associates.
- Sternberg, R.J. (1999). The theory of successful intelligence. *Review of General Psychology*, 3(4), 292–316.
- Stokes, G.S., Mumford, M.D., & Owens, W.A. (1994). *Biodata handbook. Theory, research, and use of biographical information in selection and performance prediction*. Palo Alto, CA: CPP Books
- Terenzini, P.T., Pascarella, E.T., & Blimling, G.S. (1999). Students' out-of-class experiences and their influence on learning and cognitive development: a literature review. *Journal of College Student Development*, 40(5), 610–623.
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070.
- Wonderlic Personnel Test, Inc. (1992). *The Wonderlic Personnel Test manual*. Liberty, IL: Association of Test Publishers.
- Wright, T.A., & Staw, B.M. (1999). Affect and favorable work outcomes: two longitudinal tests of the happy-productive worker thesis. *Journal of Organizational Behavior*, 20, 1–23.

ENDNOTES

A version of this manuscript was presented at the 2001 Annual Society for Industrial and Organizational Psychology Conference, San Diego, CA.