Double Jeopardy: Work Ethic Differences in Youth at Risk of School Failure

Roger B. Hill Jay W. Rojewski

The purpose of this study was to determine if work ethic differed for a sample of 152 selected 9th-grade students categorized by risk of school failure and by gender. Work ethic attributes were measured using the Occupational Work Ethic Inventory (Petty, 1993). Results of a two-way multivariate analysis of variance indicated significant work ethic differences in main effects of at-risk classification and gender for dependent variables of interpersonal skills, initiative, and being dependable. Interaction effects were not significant. Underlying constructs indicated that adolescents with greater degrees of risk were less dependable and that girls in the study were more dependable than boys.

Work ethic has been operationally defined as consisting of interpersonal skills, initiative, and being dependable (Hill, 1996, 1997; Hill & Petty, 1995; Hill & Womble, 1997). The importance of work ethic in the contemporary workplace and the mention of related characteristics (e.g., individual responsibility, self-esteem, sociability, selfmanagement, and integrity) in educational reform literature (Secretary's Commission on Achieving Necessary Skills, 1992) suggest that it is a topic of importance when considering the problems of at-risk youth. At-risk youth are those who, as a result of social, economic, political, or cultural conditions, have limited access to educational and occupational opportunities (Chartrand & Rose, 1996). Young people who are at risk are often caught up in a cycle of failure and poverty. At school they exhibit poor attendance habits, lack of interest, and have discipline problems, and in the community they are often at odds with the law. These behaviors limit opportunities for success, either at school or at work, and their existence prevents people from fulfilling their potential throughout their lives. They also jeopardize the potential for at-risk youth to gain and retain employment because employers deem issues like being present and on time, showing self-discipline, and having integrity to be so important.

Roger B. Hill and Jay W. Rojewski are associate professors in the Department of Occupational Studies at the University of Georgia in Athens. Correspondence regarding this article should be sent to Roger B. Hill, Department of Occupational Studies, 209 River's Crossing, 850 College Station Rd., The University of Georgia, Athens, GA 30602-4809 (e-mail: rbhill@arches.uga.edu).

One dilemma faced by those who seek to address these problems and help at-risk youth, particularly in schools, is the problem of identifying appropriate career intervention strategies. Inappropriate behaviors tend to attract negative attention and compound the challenges for counselors attempting to help at-risk youth break out of a cycle of failure. Although management of discipline and other problems is essential, it is also important for counselors and teachers to have guidance in identifying the critical underlying issues that preclude success for at-risk students. Social cognitive career theory (SCCT; Brown & Lent, 1996; Lent & Brown, 1996) provides a theoretical framework for understanding the dynamic of self-efficacy and outcome expectations, contextual factors, and environmental

forces as they affect career decisions and success.

One aspect of SCCT that supports the potential for educators and others to have a positive impact on at-risk students is the proposition that people reexamine their interests and outcome expectations throughout their life spans, but in particular during the adolescent years. A key feature of the process described by SCCT is the role new opportunities or changes in responsibility play in influencing career development. For example, an at-risk student might withdraw from participation in a school activity due to fear of ridicule or failure. A counselor, alerted to this problem, might identify a way for the student to reenter the situation with a special skill and have a talent acknowledged. With encouragement the student might become successfully engaged in the activity and move from avoidance to involvement. SCCT provides a framework for understanding this type of change as a person gains confidence in personal ability to succeed, recognizes rewards, and experiences an expansion of selfefficacy and outcome expectations.

SCCT extends beyond decisions about involvement in activities. Lent, Brown, and Hackett (1994) also incorporated aptitudes and work values within the framework of SCCT. Aptitudes, or a person's objective abilities, affect self-efficacy beliefs and influence interests. Work values are encompassed in the concept of outcome expectations in SCCT. People are influenced by preferences for a particular activity or type of work, anticipated reinforcers such as status or money, and the extent to which they believe a particular occupation will meet their expectations or goals. The effects of aptitudes and the development of work values are influenced by social context (e.g., interaction with others in school or in the workplace) and can be shaped by intervention strategies (Brown & Lent, 1996). Thus, SCCT provides a sound basis for efforts to facilitate work ethic develop-

ment in at-risk youth.

Underlying SCCT is a constructivist perspective of learning and development (Lent & Brown, 1996). Using primary sources of data, engaging in dialogue, and providing opportunities for students to reexamine hypotheses are all components of this approach to instruction (Brooks & Brooks, 1993). Students who hold negative attitudes related to work or do not have a strong work ethic can be challenged to reevaluate their views. Reevalution works best when students are involved in experiences that contradict their current hypotheses about work. In the case of work ethic, a combination of

case studies with thought provoking questions, classroom discussions, and interaction with successfully employed individuals could

provide stimulus for change.

Modeling often plays a key role in successful intervention strategies. Hackett and Byars (1996) emphasized the impact of such social cognitive mechanisms when they described influences on self-efficacy and outcome expectations. When significant persons within a social context demonstrate success, whether in a career or in some other valued endeavor, others within their sphere of influence are affected. Belief in the possibility of success, revision of personal goals, and reassessment of career possibilities are all facilitated. In the case of work ethic, counselors should direct the attention of at-risk youth toward role models that have achieved career success and can explain the importance of work ethic and good work attitudes. Role models are particularly influential when they have similar ethnic and racial characteristics as the affected at-risk youth.

WORK ETHIC, GENDER, AND OTHER DEMOGRAPHIC VARIABLES

Previous work ethic research has indicated that gender differences are evident when work ethic research is conducted using samples consisting of both women and men (Furnham & Muhiudeen, 1984; Hall, 1990, 1991; Hill, 1997; Miller, 1980; Petty & Hill, 1994; Wollack, Goodale, Wijting, & Smith, 1971). In all of these studies, women were found to report greater endorsement of work ethic than were men. Based on this previous body of work, studies of work ethic that use mixed-sex samples should include gender as a variable to assure that the source of any measured differences or interaction ef-

fects are accurately detected.

Gender differences in work ethic can be explained based on SCCT theory. Three variables that are prominent in SCCT are self-efficacy beliefs, outcome expectations, and personal goals (Lent & Brown, 1996). Gender is significantly intertwined in the cultural influences shaping all of these issues. For example, the perception of a glass ceiling for women in the workplace, a term coined in the 1980s to describe barriers to advancement of women in corporations (Chaffins, Forbes, Fugua, & Cangemi, 1995), is one such influence. When women are faced with the notion of a glass ceiling, they may give up and have a spirit of resignation, become critics of the system, or determine that they will overcome any barriers and be successful. Workplace demographics show that many women have chosen the third of these options. In doing so many of them embrace work ethics and associated ideas about hard work resulting in job success and advancement as they seek to overcome perceived barriers. From the perspective of SCCT, belief in the ability to succeed by working hard. the expectation that hard work will bring good results, and commitment to personal goals provide a reasonable explanation for women scoring higher on work ethic assessments than men.

Other demographic variables have been prominent in past work ethic research. For example age (Buhholz, 1978; Furnham, 1982; Ma, 1986), level of education (Aldag & Brief, 1975; Baldwin, 1984;

Buchholz, 1978; Goodale, 1973; Hill, 1997; MacDonald, 1972; Tang & Tzeng, 1992; Wollack et al., 1971), full-time work experience (Buchholz, 1978; Hill, 1997), and occupational classification (Hill, 1997) are variables that have been found to be significantly related to work ethic. These variables become significant when studies involve samples that vary widely across these characteristics. In considering work ethic within the context of at-risk adolescent populations, variability across these variables is minimal due to the homogeneity of the group; that is, variability in age, level of education, full-time work experience, and occupation for a sample of at-risk high school students is much smaller than the variability of those factors in the workplace.

PURPOSE OF STUDY

The purpose of this study was to inform the process of career intervention by identifying specific aspects of work ethic that are problematic for at-risk youth. By providing a better understanding of particular areas of need, career intervention efforts can be specifically focused in a prescriptive manner. Because work ethic is significant to success both at school and at work, research shedding light on the work ethic of at-risk youth will be useful to career development practitioners.

Three research questions were framed to guide the focus of this study. The first research question was "Are there significant differences in work ethic among students classified as at risk, moderately at risk, and not at risk?" The second research question was "Are there gender differences in work ethic for the study participants?" The third research question was "Are differences in work ethic related to interpersonal skills, initiative, or being dependable?"

METHOD

Participants

Participants in this study consisted of ninth-grade students in a midwestern metropolitan high school. Data were collected during a pilot test of work ethic curriculum materials being used in a career pathways class. The career pathways class was the initial part of a school-wide career exploration program, and it included opportunities for students to become familiar with various career options as well as to develop employability skills. As a beginning activity of a work ethic unit included in the career pathways class, students completed the Occupational Work Ethic Inventory (OWEI; Petty, 1993). Results of the OWEI were used as a discussion item in the class, but were also collected for separate analysis in this study.

A total of 152 students participated in the study; this represented all of the students in attendance in the classes participating in the study at the time of the OWEI administration. The sample was not random but was determined by schoolwide scheduling practices. All ninth-grade students participated in the career pathways class, but participants in the study consisted of those taking the class during

the first grading term of the school year. The sample included 97 (64%) girls and 55 (36%) boys. Ages ranged from 14 to 19 with a mean age of 15.2 years (SD=1.3). Four of the participants (2%) did not provide age information. Most of the participants (78%) were not employed, but 22% worked 5 hours or more each week. The majority of the participants were African American (71%) and the others were White (21%), Asian (2%), Hispanic (1%), and Other (5%). Regarding at-risk behaviors (e.g., being disciplined by a teacher and assigned to detention or extra study halls, being suspended from school, cutting classes, getting in trouble with the law, thinking about dropping out of school, being disinterested in school, or disliking doing schoolwork that required some effort), 36 (24%) reported no at-risk behaviors, 67 (44%) were moderately at risk, and 49 (32%) reported substantial risk behaviors.

Measures

A 7-item Risk Behavior Scale included as part of a student characteristic data form was used to collect information about academic risk for each participant. Respondents were asked to indicate whether during the past school year they had been disciplined by a teacher (detention or extra study halls), suspended from school, had cut classes, been in trouble with the law, thought about dropping out of school, were disinterested in school, or disliked doing schoolwork that required some effort. Student responses consisted of yes (1) or no (0) for each item, and at-risk scores were tabulated for each student in the study (range 0-7). Students with a score of 0 were classified as not at risk, those with a score of 1 to 2 were classified as moderately at risk, and students with a score of 3 to 7 were classified as substantially at risk. Categorization reduced the variance represented by the at-risk variable, but was useful for purposes of describing the results of the study and was consistent with practice in school programs where similar classifications are often used.

The basis for the Risk Behavior Scale on the student characteristics data form was a student-level predictor in a study of student dropout rates conducted by Bryk and Thum (1989). Student-level predictors were based on individual student characteristics rather than school-level predictors like perceptions of teachers' commitment to a school, academic and disciplinary climate, courses of study available, and school compositional variables. Using data gathered in the High School and Beyond longitudinal database, Bryk and Thum examined a number of student- and school-level predictors using a hierarchical linear model analysis. The at-risk variable used in this study consisted of the attitudinal and behavioral correlates of "at-riskness" originally used on the High School and Beyond questionnaire and described in the study by Bryk and Thum. Evidence of the validity of this variable was evident in the procedures used to identify its components. The variable was a factor composite and the seven items combined the attitudinal and behavioral correlates of at-riskness identified in the High School and Beyond study. Reliability was established not only through use of the variable by Bryk and Thum but also in further research by Rojewski and Hill (1998).

The OWEI was used to provide a succinct but accurate measure of work ethic endorsement for participating students. The OWEI, developed by Petty (1993), has been used in previous studies by Hatcher (1994, 1995), Hill (1992, 1996, 1997), Petty and Hill (1994), Petty (1995), and Hill and Petty (1995). The instrument has the stem "As a worker I can describe myself as:" followed by a 7-point Likert-type scale for rating each item in which 1 = never, $2 = almost \ never$, 3 = seldom, 4 = sometimes, 5 = usually, $6 = almost \ always$, and 7 = always. Nunnally (1978) recommended a scaling of this type. Instrument items consisted of 50 one- or two-word descriptors that represent key work ethic and work attitude concepts identified from previous work ethic research. To provide an interpretation of the OWEI for comparative purposes, previously established subscales were used in analysis of the data (Hill & Petty, 1995). These subscales consisted of Interpersonal Skills, Initiative, and Being Dependable.

In a previous study by Hill (1996), the OWEI was found to be an effective measure for use with adolescents. The nature of the instrument is such that it is relatively simple to understand and complete. One of the limitations to be considered in interpreting the results of using the OWEI with adolescents is the extent to which persons who are not employed can respond to questions about attributes related to work. A majority of the participants in this study (78%) were not employed, so their responses were somewhat speculative. An underlying assumption of the study is that adolescents could provide self-report data regarding their role as workers based on nonpaid work, school work, and other activities that might be interpreted as work.

Internal reliability for each of the OWEI factors was examined by computing Cronbach coefficient alpha statistics for participant responses. These reliability coefficients are indicators of error variance in a scale or test. The internal consistency of responses gathered in this study was acceptable for Interpersonal Skills (r=.92), Initiative (r=.90), and Being Dependable (r=.86).

Data Analysis

The first research question for this study asked whether differences in work ethic as measured by the OWEI were evident for at-risk classification and whether significant interaction effects were detected that might be skewing main effects. An omnibus multivariate analysis of variance (MANOVA) test was used to provide answers to these two items. Interaction effects were first analyzed, and if they were not significant at the .05 level main effects were examined for at-risk classification.

In the absence of significant interaction effects and after detecting significant main effects for at-risk and gender classifications, a descriptive discriminant analysis (DDA) was used to provide follow-up data analysis (Haase & Ellis, 1987; Huberty, 1994). The purpose of the DDA was to determine which dependent variable, based on instrument subscales, best represented the underlying constructs contributing to the significant MANOVA results. This analysis of data provided a response for the third research question that sought to

determine how interpersonal skills, initiative, and being dependable contributed to group separation detected by the MANOVA. An a priori level of .05 was selected for judging the significance of statistical test results.

RESULTS

A Wilks's Lambda statistic was used to test for overall differences in work ethic based on at-risk, gender, and at-risk by gender classifications. Significant differences were found for the grouping variables of at risk and gender, but interaction effects were not significant at the preselected .05 level of significance (see Table 1).

On the basis of the overall significant differences indicated by the MANOVA procedures for both at-risk and gender classifications, the need for follow-up tests was evident to determine the source of variance detected. DDA was used for this purpose as recommended by Haase and Ellis (1987) and Huberty (1994). This procedure allows one to examine the nature of omnibus MANOVA differences while controlling for experimentwise error and accounting for a multivariate dependent variable.

Results of the DDA procedures used with both at-risk and gender classifications are presented in Table 2. Canonical discriminant analysis structure coefficients are provided along with stepwise discriminant analysis F statistics. Significant F-to-remove values were identified for at-risk and gender classification on the OWEI subscale of Being Dependable. The within-group structure coefficients for Interpersonal Skills, although not meeting the threshold for statistical significance at the a priori .05 level, were quite close to the coefficients for Being Dependable and likely contributed to the group separation measured by the omnibus test. The canonical discriminant analysis structure coefficients provide an indication of the underlying construct or structures responsible for group separation detected by the MANOVA. When these coefficients are high, it is an indication that the items represented are significant. Stepwise descriminant analysis provides a further level of scrutiny to identify significant constructs by computing partial R^2 and f statistics for the impact of removing variables from use in the statistical calculations being performed.

TABLE 1

Multivariate Analysis of Variance for Mean Scores of Respondents by At-Risk, Gender, and At-Risk by Gender Classifications

Classification	Λ	df	F	PR > F
At-Risk	.9098	6,288	2.3236	.033
Gender	.8947	3,144	5.6508	.001
At-Risk × Gender	.9765	6,288	0.5750	.750

TABLE 2

Descriptive Discriminant Analysis Results for OWEI Subscales

Source	At-F	Risk	Gender			
	Within-Group Structure Coefficient	F-to-Remove Value	Within-Group Structure Coefficient	F-to-Remove Value		
Interpersonal		The second second				
Skills	.861	0.10	.810	2.63		
Initiative Being	.718	0.58	.399	2.49		
Dependable	.998	7.90°	.842	13.85ª		

Note. OWEI = Occupational Work Ethic Inventory.

Mean scores for at-risk groups are provided in Table 3. In each instance not-at-risk student mean scores for OWEI subscales were higher than those for moderate at-risk and at-risk students. Moderate at-risk student mean scores were higher than at-risk student mean scores. DDA tests indicated differences in Being Dependable were responsible for measured group separation. The DDA tests did not produce statistically significant F-to-remove values for Interpersonal Skills and Initiative, indicating that these were not a primary source of group separation in the differences detected.

Gender differences were anticipated based on prior research using the OWEI. A significant F-to-remove value indicated that being dependable was the key underlying construct for group separation on this variable. Mean scores for girls were consistently higher than for boys on all three subscales of the OWEI. As was the case in the at-risk analysis, the DDA tests did not produce statistically significant F-to-remove values for Interpersonal Skills and Initiative. These

TABLE 3

Mean OWEI Subscale Scores and Standard Deviations for Respondents by At-Risk and by Gender Classifications

Classification	п	Interpersonal Skills		Initiative		Being Dependable	
		Μ.	SD	М	SD	М	SD
At-Risk							
Not at-risk	36	91.39	12.4	88.61	15.1	42.78	5.8
Moderate at-risk	67	87.07	14.4	83.67	15.6	41.22	6.1
At-risk	49	80.55	16.4	78.45	16.5	37.49	7.4
Gender							
Female	97	89.19	12.9	84.89	14.8	41.86	5.5
Male	55	80.36	17.2	80.11	17.9	37.78	8.0

Note. See Table 2 Note.

[&]quot;Significant at the .05 level.

items were not a primary source of group separation detected by the MANOVA procedures.

DISCUSSION

The purpose of this study was to identify specific aspects of work ethic that are problematic for at-risk youth. Data were collected using the OWEI, and the key work ethic constructs examined were interpersonal skills, initiative, and being dependable. Differences on these constructs for gender were also analyzed, but were not the

primary focus of this study.

As results of the study are considered, constraints imposed by the sampling method, the use of self-report data, and limited scope of included variables must be recognized. The sample for the study was nonrandom and used self-report data, so generalizations beyond the participants and setting are limited. In addition, variables that influence work ethic extend beyond those considered in this study. Finally, a pencil-and-paper assessment of work ethic has inherent weaknesses in measuring affective issues that are quite ethereal and is dependent on knowledge of attitudes rather than a measure of actual behaviors.

Within the parameters just identified above, statistical differences were found in work ethic for both at-risk and gender classifications. The data indicated that being dependable was the key issue underlying differences in work ethic of students categorized by varying levels of at-risk behaviors. OWEI mean scores for at-risk students were lower than those for students who were moderately at risk, and mean scores for students not at risk were higher than scores for all others. For gender, mean scores on the OWEI were higher for girls than for boys, a finding that was consistent with prior research conducted using the OWEI (Petty & Hill, 1994). Statistical analysis showed that being dependable was the principal construct

underlying the differences between girls and boys.

That at-risk students had lower mean scores for the OWEI construct of being dependable might have been predicted intuitively. The description earlier in this article of poor attendance, lack of interest in school, and discipline problems reflects this issue in that at-risk students cannot be relied on to be in the right place at the right time or to be doing what they should be doing. The importance of social context and environmental factors as described by SCCT (Lent et al., 1994) would support a hypothesis that these students lack strong role models and social influences to encourage dependability. If this is the case, it might be difficult at least for an adolescent or young adult to overcome those conditions. However, intervention strategies can and should be developed to address the issue of being dependable. Case studies and problem-solving activities based on real life circumstances can be designed to address this issue. As students work through these activities and mentally grapple with the issues involved, awareness of problem behaviors can be increased and the importance of being dependable in the workplace can be emphasized.

In addition, community programs and interactions within the school that provide strong, positive role models should be encouraged. Whether through a program providing Big Brothers or Big Sisters in a community or in-school interactions with coaches, counselors, or teachers, people who work with at-risk adolescents should consistently model dependability and look for opportunities to emphasize its importance. Although other attributes are also important, being dependable was identified as an area of concern by this study.

Activities to encourage dependability and other aspects of work ethic should be integrated throughout the educational programs of at-risk students. This involves consideration not only of instructional content but the manner in which work is completed. Emphasis should be placed on *how* work is done as well as *whether* it is done, and evaluation and feedback should convey the importance not only of academic skills but also of affective characteristics such as being dependable. Expectations should be high, and encourage-

ment should be prolific.

Counselors are uniquely positioned to facilitate work ethic development of at-risk students. Based on the functional definition of at risk used in this study, interaction between counselors and at-risk students is likely a frequent occurrence. Counselors are typically involved with students who have experienced discipline problems, attendance problems, run-ins with the law, or disengagement with schoolwork. They are also frequently aware of community and family circumstances that have influenced the behavior patterns of at-risk youth. With the holistic perspective counselors often have, they are perhaps best suited to direct students toward a mentor in the community or involvement in extracurricular programs that encourage positive affective behaviors.

SCCT provides a basis for counselors' efforts with at-risk students. Strategies should emphasize development of self-efficacy, outcome expectations, and personal goals. Students should be encouraged to believe in their own potential for success and be made aware of the significance of work ethic attributes to accomplish their goals.

Counselors should particularly note opportunities to help students avoid negative influences. The processes explained by SCCT can function in a detrimental fashion as well as for the good. When students are involved in inappropriate activities that build their confidence and are acknowledged by significant peers who are making poor decisions, their actions can often place them even more at risk. Whether through encouraging involvement in extracurricular activities, academic programs, or community activities, counselors should make every effort to help at-risk students to find success and build expectations for future accomplishments in positive ways so that SCCT mechanisms help rather than hinder positive growth.

In considering potential applications of this study of work ethic, counselors should encourage persons who interact with at-risk youth to include work ethic, work attitudes, and in particular the issue of being dependable in a conscientious and deliberate manner. The range of opportunities for this to happen extend from informal conversations with adults associated with at-risk youth to deliberate content to be included in formal intervention programs (e.g., in-

school suspension, mandatory advising sessions, alternative educational programs).

Another aspect of work ethic noted in this study was difference in work ethic by gender. As was the case for differences on at-risk behaviors, differences on gender can be attributed in part to contextual influences. Whether associated with the masculine images embedded in U.S. culture or due to other issues that affect male development, lack of dependability leads to failure in the contemporary workplace. Research shows that providing male role models who are consciously dependable and who verbalize the importance of this and other work ethic attributes would help students prepare for work, especially boys who might need improvement in these areas.

Considerable opportunities for further research exist in the area of work ethic and work attitudes. Among the most significant are systematic studies of intervention strategies and further research to identify the source of work ethic differences. Because affective attributes are largely determined in the early years of human development, the potential for efforts to shape or influence work ethic attributes in adolescents or adults is limited. Studies are needed to evaluate the success of participation in intervention strategies designed to include work ethic issues. In addition, better understanding is needed of how work ethic develops. Perhaps efforts to encourage work ethic should be focused at the primary level rather than in secondary grades. Although most of the behaviors associated with poor work ethic are more readily identified in adolescents and adults, the origin of these behaviors might reside in earlier years of development. If there is an optimum span of years when interventions would be most effective, certainly its identification would be helpful. Further research is needed to determine if this is the case.

In considering recommendations to be derived from this study, it should be noted that many of the characteristics that constitute work ethic are elements related to personality and character. To the extent that adolescents can be influenced in these areas, theories such as SCCT provide a basis for interventions and educational strategies focused on work ethic. Change in affective characteristics such as work ethic, if they are to occur, are largely based on choices made by individuals, but other people can influence these choices.

Counselors should encourage at-risk youth to recognize personal capabilities and potential in the area of work ethic, help them to understand the significance of work ethic for success at work, and assist them with identification of personal goals that work ethic will help them to achieve. At-risk youth sometimes can lack confidence in their own personal capabilities (self-efficacy) needed to accompany outcome expectations for career-related decisions. Issues such as academic difficulties or limited economic opportunity can adversely affect at-risk youth career goals. It is useful to help them understand that other factors, such as work ethic, that are within their power to change, can significantly affect career opportunities and success. Counselors can help at-risk youth to identify career opportunities and to formulate career goals that can serve as both catalyst for a strengthened work ethic and motivation to strive for improvement in other areas as well.

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