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Influences on Adolescents' Beliefs about  
Future Work Success and Future Life Success

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### Abstract

This study discusses the relationship between students' beliefs about hard work, ability, effort, context, luck, chance, powerful others, school engagement, future work success and future life success. The study investigated the relationship among these variables for 133 boys and girls. The students reported their beliefs about each variable. Pearson correlations assessed the interrelationship of the variables. Multiple regression analyses assessed the relationship of the variables to future work success and future life success. Hard work was the only measure significantly related to future work success and future life success. Unexpectedly, neither future work success nor future life success were related to school engagement.

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The demographic make up of our society is constantly changing (Blau & Duncan, 1967). As a result of such change, it is necessary that the work environment mold and shape itself to accommodate the needs of such a society. However, the current work environment does not reflect these demographic changes of society as a whole (Borgen, 1991). Though the minority population is growing in American society, these persons are not represented in the upper echelons of the work force (Brown, Brooks, & Assoc., 1990; Farmer, 1985). Minority youth, especially those who are considered at risk youth, are severely underrepresented in the work force when they reach adulthood.

The development of work beliefs is an area of research which has not been extensively explored, especially in the area of psychology. However, the existing research suggests that economics and difference in motivation are key factors in the development of work beliefs (Danziger, 1958; Furnham, 1985,1987; Heaven, 1989. Little mention is made, however, of the social influences that shape work beliefs .

Although there has not been much research based on the social factors leading to work values, the influence

of social factors on the academic achievement and vocational aspirations of adolescents has been a keystone area of research (Perrone, 1967, 1973; Steinberg, Dornbusch, and Brown, 1992; Wijting, Arnold, and Conrad, 1977, 1978). Likewise, the motivational factors behind the willingness to work have also been greatly researched (Keller et. al, 1992; Zytowski, 1970).

However, it is very disappointing that there are several areas which this vast supply of information does not address. In particular, prior research on work values gives little attention to the process by which a value for work is developed. One of the primary problems along the lines of this research is the poorly defined concept of work values or work ethic. There are at least eight self-report scales in use that were devised to measure a person's beliefs about work ethic (Goldstein & Eichhorn, 1961; Blood, 1969; Mirels & Garrett, 1971; Wollack, Goodale, Wijting, & Smith, 1971; Hammond & Williams, 1976; Bucholz, 1976; Ray, 1982; Ho, 1984). Although, each scale measures certain aspects of work ethic, no scale establishes a clear definition of the concept of work ethic.

A second problem is related to the generalizability of the prior research conducted in this area. The previous research is based on samples of youth who are members

of the majority. Therefore, those findings may have restricted generalizability across different ethnic groups. A noted study on parenting styles by Steinberg, Dornbusch, and Brown (1992) found such lack of generalizability across ethnic groups. In fact certain parenting styles, that were deemed best based on a study of majority youth were not the best parenting styles for minority youth.

Based on this prior research, the present study focuses on the beginning stages of the development of a sense of work ethic. More specifically, this research addresses the beliefs about work among minority adolescents.

Adolescence is the age period for exploring the development of work ethic due to the very nature of the period of adolescence itself. Adolescence is a time of beginning exploration and the development of ideas of autonomy in regards to themselves and to their ideas about work (Gribbons & Lohnes, 1965; Kapes & Strickler, 1975). As children approach adolescence, they shed the cover of ideals of their parents and begin to question and to formulate their own beliefs. However, the basis and structure of those beliefs are still subject to the influence of social factors such as parents and other key figures who are instrumental in the youth's development.

The objective of this research is: (1) to describe adolescents' work beliefs, (2) to explore the factors

that are significantly related to expected work success, and (3) to note the subjects' individual beliefs about work, and how they are related to more general beliefs about personal responsibility for outcomes. In order to explore these objectives, the subjects were asked about their beliefs about work in terms of their expected future success and their personal characteristics that are related to future success.

Several hypotheses guided this study.

#### HYPOTHESIS 1.

Minority students consider ability and effort rather than luck to be significantly related to work success.

#### HYPOTHESIS 2.

Minority students consider hard work to be the most significant determinant of their future work success as compared to effort, context, or luck.

#### HYPOTHESIS 3.

Minority students deem school success necessary for for future work success.

### **Methods**

#### Sample

The 133 respondents in the study were eighth graders of which approximately 44 percent were female and 56

percent were male ( $M = 13.6$  years;  $SD = 1.11$ ).

Approximately 21 percent of the respondents were African American and 79 percent were Hispanic American. Data for this study came from a survey of eighth grade middle school students in the cities of San Antonio, Corpus Christi, and Houston who participated in a summer outreach program in July of 1995 in Houston, Texas. The outreach program, entitled Jumpstart, targeted at-risk youth and served as an instrument to introduce them to careers in math and science.

#### Procedures

The subjects completed the questionnaire in a group setting of school classrooms. The instrument asked for information concerning students' education, family backgrounds, beliefs about hard work and in regards to a work ethic, beliefs about ability, effort, context, and luck in regards to achievement, beliefs about the influence of powerful others and chance in regards to economics, and beliefs about future work success and success in general.

#### Measures

Hard Work. Beliefs about hard work were assessed based on the 10-item Hard Work factor of the Work Ethic Scale (Wollack et al., 1971). This scale assessed the degree to which individuals consider hard work

to be important for their future success (i.e., "People who are willing to work hard have a good chance of succeeding";  $\alpha = .75$ ). The students rated the measure on a 5-point rating scale which ranged from 1 (strongly agree) to 5 (strongly disagree).

Personal Responsibility. To measure personal responsibility for outcomes, the Achievement and Economic subscales of the Multidimensional- Multiattributinal Causality Scale (MMCS) (Lefcourt et al., 1979) were used. The Achievement subscale consisted of 4 variables: Ability, Effort, Context, and Luck. The students rated the variables on a 5-point rating scale which ranged from 1 (strongly disagree) to 5 (strongly agree).

Ability. The four items of the Ability factor assessed the degree to which the individuals believed that their personal ability was significant to their achievement (i.e., "If I were to receive low marks it would cause me to question my academic ability";  $\alpha = .67$ ).

Effort. The factor Effort consisted of six items which assessed the degree to which the subject believed that their individual effort was related to their achievement ( $\alpha = .68$ ).

Context. The 5 items which measured the factor Context which assessed the subjects' beliefs about the degree to which outside influences are related to their achievement

(i.e., "Sometimes I get good grade only because the course material was easy to learn"; alpha = .76).

Luck. The factor Luck consisted of 5 items which measured the extent to which the subjects believed that luck was related to their achievement (alpha = .63). The students rated all four factors on a 5- point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Chance and Powerful Others. The Economic subscale contained the two variables of Chance and Powerful Others. Each variable contained items which assessed beliefs about their economic success. The Chance variable consisted of 6 items which measured beliefs about the influence of chance on future success (e.g., "It's not always wise for me to save because many things turn out to be a matter of good or bad fortune"; alpha = .62). The Powerful Others variable consisted of 4 items which assessed beliefs about the influence that powerful people have on future success (e.g. "People like myself have very little chance of protecting our personal interests when they are in conflict with those of strong pressure groups"; alpha = .60). The students rated both measures on a 5-point scale which ranged from 1 (strongly disagree) to 5 (strongly agree).

Future Work Success (FWS) and Future Life Success (FLS). The two scales, Future Work Success and Future

Life Success were derived from the 22 item Future Orientation Scale (Fidel & Hale, 1979). The factor FWS consisted of 3 items which assessed the students' beliefs about their future work success (e.g., "I will get the job promotions I deserve"; alpha = .57). The scale FLS was measured by 5 items which assessed the students' beliefs about their future in an overall sense (e.g., "I will succeed at most things I try"; alpha = .70). The subjects rated both measures on a 5- point rating scale ranging from 1 (strongly disagree to 5 (strongly agree).

School Engagement. The scale was derived from the 7-item School Engagement Scale (Costa et al., 1987). School Success consisted of 7 items which measured the subjects' beliefs about how hard they try in their classes at school (i.e., "I try to work hard in my subjects"; alpha = .74). The subjects rated the measure on a 5- point scale ranging from 1 (This is never characteristic of me) to 5 (This is always characteristic of me).

### Results

The means for hard work, ability, effort, context, luck, chance, powerful others, school engagement, future work success, and future life success are presented in Table 1. These mean levels are consistent with previous

research (Perrone, 1973; Furth, 1980; Furnham, 1987).

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Table 1 about here

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Pearson correlations among the variables documented significant relationships among the measures (see Table 2). The analyses revealed that students believe hard work is most strongly related to effort and is more moderately related to ability, school engagement and luck. Students also believe that there are significant relationships among personal ability to achieve, personal situations or context, luck, chance and the influence of powerful people. Thus, these findings reveal a high interrelationship between these variables and suggest a great overlap in these concepts. School engagement was significantly related to hard work, effort, context, and luck. School engagement was positively related to hard work and effort and negatively related to context and luck.

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Table 2 about here

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In order to determine if there were differences between beliefs about future outcomes and success, separate regression equations with future work success, and future

life success as the dependent variables were run (see Table 3). The independent variables were sex, ethnicity, hard work, ability, effort, context, luck, and school engagement. Although the interrelationship among the predictors were moderately high, the variance inflation factor scores all ranged between 1- 2.3 indicating multicollinearity was not a statistical problem.

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Table 3 about here

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In the case of future work success the equation was marginally significant,  $F(8,105)=1.86$ ,  $p .08$  and accounted for 12% of the variance. Hard work was the only significant predictor,  $t(105)=2.11$ ,  $p < .05$ .

The equation for future life success was significant,  $F(8,105)=2.52$ ,  $p .02$  and accounted for 16% of the variance. In this case as well hard work was the only significant predictor,  $t(105)=2.44$ ,  $p < .05$ .

#### Discussion

This study confirmed that students believe hard work is the most significant determinant of their future work success. Students also appear to be aware that hard work is not the only determinant of future work success. In the correlation analysis, other factors such as ability and school engagement were also related

to life success. However, the multiple regressions analysis indicate that it is hard work that accounts for a unique portion of the variance. Situational features or contexts do not appear to be related to students' beliefs about future work success. These findings are similar to results reported on older individuals (Furnham & Rose, 1987) and younger individuals (Perrone, 1965) and support reported evidence that beliefs systems about future work success are evident prior to young adulthood (Perrone, 1967).

The findings yielded an overlapping relationship between ability to achieve, context, luck, chance and the influence of powerful others. This pattern of findings replicates previously reported results on the interrelationship of these variables (Mickelson, 1990) and the concept of an achievement paradox, as termed by Mickelson (1990). Mickelson chose the terminology achievement paradox to reflect the high interrelationship of personal variables such as ability with externally influenced variables such as chance, luck, context and the influence of powerful others.

The correlational analysis also revealed that school engagement is positively related to the concepts hard work and effort and is negatively related to the concepts context and luck. In essence, students who report trying harder in school also believe hard work and effort are

related to achievement. At the same time, students are less likely to believe that achievement is related to context or luck. However, school engagement was not significantly related to future work success although it was hypothesized that school engagement would be necessary for future work success. Therefore, how hard the student tries in school is not related or predictive of future work success. Although school seems to be the work aspect of adolescent life, school success does not correlate to future work success.

This study poses an interesting turn in the path of analyzing adolescents' beliefs about the predictors of future work success and future life success. Previous research has focused on adolescents' school achievement and engagement as an indicator of future success (Grolnick & Ryan, 1989 and Rowe, Vazsonyi, and Flannery, 1995). However this research does not confirm that school engagement is related to the future work success or future life success. Although separate multiple regression equations were conducted and examined on the two variables, hard work was the only significant measure that was related.

Certainly, further research is needed in this area. Further research on this topic should consider additional means of data collection to achieve independent measures

of the variables rather than solely depending on self reports. For example, grades should be obtained for an independent measure of school engagement. Future research also should consider conducting separate multiple regression equations for boys and girls as well as for different ethnic groups. This process will ensure more detailed and specific analyses of the variables and possible trends within sexes or between sexes and within ethnic groups or between ethnic groups.

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## Appendix

### Hard Work

1. If you work hard you will succeed.
2. People who work hard deserve success.
3. Hard work builds character.
4. Hard work makes you a better person.
5. Nothing is impossible if you work hard enough.
6. By working hard you can overcome most obstacles.
7. Hard work is fulfilling in itself.
8. People who work hard have a good chance of succeeding.
9. The person who works hard at unpleasant tasks with enthusiasm usually gets ahead.
10. If you work hard enough, you will make a good life for yourself.

### Ability

1. If I were to fail a course it would probably be because I lacked skill in that area.
2. If I were to get bad grades I would assume that I lacked ability in those courses.
3. If I were to receive low marks it would cause me to question my academic ability.

Effort

1. Whenever I receive good grades it is always because I have studied hard for that course.
2. When I receive a poor grade, I usually feel that the main reason is that I haven't studied enough for that course.
3. In my case, the good grades I receive are always the direct result of my efforts.
4. When I fail to do as well as expected in school, it is often due to the lack of effort on my part.
5. Poor grades inform me that I haven't worked hard enough.
6. I can overcome all obstacles in the path of academic success if I work hard enough.

Context

1. Sometimes I get good grades only because the course material was easy to learn.
2. Some low grades I receive seem to reflect the fact that some teachers are just stingy with grades.
3. In my experience, once a teacher gets the idea you're a poor student, your work is much more likely to receive poor grades than if someone else handed it in.

4. Some of my good grades simply reflect that these were easier courses than most.
5. Often my poorer grades are obtained in courses that the teacher has failed to make interesting.

### Luck

1. Some of my lower grades have seemed to be partially due to bad grades.
2. I feel that some of my good grades depended to a considerable extent on chance factors such as having the right questions show up on a test.
3. Some of my bad grades may have been a function of bad luck--being in the wrong course at the wrong time.
4. Sometimes I feel that I have to consider myself lucky for the good grades I get.
5. Sometimes my success on exams depends on some luck.

### Chance

1. Regarding money, there isn't much you can do for yourself when you are poor.
2. There is little one can do to prevent poverty.
3. It's not always wise for me to save because many things turn out to be a matter of good or bad fortune.

4. Only those who inherit or win money can possibly become rich.
5. Becoming rich has nothing to do with luck.
6. It is chiefly a matter of fate whether I become rich or poor.

#### Powerful Others

1. People like myself have very little chance of protecting our personal interests when they are in conflict with those of strong pressure groups.
2. I feel that my finances are mostly determined by powerful people.
3. Although I might have the ability, I will not become better off without the help of people in powerful positions.
4. Getting what I want financially requires pleasing those people above me.

Table 1: Means and Standard Deviations for Study Variables

Variables	Mean	Standard Deviations
Hard Work	43.14	4.44
Ability	16.63	3.55
Effort	24.93	3.21
Context	18.28	4.14
Luck	20.12	3.50
Chance	16.89	4.00
Powerful Others	11.25	2.86
Work Success	13.78	1.48
Life Success	23.35	1.96
School Engagement	30.12	3.16

Table 2: Correlations Among Study Variables

Variables	1	2	3	4	5
1. Hard Work	--				
2. Ability	.26**	--			
3. Effort	.62**	.15	--		
4. Context	-.08	.52***	-.17	--	
5. Luck	.20*	.49***	.09	.60***	--
6. Chance	.08	.44***	.02	.42**	.55***
7. Pwrful Others	.14	.52***	.08	.53***	.49***
8. School Engage	.31***	-.05	.23*	-.40***	-.26**
9. Work Success	.26**	.10	.11	.00	.09
10. Life Success	.34***	.07	.23**	-.08	.02

\*p < .05    \*\*p < .01    \*\*\* p < .001

**Table 2: Correlations Among Study Variables (continued)**

Variables	6	7	8	9	10
1. Hard Work					
2. Ability					
3. Effort					
4. Context					
5. Luck					
6. Chance	--				
7. Pwrful others	.54***	--			
8. school engage	-.13	-.14	--		
9. Work success	.16	.00	.14	--	
10. Life success	.17	.03	.29***	.65**	--

\*p < .05

\*\* p < .01

\*\*\*p < .001

**Table 3: Multiple Regressions of Future Work Success (FWS) and Future Life Success (FLS)**

Predictors	FWS	Predictors	FLS
	$\beta$		$\beta$
Sex	.02	Sex	.09
Ethnicity	-.16	Ethnicity	-.10
Hard work	.26*	Hard Work	.29*
Ability	.00	Ability	-.01
Effort	-.08	Effort	.02
Context	.06	Context	.07
Luck	.04	Luck	-.03
School Engagement	.16	School Engagement	.16
R <sup>2</sup>	.12	R <sup>2</sup>	.16

Note.  $\beta$ = standardized regression coefficient for the full model.

\*p < .10      \*\*p < .01      \*\*\*p < .001