ABSTRACT
This study compares and contrasts the individual dimensions of work ethic of graduating college and university students to those of workforce professionals. The Multidimensional Work Ethic Profile (MWEP) is used to operationalize seven dimensions of work ethic. The findings indicate that while students and workforce professionals differ within the individual dimensions, quantitatively, they have the same overall work ethic. Variances within the dimensions of work ethic may have important implications for corporate managers.

Keywords: Work Ethic, Work Values, Dimensions of Work Ethic
Challenging as it may be, more empirical research and scientific theory of work ethic is needed. Greater understanding of the desires, requirements, and work-related values of the newest generation of employees may provide a win-win opportunity where both employers and employees benefit. Conversely, the adverse consequences of a knowledge shortfall are enormous. Mismatches between job design and employees will negatively affect job attitudes (Porter, 1969), which in turn may affect a firm’s ability to compete. Understanding the values of employees is a requirement for any company that wishes to operate with vigor and vitality (Ralston et al., 1997) and it offers potential benefits to an entire society (Hansen, 1963) as healthy organizations can translate into economically prosperous cultures (Hofstede, 1984). Key to the future success of any company is its ability to manage, train, develop, and reward (Vroom, 1960) a satisfied (Herzberg, 1968) and motivated workforce (Lawler, 1968) at all levels of its organization. This cannot be accomplished unless changes in work-related values are understood. Interestingly, while most organizations have human resource management policies and procedures that mirror the company’s culture (Jain, 1990) and are influenced by the root national culture (Hofstede, 1983), they are not always attuned to the values of the changing workforce (Smola and Sutton, 2002).

While the existence of differences in the overall work ethic between established workers and new employees is generally accepted (Hirschfeld and Field, 2000; Loscocco and Kalleberg, 1988), the degree and extent to which they differ is not fully understood (Cherrington et al., 1979). Our literature review yielded a wide range of studies that found differences in the work ethic of younger and older people (Loscocco and Kalleberg, 1988; Cherrington, 1977; Cherrington et al., 1979; Taylor and Thompson, 1976). However, findings may be incomplete or misleading since they focus on only one or two dimensions of work ethic (Miller et al., 2002).

Our investigation differs from related studies in that we compare each of the distinctive dimensions of work ethic of individuals about to begin their professional careers to those already working in those careers. Our study also differs from those involving psychological contracts, organizational commitment, or generational differences. For example, psychological contracts are general perceptions of an exchange agreement between two parties (De Meuse et al., 2001; Rousseau, 1998). Chris Argyris introduced the term “psychological contract” in 1960, as a broad reference to a set of expectations between an employee and his/her employer. Since many organizations are no longer willing or able to meet these expectations the traditional psychological contract is in a transient state (Guest, 1998; Anderson and Schalk, 1998). In other words, organizational changes are influencing psychological contracts and these are not necessarily directly related to the individual dimensions of work ethic.

Organizational commitment was initially conceptualized as an individual’s internalization of an organization’s goals and values and the willingness to work toward
achievement of those goals (Porter et al., 1974). Later, it was reinterpreted as a manifestation of multiple commitments to various groups within an organization (Reicher, 1985). Organizational commitment is of keen interest to many researchers since it has been linked to positive job performance (Fiorito et al., 2007; Hunt, 1994). However, critics believe that the construct has insufficient theoretical grounding (Fiorito et al., 2007) which may explain why it has been studied without yielding a consensus as to its dynamic processes (Lorence and Mortimer, 1985). Some studies suggest that a person’s organizational commitment is measurably influenced by the perception of organizational fit (Ravlin, et al., 2006). While this may be influenced by an individual’s work ethic, it is not a measure of work ethic.

The literature is rich with studies of generational differences. Generational groups are comprised of individuals who share a set of significant life experiences that are relatively constantly over the course of their lives (Smola and Sutton, 2002). Generational differences have linked to variations in ideas, values, and behaviors (Callahan, 2008) including the demonstration of respect for authority and loyalty to institutions (Kupperschmidt, 2000). Some studies have found that older workers are more satisfied in their jobs and presumably are more committed to their work (Wright and Hamilton, 1978). However, while there is sufficient evidence to conclude that common life experiences influence overall behaviors and values (Payne et al., 1973), few studies related to work values, have sufficiently investigated the individual components (Miller et al., 2002). These individual components are the centerpiece of our study.

**Seven Dimensions of Work Ethic**

In order to study work ethic within the context of Max Weber’s original ideas, it must be disentangled from other work-related concepts. To accomplish this objective we adopted a measure introduced by Miller, et al., 2002. The measure, Multidimensional Work Ethic Profile (MWEP), has seven Weber-associated dimensions: Leisure, Wasted Time, Self-Reliance, Work Centrality, Delay of Gratification, Belief in Hard Work, and Morality/Ethics (Miller et al., 2002). We used “career status” as a generic classification and within this, we investigated two populations: workforce professionals and college/university students. The MWEP was used to operationalize the responses. (See Figure I).

**FIGURE 1**

The Seven Dimensions of Work

<table>
<thead>
<tr>
<th>Dimensions of Work Ethic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Reliance</td>
</tr>
<tr>
<td>Morality/Ethics</td>
</tr>
<tr>
<td>Leisure</td>
</tr>
<tr>
<td>Hard Work</td>
</tr>
<tr>
<td>Centrality of Work</td>
</tr>
<tr>
<td>Wasted Time</td>
</tr>
<tr>
<td>Delay of Gratification</td>
</tr>
</tbody>
</table>

Workforce Professional - College Student
**Self-Reliance.** Self-reliance may be particularly prudent for individuals who are not yet established in their careers since it is conceivable that they will be observed more closely than established professionals. It may be necessary for them to quickly demonstrate the ability to work independently, particularly given a business environment of weakening long-term commitments between employees and employers. Some literature suggests that young people understand the new environment and accept the idea that they must be self-reliant. For instance, a sampling of college seniors assessing perceptions of career self-reliance found that seniors believe that traditional career paths are a thing of the past and that career self-reliance is essential in the modern world (Brown, 2005). Even earlier studies seem to affirm the commitment of younger workers to self-reliance as they exhibit a strong propensity for self-expression and a desire to have more responsibility, to make influential decisions, and to function autonomously (Taylor and Thompson, 1976; Buchholz, 1978a; Cherrington, 1977).

Not all studies found a strong desire for self-reliance among students. For example, Owens (1980) presented students with two different ideologies – one that emphasized the traditional American work ethic and one that stressed a less individualistic and more communal orientation. Students were asked to choose which they preferred. Findings in that study suggested that Americans, particularly college students, were shifting to a new communitarian ideology and away from independence/self-reliance. Notwithstanding the Owens study, we believe the overall findings suggest the following is hypothesis:

**Hypothesis (1):** Career status will have a significant effect on the dimension of self-reliance, such that college students will have a higher mean score in self-reliance than workforce professionals.

MWEP sample self-reliance questions (There were 10 questions.)

(7-point Likert scale Strongly Disagree to Strongly Agree)

To be truly successful, a person should be self-reliant

Self-reliance is the key to being successful

People would be better off if they depended on themselves

**Morality/Ethics.** The term morality evolved from the Latin word moralis, while ethics is associated with a Greek-rooted word, ethos. Loosely translated, each is a reference to issues surrounding the character, customs, and matters of behavior. Occasionally, morality is used to describe how people act, while ethics is used to define the study of behavior standards, specifically rules of right and wrong (Gbadamosi, 2004). More frequently, however, the terms ethics and morality are used interchangeably as a way of referring to the manner in which people act or are expected to act. In this study of work ethic, “morality and ethics” are combined to describe the belief in a just and moral existence (Miller et al., 2002).
Morality/Ethics literature with students as subjects has received considerable attention. Recent examples include moral reasoning and moral development of students (Bruess and Pearson, 2002; Pearson and Bruess, 2001; Snodgrass and Behling, 1996; Venezia, 2005), academic ethics (Gbadamosi, 2004), academic dishonesty (Rawwas et al., 2004), and ethical decision making (Nill and Schibrowsky, 2005). The college experience has been identified as having a major influence on moral reasoning in both traditional and non-traditional students (McCarthy et al., 2002). Educational intervention can positively impact moral reasoning as was shown in a study that explored the use of a cognitive development approach and its affect on police trainees and students of criminal justice (Morgan et al., 2000).

Based on the literature, we conclude that morality/ethics is strengthened by the college experience and continues to develop in the workforce professional. Therefore we hypothesize:

**Hypothesis (2):** Career status will have a significant effect on the dimension of morality/ethics, such that workforce professionals will have a higher mean score in morality/ethics than college students.

**MWEP sample Morality/Ethics questions (There were 10 questions.)**

- One should always take responsibility for one’s actions.
- One should always do what is right and just
- One should not pass judgment until one has heard all the facts

**Leisure.** Historically, waking hours have been dichotomized such that total time minus working time is equal to leisure or, at least, non-working time (Feldman and Hornik, 1981). Understanding work-leisure relationships require a clear distinction between leisure potential, leisure activity, and leisure orientation (Shamir and Ruskin, 1983). Leisure potential is the flexibility to do what one wishes to do when he or she wishes to do it (Parker, 1981). Leisure activity is participating in a non-working activity and leisure orientation is the desire to participate in non-working activities. In the context of this study, references to leisure are meant to refer to leisure orientation (i.e., the importance that individuals place on leisure/non-work activities).

Some research suggests that an individual who is highly motivated to seek leisure activities would receive less fulfillment from the work that he or she performs than the individual who has a low interest in leisure activities. In other words, a strong pro-leisure orientation may be the antithesis of a strong pro-work ethic (Buchholz, 1978a; Miller et al., 2002; Weber, 1905). Other studies find that a high leisure orientation and a high work ethic are not necessarily opposite ends of a spectrum (Furnham and Rose, 1987; Furnham, 1990; Tang, 1993; Pryor and Davies, 1989). These studies propose that individuals who receive fulfillment from work are not necessarily excluded from receiving fulfillment from leisure activities and vice versa. Thus, one could have a strong leisure ethic as well as a strong work ethic.
Although the literature reveals some contradictory findings, we believe the overall evidence supports the following hypothesis:

**Hypothesis (3):** Career status will have a significant effect on the dimension of leisure, such that college students will have a higher mean score in leisure than that of workforce professionals.

MWEP sample Leisure questions (There were 10 questions.)

- Life would be more meaningful if we had more leisure time.
- I would prefer a job that allowed me to have more leisure time.
- The more time I can spend in leisure activity, the better I feel.

**Hard Work.** In the context of this study, hard work is a belief that one can become a better person and achieve his or her objectives through a commitment to the value and importance of work. An individual committed to hard work can overcome almost any obstacle, can achieve personal goals, and become a better person (Miller, et al., 2002). He or she has the primary responsibility for fulfilling personal objectives such as the desire for success and the accumulation of material wealth (Buchholz, 1978a). Furnham (1984) found that individuals who subscribe to the tenants of the Protestant work ethic are strongly predisposed to a hard work commitment and Buchholz (1978b) found that hard work is a belief system almost indistinguishable from other belief systems such as Marxist-related and the humanistic.

It is possible that older and younger employees have different perception of what actually comprises hard work, thus their behaviors and responses may be skewed. Nonetheless, Miller et al. (2002) found that their student population had a lower mean score in hard work than their workforce population. Cherrington (1977), performing a work values study on workforce professionals throughout various industries, found that hard work and pride in craftsmanship were not as important to younger workers, compared to older workers. Interestingly, Smola and Sutton (2002), in their generational study of work values, found that the younger generations tended to believe that working hard was indicative of their value. Although there have been conflicting findings, we believe the weight of the work would suggest support the following hypothesis:

**Hypothesis (4):** Career status will have a significant effect on the dimension of hard work, such that workforce professionals will have a higher mean score in hard work than college students.

MWEP sample Hard Work questions (There were 10 questions.)

- Nothing is impossible if you work hard enough.
- Working hard is the key to being successful.
- If one works hard enough, one is likely to make a good life for oneself.
**Centrality of Work.** Centrality of Work refers to the importance that an individual places on his or her opportunity to work. It transcends the need and/or desire for compensation and represents a major frame of reference in one’s self-identification (Hirschfeld and Field, 2000). A study by Pryor and Davies (1989) investigated the actual work centrality concept and focused on three conceptualizations. First, is the belief that work is good and it provides dignity (Buchholz, 1976), second, work centrality is a residual concept (i.e., the less interested one is in non-work activities the greater the centrality of work) (Pryor, 1987) and third, the affective interest one has in the work, the passion for the process (Dubin et al., 1975). The Pryor and Davies (1989) study did not establish a strong relationship between the three conceptualizations and work centrality, thus many questions remain.

A study of work ethic across career stages discovered significant differences in multiple dimensions of work ethic; however, it found no evidence to suggest differences in centrality of work (Pogson et al., 2003). However, an earlier study by van der Velde, Feij and van Emmerik (1998) suggests that there is a connection between age and centrality of work. Their research involved studying three age groups of young adults – 18-year-olds, 22-year-olds, and 26-year-olds. They concluded that each group became more work centered over time. Smola and Sutton (2000) found that younger generations were less likely to believe that work should be a central part of their life. Based on the results of this literature, albeit somewhat contradictory, the following is hypothesized:

**Hypothesis (5):** Career status will have a significant effect on the dimension of centrality of work, such that workforce professionals will have a higher mean score in centrality of work than college students.

MWEP sample Centrality of Work questions (There were 10 questions.)

- I feel uneasy when there is little work for me to do.
- I feel content when I have spent the day working.
- Even if I were financially able, I would not stop working.

**Wasted Time.** Wasted time in this context refers to a continuum with one end representing a high commitment to time management in order to maximize productivity and the other end characterizing a low commitment to time management. The efficient and constructive use of time is consistent with a strong work ethic (Herman, 2002) and it has been long understood that improved performance is inexorably linked to efficient use of time (Mudrack, 1999). Poor time management and procrastination have been identified as an obstacle to productivity (Dembo and Eaton, 2000).

Wasted time and poor performance, whether by students or workforce professionals, may be affected by procrastination. Procrastination can work in different ways, such as underestimating the amount of time required for specific tasks and therefore not investing the time and effort necessary for performing well (Jackson et al., 2003) or delaying or avoiding the execution of a task (Van Eerde, 2003), resulting in
under-performance or wasted time. Procrastination can be accompanied by a feeling of internal discomfort (Haycock et al., 1998; Van der Hulst and Jansen, 2002), which can further exacerbate the situation. Efficient use of time is a learned skill that can decrease avoidance behavior, reduce anxiety, and increase satisfaction (Van Eerde, 2003; Mudrak, 1999). The satisfaction component can be observed in some individuals who actually hit a psychological state where they are so involved in their work that they become oblivious to time and setting (Lee, 2005).

While a number of studies investigate how workers waste time (Libet et al., 2001; Bauza, 2006; Aftab, 2003; Donkin, 2002; Gimein, 1999), there is little scholarly literature comparing workforce professionals to college/university students. Since efficient use of time is a learned skill, it hypothesized that:

**Hypothesis (6):** Career status will have a significant effect on the dimension of wasted time, such that workforce professionals will have a higher mean score in wasted time than college students.

MWEP sample Wasted Time questions *(There were 8 questions.)*

- **It is important to stay busy at work and not waste time.**
- **Time should not be wasted, it should be used efficiently.**
- **I schedule my day in advance to avoid wasting time.**

**Delay of Gratification.** Delay of gratification reflects the ability to forgo short-term rewards in order to reap some benefit in the future (Joy and Witt, 1992). It is an individual’s ability to sustain a chosen course of action for the achievement of a long-term goal even though there are tempting alternatives that offer short-term gratification (Reynolds and Schiffbauer, 2005). While delay of gratification has been studied relative to socioeconomic status and impulse buying (Wood, 1998), affective decision making and perspective taking (Prencipe and Zelazo, 2005), gender (Silverman, 2003; Witt, 1990), life themes and motivations among students re-entering a university environment (Bauer and Mott, 1990), organizational satisfaction and commitment (Witt, 1990), procedural justice and distributive justice relationship (Joy and Witt, 1992), and impulsive choices and problem behaviors (Wulfert et al., 2002) few studies have examined the differences between students and workforce professionals. However, a study of adolescent delay of gratification and self-regulatory abilities concluded that impulsive choices in an experimental situation pointed to lack of self-control in other areas of life (e.g., low achievement and substance use (Wulfert et al., 2002). A study using a sample of undergraduate students discovered that greater satisfaction with and commitment to an organization could be associated with an orientation toward or ability to delay gratification (Witt, 1990). Based on the literature results, the following is hypothesized:
Hypothesis (7): Career status will have a significant effect on the dimension of delay of gratification, such that workforce professionals will have a higher mean score in delay of gratification than college students.

MWEP sample Delay of Gratification (There were 7 questions.)

If I want to buy something, I always wait until I can afford it.

I get more fulfillment from items I had to wait for.

Things that you have to wait for are the most worthwhile.

METHODS
Sample and Procedures
Two samples were used for this study. The first sample, college juniors and seniors, was selected from a large northeastern university and a smaller northeastern college. Participation in the paper-and-pencil survey was voluntary and administered in an in-class setting. There were no inducements for participation. Anonymity was guaranteed and no identifying items were included on the questionnaire.

The second sample, workforce professionals, was drawn from businesses in a wide range of industries, including manufacturing, merchandising, general services, financial services, technologies, drugs, medical supplies and banking. Businesses were selected from the database of the National Society of Human Resource Management, the database of the National Association of Accountants, and additional organizations at the recommendation of other businesses participating in the process. Contact information was collected for individuals holding various positions in the organizations. The surveys were distributed to individuals both in paper format through US Mail, Fax, and electronically via email and the Internet (Survey Monkey). In addition to the questionnaire, workforce participants were given a cover letter (an e-letter for online participants) explaining the survey. The cover letter reinforced our guarantee of confidentiality and anonymity.

The online survey collection was selected as it provided for efficiency (Kaplowitz et al., 2004), as well as speed and flexibility (Best et al., 2001). Ballard and Prine (2002) compared Internet and mail survey responses, reporting that those likely to complete and return mail surveys do not differ substantially from those who tend to respond by Internet. Further, when Best et al. (2001) compared samples drawn using probabilistic telephone methods and the Internet, they found no difference between Internet users and the population in terms of the decision making-processes for common political decisions. Finally, evaluating the question of whether individuals respond differently depending on the mode of questionnaire delivery (web-based versus paper-based), Denscombe (2006) found little evidence to support a mode effect linked to web-based questionnaires.

The combined total sample size was 430 individuals. The sample size of students was 218, with a mean age of 23.00 (SD = 3.85) and a minimum and maximum age of 19 and 50 years. The student sample had a gender distribution of 46% female and 54% male.
The sample demographics are consistent with the overall student population. The sample size of workforce professionals was 212, with a mean age of 44.56 (SD = 14.28) and a minimum and maximum age of 19 and 77 years. The workforce population had a gender distribution of 42% female and 58% male.

VARIABLES

Work Ethic. The Multidimensional Work Ethic Questionnaire (Miller, et al., 2002) was used to measure the seven dimensions of work ethic. The scale had 65 items, in random order, and used a Seven-point Likert-type scale ranging from 1, Strongly Disagree to 7, Strongly Agree. The seven dimensions measured in the study were Self-Reliance (10 items), Morality/Ethics (10 items), Leisure (10 items), Hard Work (10 items), Centrality of Work (10 items), Wasted Time (8 items) and Delay of Gratification (7 items). Four items within the Morality/Ethics dimension were reverse coded in order to assess the participants’ level of engagement in the survey. After recoding the items, the means were not significantly different from the other items in the scale. Chronbach’s alphas were computed for the sample which yielded the following acceptable levels of reliability: Self-Reliance (.89), Morality/Ethics (.77), Leisure (.90), Hard Work (.89), Centrality of Work (.85), Wasted Time (.79) and Delay of Gratification (.81).

Career Status. The independent variable, career status, was measured through data collection. All surveys collected from college students were coded 1 and all surveys collected from workforce professionals were coded 2.

Gender. Gender was measured through a question asking the survey respondent to select their gender. Females were dummy coded 1 and males were dummy coded 2.

ANALYSES

The means, standard deviations and two-tailed Pearson Correlations were calculated for the seven dimensions of work ethic. The results can be seen in Table 1. Analysis of variance was performed to find differences in the dependent variable work ethic as a function of career status. Work ethic was calculated using the mean work ethic score for each individual participating in the survey.

Multivariate analysis of variance was then performed to find the differences in the separate dimensions of work ethic as a function of career status. The separate dimensions were calculated using the mean dimension score for each individual participating in the survey. The Wilkes’ Lambda was calculated, followed by the calculation of separate univariate F-tests and cell means in order to ascertain the impact of the main effect of career status on the individual dimensions of work ethic.

RESULTS

Table 1 shows most of the correlations between the dimensions were statistically significant. However, very few of the correlations were large. Out of the 21 correlations, only two of the correlations were greater than .50 and only one of the correlations was greater than .60. Further, nine of the correlations were less than .30. The relatively low
correlations provide support for the respondents’ ability to distinguish between the different dimensions of work ethic.

TABLE 1
Pearson Correlation Matrix of the Factors of Work Ethic

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Self Reliance</th>
<th>Morality / Ethics</th>
<th>Leisure</th>
<th>Hard Work</th>
<th>Centrality of Work</th>
<th>Wasted Time</th>
<th>Delay of Gratification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Reliance</td>
<td>4.77</td>
<td>1.03</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morality / Ethics</td>
<td>6.25</td>
<td>0.64</td>
<td>(0.01)</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leisure</td>
<td>4.52</td>
<td>1.03</td>
<td>0.01</td>
<td>(0.24) **</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hard Work</td>
<td>5.25</td>
<td>0.96</td>
<td>0.38 **</td>
<td>0.21 **</td>
<td>(0.14) **</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centrality of Work</td>
<td>5.28</td>
<td>0.93</td>
<td>0.23 **</td>
<td>0.30 **</td>
<td>(0.54) **</td>
<td>0.46 **</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wasted Time</td>
<td>5.08</td>
<td>0.88</td>
<td>0.31 **</td>
<td>0.31 **</td>
<td>(0.37) **</td>
<td>0.45 **</td>
<td>0.60 **</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>Delay of Gratification</td>
<td>4.72</td>
<td>0.99</td>
<td>0.21 **</td>
<td>0.20 **</td>
<td>(0.13) **</td>
<td>0.39 **</td>
<td>0.36 **</td>
<td>0.42 **</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Notes: N = 430; ** p < .01 (2-tailed)

Tables 2 and 3 show the initial analysis of variance of work ethic and career status produced no significant effect using a p < .05. This confirmed our original proposition that the overall work ethic of students was similar to that of workforce professionals.

TABLE 2
Cell Means and Standard Deviations of Work Ethic as a Function of Career Status

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>College Students</th>
<th>Workforce Professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 218)</td>
<td>(n = 212)</td>
</tr>
<tr>
<td>Work Ethic</td>
<td>5.16 (.49)</td>
<td>5.09 (.49)</td>
</tr>
</tbody>
</table>

11
The results for the multivariate analysis of variance on the effect of career status on the dimensions of work ethic are shown in Tables 4 and 5. The Wilkes Lambda was moderate and significant, with career status providing for approximately 23% of variability in the dimensions of work ethic. The results of the univariate F-tests and the cell means provide a better understanding of the influence of the main effect of career status on the individual constructs of work ethic. As seen in Table 4, career status had a strong significant effect on Self-Reliance, Morality/Ethics, Leisure, and Hard Work at \( p < .001 \). Career status also had a significant effect on Centrality of Work and Wasted Time at \( p < .05 \). The data did not support career status having a significant effect on Delay of Gratification. The means of the significant dimensions as indicated in Table 5, show that students were more self reliant, had a stronger leisure ethic, and had a stronger propensity for hard work, while workforce professionals had a stronger distaste for wasting time, a stronger moral and ethical aptitude and had placed a greater importance on work in their lives (Centrality of Work). Therefore, the results supported our conclusions drawn in Hypotheses 1, 2, 3, 5, and 6 from the literature. The results did not support the conclusions made in Hypotheses 4 and 7.

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### TABLE 3

Test of Career Status on Work Ethic

<table>
<thead>
<tr>
<th>IV Name</th>
<th>DV Name</th>
<th>Univariate F</th>
<th>Partial Eta^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Status</td>
<td>Work Ethic</td>
<td>2.38</td>
<td>.01</td>
</tr>
</tbody>
</table>

Notes: *\( p < .05 \)  **\( p < .01 \)  ***\( p < .001 \)  \( N = 430 \)
TABLE 4

Test of Main Effects and Tests of Employment Status on Each Factor of Work Ethic using Univariate F-Tests

<table>
<thead>
<tr>
<th>IV Name</th>
<th>DV Name</th>
<th>Wilks' Lambda Value (F)</th>
<th>Univariate F</th>
<th>Partial Eta²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Status</td>
<td>Self Reliance</td>
<td>---</td>
<td>14.67***</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>Morality / Ethics</td>
<td>---</td>
<td>16.37***</td>
<td>.09</td>
</tr>
<tr>
<td></td>
<td>Leisure</td>
<td>---</td>
<td>14.61***</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>Hard Work</td>
<td>---</td>
<td>21.07***</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td>Centrality of Work</td>
<td>---</td>
<td>4.35*</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>Wasted Time</td>
<td>---</td>
<td>4.22*</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>Delay of Gratification</td>
<td>---</td>
<td>1.40</td>
<td>.00</td>
</tr>
</tbody>
</table>

Notes: *p < .05  **p < .01  ***p < .001  N = 430
### TABLE 5

**Cell Means and Standard Deviations of the Factors of Work Ethic as a Function of Career Status**

<table>
<thead>
<tr>
<th>Factor Names</th>
<th>College Student</th>
<th>Workforce Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$(n = 218)$</td>
<td>$(n = 212)$</td>
</tr>
<tr>
<td>Self Reliance</td>
<td>4.95 (.99)</td>
<td>4.58 (1.04)</td>
</tr>
<tr>
<td>Morality / Ethics</td>
<td>6.06 (.65)</td>
<td>6.44 (.57)</td>
</tr>
<tr>
<td>Leisure</td>
<td>4.70 (1.10)</td>
<td>4.33 (.91)</td>
</tr>
<tr>
<td>Hard Work</td>
<td>5.47 (.85)</td>
<td>5.03 (1.02)</td>
</tr>
<tr>
<td>Centrality of Work</td>
<td>5.18 (.98)</td>
<td>5.38 (.86)</td>
</tr>
<tr>
<td>Wasted Time</td>
<td>4.99 (.92)</td>
<td>5.19 (.83)</td>
</tr>
<tr>
<td>Delay of Gratification</td>
<td>4.78 (1.00)</td>
<td>4.67 (.97)</td>
</tr>
</tbody>
</table>

Due to the intercorrelations between the dimensions of work ethic, a Roy-Bargmann step-down F analysis was performed (Tabachnick and Fidell, 2001). Similar results were produced and the same variables were statistically significant (see table 6). The only exception was a change in the level of significance for the Leisure construct, which went from being significant at a $p < .001$ level to being significant at a $p < .05$ level. Therefore, even when taking into consideration the more conservative Roy-Bargmann analysis, the same relationships were statistically significant. (See Table 6)
TABLE 6

Test of Main Effects and Tests of Employment Status on Each Factor of Work Ethic using Roy Bargmann's Stepdown F Analysis

<table>
<thead>
<tr>
<th>IV Name</th>
<th>DV Name</th>
<th>Wilks' Lambda Value (F)</th>
<th>Step-down F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Status</td>
<td></td>
<td>.77 (18.29)***</td>
<td></td>
</tr>
<tr>
<td>Self Reliance</td>
<td></td>
<td>14.24***</td>
<td></td>
</tr>
<tr>
<td>Morality / Ethics</td>
<td></td>
<td>44.91***</td>
<td></td>
</tr>
<tr>
<td>Leisure</td>
<td></td>
<td>6.03*</td>
<td></td>
</tr>
<tr>
<td>Hard Work</td>
<td></td>
<td>37.36***</td>
<td></td>
</tr>
<tr>
<td>Centrality of Work</td>
<td></td>
<td>6.56*</td>
<td></td>
</tr>
<tr>
<td>Wasted Time</td>
<td></td>
<td>5.80*</td>
<td></td>
</tr>
<tr>
<td>Delay of Gratification</td>
<td></td>
<td>2.10</td>
<td></td>
</tr>
</tbody>
</table>

Notes: *p < .05  **p < .01  ***p < .001  N = 430

DISCUSSION

A majority of our hypotheses were supported by the results. The results found college students and workforce professionals report a similar work ethic. Further, when looking at the $\eta^2$, career status accounted for only 1% of the total variability in overall work ethic and the overall means were similar. When assessing the individual dimensions, career status accounted for approximately 23% of the variance, clearly a substantial proportion of the overall variance. In practical terms, career status accounts for a great deal of the difference in the work ethic of college students and workforce professionals. This finding supports our decision to explore more thoroughly the effects of career status on the separate dimensions of work ethic, with the belief that there is no difference in the overall work ethic of college students.

Our findings with regard to the individual dimensions are consistent with our hypotheses, with the exceptions of hypothesis 4, hard work, and hypothesis 7, delay of gratification. Our first hypothesis on self-reliance was confirmed; students demonstrated
a significantly stronger self-reliance than workforce professionals. This conforms to the findings of Taylor and Thompson (1976) that students are more self-reliant and independent than workforce professionals. The authors speculate that this could be caused by a number of factors. Many college students, especially those in their senior year, work hard individually to obtain employment outside school. It is their effort, individually, that ensures employment. In contrast, many businesses look to teamwork, rather than the work of an individual, promoting collaborative work efforts versus self-reliance. These results have implications with regard to the current curriculum in business schools today, where more team projects and group interaction should be enforced. Additionally, the orientation programs of businesses may need to include team training and interaction in order to ensure a better employee fit.

Morality and Ethics are clearly influenced by career status, with workforce professionals demonstrating a stronger moral and ethical aptitude than college students. This supports our second hypothesis. Further, career status explained nine percent of the variability within the Morality/Ethics dimension. These findings have clear implications for academia, the workforce, and the organizations that employ them. Students may need a college curriculum that is stronger in morality and ethics, or businesses need to provide training to incoming employees on ethical business practices and moral business decisions. As stated earlier, training is an effective way to increase an individual’s predisposition toward moral reasoning (Morgan et al., 2000). The need for moral reasoning and ethical decision making becomes particularly clear when considering the economic disasters associated with Enron and WorldCom.

Findings associated with the Leisure dimension of Work Ethic supported our third hypothesis that college students would have a higher leisure ethic than workforce professionals. This is not surprising as college students have different lifestyle requirements that afford them more time to enjoy leisure activities. They have summers free from schoolwork, shorter workdays, and they have a greater focus on the friends around them at school. They generally do not have family commitments. This could have implications in organizations, especially as new employees enter the workforce. Companies may need to foster a social environment and plan social activities to mitigate the sense of leisure time loss that college students might feel when they join the workforce.

Students had a significantly higher mean score for the Hard Work dimension than did workforce professionals. The results did not support our fourth hypothesis. This contradicted a substantial portion of the literature from which our hypothesis was drawn. The reported results are supported by Smola and Sutton (2000) who found that younger workers took more pride in hard work. There are a number of speculative reasons the authors suggest, which support these results and could provide for practical implications to business. First, there is the possibility that longer-term employees may become discouraged by perceiving an inequitable relationship between their contribution to a business and its reward and benefit programs. This could be amplified as more and more
businesses begin to reduce reward and benefit programs due to rising cost-cutting measures. Essentially, the employee may perceive him or herself as working harder for a smaller return. Another explanation is tied to the transition from being a college student to becoming an employee. There may be additional responsibilities associated with this status change. These life changes could include change in family status or external non-work interests, which change time demands, reducing the available time to commit to work.

Our results supported our fifth hypothesis and suggested that workforce professionals have a higher orientation towards Centrality of Work than college students. It is possible that once individuals enter the workforce they are engaged by the new experience and this, coupled with increased life-stage responsibilities, subtly stimulates a sense of work centrality. This idea is supported by the findings in van der Velde et al. (1998), a longitudinal study that reported individuals have a higher orientation towards centrality of work as they leave school and enter the workforce.

Workforce professionals were found to have a significantly higher mean score in Wasting Time over college students, supporting our sixth hypothesis and current literature. It is more important to workforce professionals to not waste time and be more effective and efficient in the use of their time than college students. These results could be the outcome of the various schedules and differing external forces that cause different demands on workforce professionals lives versus college students. A workforce professional could have family or external interest forces that demand more of his or her time, causing him or her to desire to be more efficient. This has practical implications to the business environment where new employees might need time management training in order to be more effective in their transition to the workforce.

Finally, we postulated that workforce professionals would have a higher Delay of Gratification than college students. Our seventh hypothesis was not supported and we did not find any significant effects of career status on this dimension. However, it is interesting to note that college students did have a higher mean score than workforce professionals. This is not consistent with the literature; however, when looking at the dimension practically, college students make far less money than workforce professionals. The students may delay their gratification in a purchase, for example, until they can afford it or until they are in the workforce earning a higher, steadier income.

Based on these results it is apparent that there are no significant differences in the overall work ethic of students and workforce professionals. There are differences, however, between students and workforce professionals when analyzing six out of the seven constructs that make up work ethic. Students are more self-reliant, have a stronger leisure ethic, and have a stronger propensity for hard work. Workforce professionals have a stronger distaste for wasting time, a stronger moral and ethical aptitude and have placed a greater importance on work in their lives (centrality of work). These findings support the usefulness and necessity of a multidimensional construct of work ethic. Further,
these findings have strong implications for both business and future research. They provide insight into the work ethic of the future workforce and provide hope for a productive economy. These results reveal, through the univariate means, that college students do not have a less or weakening work ethic, as much popular press would speculate, but a work ethic that is almost equally strong as the current workforce.

Limitations and Future Research

We recognize that there are limitations with this study. First we acknowledge that there are limitations based on our samples. The student samples were taken from educational institutions in the northeast; however, these institutions maintain a diverse student population. The business sample was drawn nationally from various positions in multiple industries and does not limit this study. We also recognize that there are natural limitations of using self-report as a measure of work ethic; however, alternative means of data collection would have limitations of similar or greater magnitude. Further, we recognize there are other constructs that could overlap with career status, such as age, life stage or career stage. Our findings, however, indicate that approximately 23% of the variability in work ethic can be explained by career stage, clearly a substantial portion of the variance. Finally, any initial concern over the significant correlations between the dimension scales is diminished when taking into account the sample size in this study. The correlations show that each dimension is being measured well within the overall construct of work ethic.

Based on our findings, our analysis, and our recognition of limitations, we suggest that further studies of student versus worker work-related values will yield important information that can enhance understanding of and communication with the newest entrants to the workforce. Enhanced understanding of work ethic can result from both qualitative and quantitative research that focuses on individual dimensions as well as the construct in its entirety. Further qualitative examination, including interviews and observations, might identify specific components within the career status construct that create changes in work ethic. Other follow up studies could include a longitudinal study of the students and workforce professionals that participated in the current study. One study might examine the state of work ethic as affected by career status over time – “Is it static”? or “Will it change over time?” and “What are the causes for that change?” Another longitudinal study, and a true follow-up to the current study, would be to examine and measure the current college students’ work ethic when they become workforce professionals. This would allow for the comparison of a new work ethic score to that of the current workforce professionals in this study, allowing us to determine if the current study’s results hold similar. Finally, additional studies with more geographically diverse participants could also provide insight on the influence of culture on career status and work ethic.
REFERENCES


