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ABSTRACT

A number of researchers have described individual differences in achievement goals and performance standards. To explore similarities and differences in these theories, and to provide an instrument to measure them, 273 female and 88 male college students responded to items designed to measure each of the dimensions defined by these theories. The instrument included a five-page Achievement Booklet and an eight-page Attitudes Booklet, comprised of 24 items of the Personal Attributes Questionnaire (PAQ) and the Work and Family Orientation Scale (WOFO). Factor analysis of the achievement orientation items revealed four factors: extrinsic standards, affiliative goals, intrinsic standards, and competitive goals. Correlations between responses on the achievement items and responses on PAQ and WOFO scores provided evidence for the convergent and divergent validity of the scales, e.g., the competitiveness goals scale was positively correlated with the PAQ-masculinity and WOFO-worker and WOFO-competitiveness scales; and the intrinsic standards scale was positively correlated with the PAQ-femininity scale. The findings indicate that the various theoretical dimensions of achievement can be interpreted by examining achievement goals and performance standards. (JAC)

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Performance Standards and Domains of College Students'

Personal Accomplishments

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Abstract

A number of researchers have described individual differences in achievement goals and performance standards (Bakan, 1966; Kipnis, 1974; Stein & Bailey, 1973; Veroff, 1977). College students' (273 females and 88 males) responses to items designed to reflect each of the dimensions defined by these theories were subjected to scale development and validity analyses. Results showed that the dimensions outlined by Bakan (1966), Kipnis (1974), Stein and Bailey (1973) and Veroff (1977) can be interpreted by considering achievement goals and performance standards. Also, a reliable measure of goals and performance standards and evidence for the validity of the measure were provided.

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Performance Standards and Domains of College Students'

Personal Accomplishments

The focus of the current research was to explore similarities and differences among recently developed theories of achievement behavior, and to provide an instrument to measure individual differences in achievement goals and performance standards.

The goals of achievement activities are typically considered to be either instrumental or expressive (cf. Parsons & Goff, 1980; Stein & Bailey, 1973), or very similarly, communal vs. agentic (cf. Bakan, 1966; Parsons & Goff, 1980). According to these views, accomplishments can be directed towards goals that are primarily social (such as making friends and maintaining harmonious social relationships) or towards task mastery (instrumental domain, in which objective, specific tasks are attempted). Research concerning these dimensions has focused on attributions made for successes and failures in the different domains (Travis, Burnett-Doering, & Reid, 1982), the socialization of these orientations (Stein & Bailey, 1973), and the importance of the incentive values of different domains (Parsons & Goff, 1980). In general, social goals have been associated with femininity (Parsons & Goff, 1980; Stein & Bailey, 1973) whereas masculinity has been associated with agentic, task mastery focused achievement (Parsons & Goff, 1980; Stein & Bailey, 1973).

Research on standards for performance evaluation has focused on differences in intrinsic and extrinsic standards. Veroff (1977) suggested that an impact orientation to achievement (extrinsic standard) means that a person realizes feelings of success from having had an impact on a task or other people. Kipnis (1974) argued that an other directed focus in achievement (extrinsic standard) suggests that other peoples' performances (e.g., peers) or their evaluations (e.g., bosses' appraisals) are used as

standards. Intrinsic orientations to achievement (the use of internalized standards) have been suggested by Kipnis (1974) and Veroff (1977) and called inner directed and process orientations respectively. The use of inner directed standards suggests that a person evaluates his or her accomplishments in terms of internalized standards for behavior (Kipnis, 1974). A process orientation to achievement means that a person derives their feelings of accomplishment from reflecting on how they accomplished their goal (Veroff, 1977). Research regarding these dimensions is sparse, but Travis et al. (1982) conducted a study that related Veroff's (1977) process and impact dimensions to attributions for achievement.

A problem with these dimensions is that there are many very similar concepts, some of which are widely cited (e.g., task and social goals; Stein & Bailey, 1973), yet very little research on the accuracy and validity of the theories has been done. Gaeddert (in press) showed that subjects' self-selected accomplishments and failures could be content analyzed according to eight dimensions: task and social goals (Stein & Bailey, 1973); agentic and communal goals (Bakan, 1966); inner and other directed standards (Kipnis, 1974), and impact and process orientations (Veroff, 1977). Furthermore, factor analyses of the content ratings showed that only two of these dimensions were needed to describe college students' accomplishments and failures: task vs. social goals and intrinsic vs. extrinsic standards. The current study was designed to provide further evidence for the importance of considering the goals and performance standards of accomplishments (achievement orientations) using an objective measure of achievement orientations.

Method

Subjects

Subjects were 273 female and 88 male Introductory Psychology students. Students volunteered to fill out questionnaires as partial fulfillment of requirements for their classes.

Materials

A five page Achievement Booklet was used to obtain information on students' sex, age, major, an account of an important success in their lives, and their responses to 33 items designed to measure achievement orientations. Students' accounts of their success experiences were elicited by asking them to reflect on past accomplishments and to describe what they had accomplished, why they wanted to accomplish the goal, and what about the experience made them feel successful. In order to provide validity information, students were asked to recall accomplishments in one of five areas. The five areas were selected based on previous research (Gaeddert, in press) which showed them to be common achievement concerns for undergraduates. Thus, students were asked to recall accomplishments related to: a) personal growth activities (e.g., losing weight), b) scholastic pursuits, c) social relationships, d) sports related accomplishments, or e) work and employment related successes. The achievement orientation items were written by two of the authors (WPG and DCN) to reflect the basic aspects of each dimension proposed by Bakan (1966), Kipnis (1974), Stein and Bailey (1973), and Veroff (1974). Students rated each achievement orientation item on the extent to which they felt the item described their accomplishment using a five point scale (anchored at scale point 0 by "does not describe at all" and scale point 4 by "describes very well").

An eight page Attitudes Booklet was used to obtain subjects' responses to the 24 items of the Personal Attributes Questionnaire (PAQ; Spence, Helmreich, & Stapp, 1974) and the 23 item Work and Family

Orientation Scale (WOFO; Helmreich & Spence, 1978). The PAQ is a commonly used measure of instrumental and expressive traits. Scales reflecting these traits are called the masculinity and femininity scales respectively. The WOFO is a measure of achievement motivation which is scored on three scales. A competitiveness scale is made up of items such as "It annoys me when other people perform better than I do." The work scale includes items such as "I find satisfaction in working as well as I can," and the mastery scale contains items such as "Once I undertake a task, I persist."

Procedure

Subjects were run in mixed sex groups by two male experimenters. They were first assured of the anonymity and confidentiality of their responses and were then given the Achievement Booklets. After all students had completed their Achievement Booklets, the Attitudes Booklets were distributed. When all students had completed the Attitudes Booklet, they were given a full explanation of the study, thanked, and dismissed.

Results

Scale Development

Factor analyses were conducted using students' responses to the 33 achievement orientation items, sex, and the situational cues as variables. Preliminary analyses indicated that: a) four factors were necessary for an interpretable description of the relationships among the variables, and b) because sex and situational cues did not load on any of the factors, neither the type of accomplishment described by subjects nor their sex affected the patterns of their responses. The data reduction step of the factor analysis was accomplished using a principle components solution with iteration on communality estimates. Four factors were then rotated using an oblimin criterion. Table 1 contains a summary of the factor analysis in which four factors were rotated.

Factor I was labeled an extrinsic standards factor, accounted for 47% of the variance, and was marked by high scores on items such as "I gained approval from others for what I had done," and "I proved my ability to other people." The second factor was called an affiliative goals factor, accounted for 23% of the variance, and was marked by items such as "my accomplishment helped someone else achieve something," and "my goal was to form or maintain a good relationship with another person." Factor III accounted for 18% of the variance, was labeled an intrinsic standards factor, and was marked by items such as "I proved my ability to myself," and "I accomplished a goal that I had set for myself." Finally, Factor IV accounted for 11% of the variance, was called a competitive goals factor, and was marked by items such as "my accomplishment set me apart from other people," and "my goal was to beat someone else at what we were doing."

Interfactor correlations showed that the competitive goals factor correlated with the extrinsic standards factor, the social goals factor, and the intrinsic standards factor in the expected directions ($r = 0.20$, -0.14 , and -0.18 respectively).

Scale scores for each student were computed using the items that loaded highly and uniquely on each factor. Coefficient alpha values were computed for these scales; all yielded acceptable values. These coefficients were: 0.82, 0.74, 0.66, and 0.70 for the extrinsic standards (8 items), intrinsic standards (9 items), competitive goals (4 items) and affiliative goals (5 items) scales respectively.

Scale Validity

Evidence of the convergent and divergent validity of these scales was obtained by examining correlations between students' scale scores and students' PAQ and WOFO scores. As indicated in Table 2, none of the correlations were large, yet all significant correlations were in the expected directions. For example, the competitive goals scale was positively correlated with PAQ-masculinity and WOFO-work and WOFO-

competitiveness scales. Also, the intrinsic standards scale was positively correlated with the PAQ-femininity scale and the WOFO-work scale and the extrinsic standards scale was positively correlated with the WOFO-competitiveness scale.

Intercorrelations of the achievement orientation scales indicated that extrinsic standards scores were correlated with intrinsic standards scores and highly related to competitive goals scores ($r=0.27$ and 0.41 respectively, $p < .01$). Intrinsic standards scores were also correlated with competitive goals scores and social goals scores ($r=0.16$ and 0.13 respectively, $p < .01$). Social goals scores did not correlate with competitive goals scores, nor with extrinsic standards scores.

A series of 2 (students' sex) X 5 (situational cue) ANOVAs using achievement orientation scales as dependent measures were conducted. Each of these analyses yielded sex or situational cue main effects that were consistent with the definition of the scales. Table 3 contains F values and means for the main effects for situational cues. Students' extrinsic standards scores yielded a main effect for situational cues, which showed that the social accomplishment cue resulted in the lowest extrinsic standard scores (see Table 3). A main effect for students' sex was found in their intrinsic standards scores, $F(1,343)=7.78$, $p < .01$, ($\omega^2=0.02$). Females' intrinsic standards scores were higher than males' scores ($M=3.06$ and 2.84 respectively). Analyses of the intrinsic standards scores also yielded a main effect for situational cue which showed that intrinsic standards were most important in personal growth accomplishments, and least important in work related accomplishments (see Table 3). Males had higher competitive goals scores than did females ($M=1.78$ and 1.48 respectively), $F(1,343)=5.71$, $p < .01$, ($\omega^2=0.01$). Also, people who wrote about social accomplishments had the lowest competitive goals scores, and those who wrote about sports related accomplishments had the

highest competitive goals scores (see Table 3). The highest affiliative goals scores were obtained from students who had written about social accomplishments, and the lowest were obtained by those who recalled sports related accomplishments (see Table 3).

Discussion

College students' responses to items designed to assess their goals and standards for success were subjected to scale development and validity analyses. The results of these analyses indicate that college students' self-reports of accomplishments can be effectively described by their self-ratings on the achievement orientation scales.

Factor analyses of the achievement orientation items revealed patterns of relationships among the items that clearly reflected major aspects of the models of Bakan (1966; agentic vs. communal goals), Stein and Bailey (1973; task vs. social-affiliative domains), Kipnis (1974; inner vs. other directed standards), and Veroff (1977; impact vs. process orientations). The extrinsic standards factor contained the important components of an other directed focus in achievement (e.g., gaining status and approval for accomplishment), but did not clearly measure impact orientation. The intrinsic standards factor contained items most closely associated with an inner directed focus (e.g., I proved my ability to myself) and a process orientation (e.g., I felt successful because of the way I accomplished my goal) to achievement. The competitive goals factor reflected agentic and impact oriented approaches to achievement (e.g., my accomplishment set me apart from others, and competitive achievement, respectively), whereas the social goals factor contained components of communal and social-affiliative orientations to achievement (e.g., my accomplishment helped someone else achieve something, and my goal was to form or maintain a good relationship with another person). Analyses of scores derived from these factors provided further information concerning the content of the scales.

Achievement Orientation Scales

The extrinsic standards scale reflects the extent to which a person uses others as referents for determining their own feelings of success. Persons scoring high on this scale felt successful because they gained status, proved their ability to others, and gained approval for their efforts. Scores on this scale correlated with scores on the WOFO-competitiveness scale, which is consistent with the status oriented nature of competitive achievement strivings. Students who reported social accomplishments used extrinsic standards less than did those who reported other types of accomplishments. This result is entirely consistent with the nature of interpersonal relationships which are focused on the elimination of status differences.

The intrinsic standards scale reflects the extent to which a person uses their own standards for determining whether they were successful. Persons with high scores on this scale felt good about their successes because they had accomplished a goal difficult for them, and because they proved their ability to themselves, whether or not others knew about their accomplishment. Scores on this scale correlated with PAQ-femininity scores, and with WOFO-work scale scores. The use of internalized standards seems associated with an enjoyment of hard work, but the relationship between the use of intrinsic standards and femininity is less clear. It may be that the correlation is due to women using intrinsic standards more than did men. The persons who reported personal growth accomplishments (e.g., losing weight, quitting smoking) had the highest intrinsic standards scores, and those who wrote about work related successes (e.g., obtaining a desired job) reported the lowest use of intrinsic standards. These results are consistent with the nature of these types of accomplishments, because the most relevant standards for personal growth are internal, whereas a job is obtained because of another person's evaluations.

The competitive goals scale indicated whether a person had the agentic goals of beating others and of setting oneself apart through achievement. Scores on this scale were associated with the use of extrinsic standards for success, with the PAQ-masculinity scale, and with each of the WOFO scales (mastery, work, and competitiveness). The relationships between competitive goals, and extrinsic standards, masculinity, mastery, and competitiveness are clearly consistent with the content of these scales. Setting oneself apart from others by beating them or accomplishing goals they would find difficult are essential aspects of the self-assertive components of masculinity as measured by the PAQ (cf. Spence, 1984) as well as implying the use of extrinsic standards, a focus on mastery, and a competitive orientation to achievement. The relationship between competitive goals and WOFO-work scores is less clear, but may stem from a belief that competitive goals can be achieved through hard work. Furthermore the finding that the focus on competitive goals was highest among students who had written about sports-related and work-related accomplishments, and lowest among those who had written about social relationships is consistent with the nature of these achievements.

The social goals scale measured students' reports of having achievement goals related to helping others and forming pleasant social relationships. Based on Stein and Bailey's (1973) model, it is surprising that scores on this scale did not correlate with PAQ-femininity scale scores. However, social goals scores were highest for persons who had written about social accomplishments, and lowest for those who had reported scholastic activities.

In addition, the results of this study are consistent with previous findings that women are more intrinsically oriented than are men (Gaeddert, in press; Kipnis, 1974) and that men are more competitive than women (cf. Veroff, 1977). Furthermore, a very recent study (Bruso & Gaeddert, 1984)

showed that scores on the achievement orientation scales developed in this study are strongly associated with college students' self-schemas for achievement. Scores on the intrinsic standards scale predicted schema facets relating to academic and intellectual success, a result consistent with the definition of the scale. Also, the use of extrinsic standards was associated with an emphasis on sports activities which is consistent with the competitive nature of most sports-related accomplishments.

Conclusions

This study showed that the dimensions outlined by Bakan (1966), Kipnis (1974), Stein and Bailey (1973) and Veroff (1977) can be interpreted by considering achievement goals and performance standards. Also, a reliable measure of students' goals and performance standards was developed, and evidence for the validity of the measure was provided. Further research should be focused on determining the predictive validity and temporal stability of this measure of achievement orientations.

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Table 1Summary of factor analysis on achievement orientation items

Achievement Orientation Items	Factor Pattern Loadings			
	Factor I	Factor II	Factor III	Factor IV
My accomplishment:				
made me feel part of a group	0.52			
let me show others how good I really am	0.45			
I felt successful because:				
I accomplished what I did by "playing by the rules" or by "doing it right"	0.38			
I gained status in the eyes of my peers	0.62		0.31	
other people looked up to me after I succeeded	0.50		0.32	
I proved my ability to other people	0.61			
I did what was expected of me	0.57			
I gained approval from others for what I had done	0.63			
My Accomplishment:				
benefited me and no one else* helped someone else achieve something		-0.52		
		0.70		
My goal was:				
to form or maintain a good relationship with another person		0.52		
I felt successful because:				
my accomplishment had an effect on another person or persons		0.74		
my success meant that it would be easier for others to accomplish their goals		0.34		
My accomplishment:				
made me feel good about myself			-0.48	
gave me confidence in my ability to accomplish similar things in the future			-0.54	
My goal was:				
more important than anything else at the time			-0.39	

Table 1 (continued)

Summary of factor analysis on achievement orientation items

Achievement Orientation Items	Factor Pattern Loadings			
	Factor I	Factor II	Factor III	Factor IV
I felt successful because:				
I accomplished a goal I set for myself			-0.47	
of the way I accomplished my goal, and not just the fact that I had succeeded			-0.33	
my accomplishment made me feel good whether or not anyone else knew about it			-0.42	
I accomplished a goal that was very difficult for me			-0.47	
I proved my ability to myself			-0.55	
my success meant that it would be easier for me to accomplish other goals I have			-0.61	
My accomplishment:				
set me apart from other people				0.46
My goal was:				
to beat someone else at what we were doing				0.66
I felt successful because:				
I accomplished a goal that would be very difficult for most people				0.46
I beat someone else at what we were doing				0.68
Eigenvalue	5.10	2.53	1.98	1.22
Percent variance	47.1	23.3	18.3	11.2

Note: Loadings are listed only for those items that were later used to form the achievement orientation scales (cross loadings are listed only if they exceeded 0.30). A list of all items included in the factor analysis is available from the first author. The factors were labelled as follows: Factor I - extrinsic standards, Factor II - social goals, Factor III - intrinsic standards, and Factor IV - competitive goals.

* this item was reverse scored when scale scores were computed

Table 2

Correlations of achievement orientation scales, and PAQ and WOFO scales

Achievement orientation	PAQ scales		WOFO scales		
	F	M	MY	WK	CM
extrinsic standards	0.09	0.06	-0.05	0.09	0.25**
intrinsic standards	0.22**	0.08	0.09	0.23**	0.06
competitive goals	-0.09	0.24**	0.10*	0.14**	0.25**
social goals	0.09	0.08	0.07	0.05	0.01

Note: F and M refer to the femininity and masculinity scales of the Personal Attributes Questionnaire respectively, and MY, WK, and CM refer to the mastery, work, and competitiveness scales of the Work and Family Orientation Questionnaire respectively.

* $p < .05$

** $p < .01$

Table 3

Summary of situational cue main effects

Situational cue	Standards and goals scores			
	extrinsic	intrinsic	competitive	social
personal growth	2.46b	3.15c	1.65bc	1.97c
scholastic	2.42b	3.02ab	1.66bc	1.16a
social	1.87a	2.91ab	1.30a	2.26c
sports	2.51b	3.11b	1.85c	1.60b
work	2.61b	2.86a	1.36b	2.10c

<u>F</u> (4,343)	7.16**	2.38*	3.19**	12.81**
Omega-square	0.06	0.01	0.03	0.11

Note: Means within a dependent variable (column) not sharing common subscripts differ according to Duncan's tests, $p < .05$. Possible range for all scales is 0 to 4.

* $p < .06$ ** $p < .01$