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ABSTRACT
        Recent discussions of achievement motivation hade
introduced the notion of achievement orientations. Achievement
orientations are constructs which reflect differences in defining
success, standards of performance, and preferences for types of
achievement tasks. This study investigated the perceived prevalence
and evidence-to-inference links of traits related to
conceptualizations of achievement through demonstrating competence
and superiority. Traits related to demonstrating competence were
rated by college students (N=45) in psychology courses as being more
prevalent and requiring more instances of behavior to confirm their
presence than traits related to demonstrating superiority.
Significantly more evidence was perceived to be required to confirm
than disconfirm the presence of traits related to demonstrating
competence but not for traits related to demonstrating superiority.
Some implications of these findings are that criteria related to
demonstrating superiority would more likely be used in evaluations
than criteria related to demonstrating competence; and demonstrations
of superiority would enhance halo effects in memory-based
evaluations. (Author/ABL)

Confirmability and Disconfirmability of Traits Related

to Conceptualizations of Achievement

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Running head: ACHIEVEMENT TRAIT INFERENCES

Abstract

This study investigated the perceived prevalence and evidence-to-inference links of traits related to conceptualizations of achievement through demonstrating competence and superiority. Traits related to demonstrating competence were rated by a student sample as being more prevalent and requiring more instances of behavior to confirm their presence than traits related to demonstrating superiority. Significantly more evidence was perceived to be required to confirm than disconfirm the presence of traits related to demonstrating competence but not for traits related to demonstrating superiority. Some implications of these findings are (a) that criteria related to demonstrating superiority would more likely be used in evaluations than criteria related to demonstrating competence, and (b) demonstrations of superiority would enhance halo effects in memory-based evaluations.

Confirmability and Disconfirmability of Traits Related

to Conceptualizations of Achievement

Recent discussions of achievement motivation have
introduced the notion of achievement orientations
(Kipnis, 1974; Nicholls, 1984; Veroff, 1977). Achieve-
ment orientations are constructs which reflect differ-
ences in defining success, standards of performance,
and preferences for types of achievement tasks. While
the various specific formulations of achievement orien-
tations differ in many ways, the conceptualizations can
be grouped into two generic categories. One generic
conceptualization, which may be referred to as compe-
tence, views achievement in terms of mastery, under-
standing, and knowledge. In this case, behaviors re-
lated to quality of performance would be salient in
construing achievement. The other generic conceptuali-
zation, which may be termed superiority, focuses on
comparative levels of performance. In this case, be-
haviors related to an individual's producing more or
performing better than others would be salient in con-
struing achievement.

The purpose of this study was to investigate the
relationship between evidentiary requirements and in-
ferences about traits whcih correspond to competence
and superiority. Rothbart and Park (1986) have shown

that the diagnosticity and evidence-to-inference links
are not identical for all traits. Behaviors which
occur more frequently are less diagnostic or informa-
tive about correspondent dispositions than behaviors
which occur less frequently. Likewise, fewer instances
of related behaviors are required to confirm the pre-
sence of a disposition based on highly diagnostic be-
haviors than one based on less diagnostic behaviors.
The Nicholls (1984) model of achievement motivation
suggests that demonstrating competence is a more funda-
mental conceptualization of achievement than is demon-
strating superiority. This would imply that behaviors
reflecting superiority occur less often and require
fewer instances of occurrence to confirm an underlying
correspondent disposition than those reflecting compe-
tence.

Inferences about underlying traits also differ in
the behavioral restrictiveness or the relative amount
of evidence required to confirm and disconfirm the pre-
sence of a particular disposition (Reeder & Brewer,
1979; Rothbart & Park, 1986). Reeder and Brewer (1979)
contend that traits reflecting ability are construed in
terms of a hierarchically restrictive schema. That is,
more evidence is required to confirm than disconfirm
the presence of the traits. This would seem to hold

for traits related to demonstrating competence as such behaviors are considered fundamental in demonstrating ability (Nicholls, 1984) and would be expected to be frequently enacted in achievement settings. On the other hand, demonstrating superiority suggests more of a behavioral preference and would more likely be conceptualized in terms of a fully restrictive schema. In such cases, the criterion for inferring the disposition is whether or not an actor engages in these behaviors when circumstances provide the opportunity. Thus it would be expected that differences in the amount of evidence required to confirm or disconfirm traits corresponding to demonstrating superiority would not be as evident as for traits corresponding to demonstrating competence.

Method

Subjects

The subjects were 45 students enrolled in psychology courses. Participation was voluntary and based on informed consent.

Materials and Procedure

The list of achievement-related traits developed by Sadowski and Long-Hall (1985) was used. The list contains seven traits related to demonstrating competence (reliable, responsible, accurate, thorough, careful, disciplined, and dependable) and seven traits related to demonstrating superiority (adventurous, bold, enterprising, aggressive, forceful, opportunistic, and daring). Each subject was presented the list in the following order: reliable, adventurous, responsible, bold, accurate, enterprising, thorough, aggressive, careful, forceful, disciplined, opportunisitic, dependable, and daring.

Judgments about the traits were obtained using the procedures developed by Rothbart and Park (1986). The frequency of the traits was rated on a 9-point scale (extremely rare = 1, extremely common = 9) by 10 subjects. The number of instances required to confirm the presence of the traits was rated by 18 subjects. Ratings were made on 9-point scales having five descrip-

tive anchors: would have to engage in confirming be-
havior only once (1), a few times (3), occasionally
(5), frequently (7), and continually (9). The traits
were rated on the number of instances required to dis-
confirm the presence of the traits by 17 subjects using
similar scales which substituted disconfirming for con-
firming in the anchors.

   Administration of the rating tasks was done in
groups. Ea n subject was randopmly assigned to one of
the rating conditions. Two separate sessions were con-
ducted, but frequency ratings were obtained only during
one session.

Results

The rated frequency of trait occurrence was ana-
lyzed with a one-way repeated measures ANOVA. This an-
alysis indicated a significant difference among the
perceived frequencies of trait occurrence, $F(13, 117) =$
47.18, $p < .001$. A planned comparison supported the
prediction that traits related to demonstrating compe-
tence were perceived to occur more frequently than
traits related to demonstrating superiority, $t(117) =$
7.54, $p < .001$.

Mean ratings of the amount of evidence required to
confirm and disconfirm the presence of each trait are
presented in Table 1. These ratings were analyzed with
a 2(Confirm-Disconfirm) X 14(Traits) unweighted means
repeated measures ANOVA. The omnibus test indicated
three significant effects. More evidence was required
to confirm than disconfirm the presence of traits,
$F(1, 33) = 6.67$, $p < .05$. There also was a significant
difference in the amount of evidence required regarding
the different traits, $F(13, 429) = 5.83$, $p < .001$, and
a significant Confirm-Disconfirm X Trait interaction,
$F(13, 429) = 4.62$, $p < .001$.

Planned comparisons were used to test specific
predictions. The prediction that more evidence would
be required to confirm the presence of traits related

to competence than traits related to superiority was
supported, $\underline{t}(249) = 10.69$, $\underline{p} < .001$. The second plan-
ned comparison indicated, also as predicted, that more
evidence was required to confirm than disconfirm the
presence of traits related to competence than was the
case for traits related to superiority, $\underline{t}(124) = 5.34$,
$\underline{p} < .001$.

Insert Table 1 about here

Discussion

The results of this study indicate there are dif-
ferences in the diagnosticity and evidence-to-inference
links for traits related to demonstrating competence
and superiority. Demonstrating superiority is per-
ceived to be less prevalent than demonstrating compe-
tence. Likewise, less evidence is required to confirm
the presence of traits related to demonstrating superi-
ority than traits related to demonstrating competence.

Trait inferences related to demonstrating compe-
tence and superiority also were found to be based on
different schematic representations. Inferences about
traits related to demonstrating competence are based on
an asymmetrical hierarchically restrictive schema. De-
monstrating competence is considered the fundamental
orientation in construing acievement (Nicholls, 1984)
and such behaviors would be expected to be normative in
achievement settings. Disconfirming behaviors in this
instance would be more diagnostic than confirming be-
haviors, so more evidence is required to confirm than
disconfirm a dispositional orientation toward demon-
strating competence.

Inferences about traits related to demonstrating
superiority, on the other hand, are based on a symmet-
rical fully restrictive schema. As demonstrating su-

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periority is viewed as less common an orientation than demonstrating competence, less evidence is required to confirm such a disposition. However, as demonstrating superiority is seen as somewhat uncommon and reflecting personal preference, relatively little evidence also is required to infer that an individual is not dispositionally oriented toward demonstrating superiority.

These findings have implications regarding possible biases in memory-based evaluations. As behaviors related to demonstrating superiority are less prevalent and require fewer instances to confirm an underlying disposition than behaviors related to demonstrating competence, it is likely to be easier to make judgments about traits related to superiority than traits related to competence and there would be greater inter-judge agreement regarding the more salient traits Funder & Dobruth, 1987). The greater ease of judgment and consensus would tend to bias evaluations toward being based on criteria related to demonstrating superiority over demonstrating competence.

The Nicholls (1984) model of achievement motivation suggests another implication as to how construing achievement in terms of demonstrating superiority may affect memory-based evaluations. To some extent, successfully demonstrating superiority implies some degree

of underlying competence. Demonstrating superiority
would likely carry greater weight in evaluations than
demonstrating competence. Thus,when demonstrating su-
periority is salient, the implication of corresponding
competence would enhance the likelihood of halo
effects.

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Table 1

Mean Ratings of Instances Required to Confirm and

Disconfirm the Presence of Achievement-related Traits

Trait	Confirm	Disconfirm
Competence Traits		
Reliable	7.67	4.61
Responsible	7.06	4.71
Accurate	7.17	5.12
Thorough	7.22	4.88
Careful	6.17	4.24
Disciplined	6.44	4.47
Dependable	7.22	4.47
Superiority Traits		
Adventurous	5.11	3.88
Bold	4.83	4.41
Enterprising	5.22	4.76
Aggressive	4.61	4.35
Forceful	4.56	4.5?
Opportunistic	5.11	4.24
Daring	4.17	4.82

Note. Ratings were made on 9-point scales with higher

ratings indicating a greater number of instances to

confirm or disconfirm the presence of a trait.