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Short Communication

Winning at work: Trait competitiveness, personality types, and occupational interests



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ABSTRACT

This study examined the relationship between trait competitiveness and occupational interests of undergraduates prior to entering the work force. The findings indicate that competitiveness is related to Investigative and Realistic types within Holland's model of vocational choice and that competitive individuals are attracted to jobs involving competition and competitive pressure based on O*NET job characteristic ratings. Implications for future research are discussed.

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1. Introduction

Little research has focused on the personality trait competitiveness and occupational interests. Research on competitiveness spans more than a century, beginning with the work of Triplett (1897) on competitive instincts in sports. Later, the neo-Freudian Horney (1937) stressed the unhealthy aspect of extreme competitiveness by linking "hypercompetitiveness" to neurosis. According to Horney (1937) hypercompetitiveness represents an indiscriminant need for individuals to compete at any cost in order to maintain or increase feelings of self-worth. Utilizing a different theoretical framework based on achievement motivation research, Helmreich and Spence (1978) conceptualized competitiveness in more general terms as the desire to win against others. Recently, Alba, McIlwain, Wheeler, and Jones (2014) have proposed that competitiveness is conceptually linked to seeking high status and rank within social hierarchies which, from an evolutionary psychology perspective, have adaptive significance. These researchers also report that competitiveness is positively related to several facets of status consciousness including high perceived status, status display, and belief in hierarchy. From this perspective, competitiveness, in its less extreme form, is a potentially adaptive trait across a range of occupational domains, including business, law,

and sports (Houston, Carter, & Smither, 1997). However, in social environments requiring cooperative activities, such as driving, competitiveness can be socially dysfunctional (Houston, Harris, & Norman, 2003).

Houston, Farese, and La Du (1992) explored competitiveness and occupational choice by comparing the trait competitiveness scores of lawyers and nurses. Based on the premise that individuals high in competitiveness tend to seek out work environments with high levels of competition, Houston et al. (1992) argued that lawyers, whose jobs stress competitive activities, should have high competitiveness scores. Conversely, nurses, whose jobs focus on cooperative interactions, should score relatively low on competitiveness. While the study found that lawyers do indeed score significantly higher on competitiveness than nurses, the results leave open the possibility that social factors within the workplace may influence competitiveness. Thus, the relationship between trait competitiveness and occupational choice may be confounded by professional socialization processes and prevailing organizational attitudes towards competition. To further investigate the relationship between competitiveness and occupational choice, the current study shifts the research focus from occupational membership (people who are already in a job) to occupational interest (people who are still exploring job options) by incorporating undergraduate students who have not yet entered the job market. In addition, the current study expands the range of jobs explored by using an open-ended response format for identifying participants' occupational interests. Finally, this study systematically identified the level of competitiveness in jobs based on

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ratings provided by panels of subject matter experts from the Occupational Information Network (O*NET), a national database of worker attributes and job characteristics. Since the O*NET is an archival database of occupational information sponsored by the US Department of Labor, the standardized ratings of competitiveness in jobs obtained from the O*NET were conducted completely independent of this study.

The theoretical framework linking personality and occupational interests stems primarily from the vocational counseling literature. According to [Holland \(1985, 1997\)](#) theory of vocational choice people are differentially attracted to occupations as a function of their interests and personalities. Thus, the work environments people join reflect key characteristics of the people who become part of them. Within this model personality is operationally defined in terms of a broad typology that categorizes people into six types: Realistic (practical, mechanical), Investigative (intellectual, scientific, precise), Artistic (independent, expressive, original), Social (helpful, friendly, trustworthy), Enterprising (ambitious, energetic, sociable), and Conventional (orderly, systematic), known collectively by the acronym RIASEC. A number of research findings (e.g., [Campbell & Holland, 1972](#); [Houston et al., 1992](#); [Neiner & Owen, 1985](#)) provide support for the relationship between personality and occupational choice. In addition, meta-analyses ([Barrick, Mount, & Gupta, 2003](#); [Larson, Rottinghaus, & Borgen, 2002](#)) have identified several areas of overlap between personality dimensions from the five-factor model and RIASEC types. However, the relationship between RIASEC types and more specific personality traits, such as competitiveness, has not been systematically explored. This study investigates the relationship between competitiveness, RIASEC types, and the level of competition of occupational interests.

2. Method

2.1. Participants

A total of 149 undergraduate students (100 females and 49 males) with a mean age of 19.56 years ($SD = 1.30$) participated in this study. Participants were recruited from introductory psychology classes at a small liberal arts college in the Southeast United States and received extra course credit for voluntarily taking part in the study.

2.2. Measures and procedures

All participants completed a survey packet containing demographic questions (age and gender), an occupational interest assessment measure, an open response question asking participants to “list the ‘top four’ occupations that you are considering after completing your education,” and a trait competitiveness scale. The order of the measures was designed to avoid priming occupational interest responses by administering the trait competitiveness measure last.

Revised Competitiveness Index – Participants completed the Revised Competitiveness Index (CI-R; [Houston, Harris, McIntire, & Francis, 2002](#)), a 14-item self-report measure of trait competitiveness designed to assess the desire to win in interpersonal situations. The CI-R uses a 5-point Likert-type response scale anchored by 1 (strongly disagree) and 5 (strongly agree). Sample scale items include “I often try to outperform others” and “I like competition.” [Harris and Houston \(2010\)](#) reported acceptable test–retest reliability ($r = .85$) for time intervals of 18–34 days. Internal consistency for this measure in the present study was high ($\alpha = .90$).

Self-Directed Search, Form R – To assess career interests and personality types, participants completed the Self-Directed Search

(SDS; [Holland, 1994](#)), a 228-item self-report interest inventory containing 4 sections: activities, competencies, occupations, and self-estimates. By focusing on aspirations, activities, skills, and interests in different jobs, this self-scored inventory yields values for Holland’s six personality types: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional.

O*Net Level of Competition Ratings – The level of competition for occupational interests were assessed in a two step process. First, careers that participants listed as their top considerations were matched with occupational titles from the Occupational Information Network (O*NET, <http://www.onetcenter.org/dataCollection.html>), a national database of worker attributes and job characteristics. In the second step, the O*NET level of competition ratings, defined as the extent to which the “job requires the worker to compete or to be aware of competitive pressure,” were then recorded for the corresponding occupations listed by participants. To ensure occupational interests could be meaningfully coded, participants were asked to identify specific jobs (e.g., “high school English teacher”) and avoid broad generic terms (e.g., “teacher” or “educator”). The O*NET scores were then averaged across the jobs listed by the participants. To determine the level of interrater agreement in matching open responses to O*NET occupational title categories, two independent raters’ coding responses were compared resulting in a Cohen’s Kappa of .965.

3. Results

To determine the level of inter-rater agreement in matching open responses to O*NET occupational title categories, two independent raters’ coding responses were compared resulting in a Cohen’s Kappa of .965. An analysis using partial correlations, controlling for gender and age, was then conducted to investigate the relationship between competitiveness (CI-R scores), RIASEC types, and the O*NET level of competition of occupational interests. As [Table 1](#) indicates, CI-R scores were positively correlated with the O*NET competition ratings of occupational interests ($r_{ab,c} = .47$, $p < .01$), as well as investigative ($r_{ab,c} = .21$, $p < .01$) and enterprising ($r_{ab,c} = .44$, $p < .01$) RIASEC types. O*NET competition of occupational interests was also related to Enterprising ($r_{ab,c} = .42$, $p < .01$) and Social ($r_{ab,c} = -.19$, $p < .05$) types.

4. Discussion

The findings indicate that competitiveness is positively related to occupational interests. While competitive individuals expressed interest in jobs with higher levels of competition, less competitive individuals showed an interest in jobs with lower levels of competition. These results are consistent with [Houston et al. \(1992\)](#) findings that competitiveness is related to occupational membership. However, the current study extends these findings to occupational interests by focusing on participants who have limited work experience. Given that individuals in the exploratory stage of career development often have limited knowledge of occupations ([Schwartz, 1992](#)), participants in this study likely relied on general stereotypes and reputations of different occupations. Considered together, these findings suggest that competitive individuals, based on available information, are attracted to jobs involving competition and interested in pursuing careers in competitive occupations.

The results also highlight important conceptual and empirical links between competitiveness and Investigative and Enterprising RIASEC types. Given that [Holland \(1994\)](#) defines enterprising individuals as liking activities involving “persuading and directing others” and valuing “social success” (p. 3), it makes sense that enterprising people would also tend to have competitive traits

Table 1Descriptive statistics and partial correlations controlling for gender and age ($n = 149$).

Measures	Mean	SD	1	2	3	4	5	6	7
1. Revised competitiveness index	50.01	10.22							
<i>SDS scales</i>									
2. Realistic	12.93	8.82	.02						
3. Investigative	21.19	9.54	.21**	.27**					
4. Artistic	20.44	9.58	-.13	.25*	.21*				
5. Social	33.07	7.88	.01	-.06	.12	.23**			
6. Enterprising	28.54	9.73	.44**	.17*	.10	.08	.11		
7. Conventional	17.56	7.88	.02	.24**	.31**	-.02	.08	.30**	
<i>O*NET ratings</i>									
8. Competition level of occupational interests	55.60	11.70	.47**	.08	.00	.07	-.19*	.42**	.02

* $p < .05$.** $p < .01$.

and strive to win in interpersonal situations. Similarly, Holland (1994) definition of investigative individuals as valuing “achievement” (p. 4) is consistent with the construct definition of competitiveness and Smither and Houston (1992) findings that competitiveness is significantly related to need for achievement. Furthermore, Smither and Houston (1992) argue that while achievement-oriented individuals compete against an internal standard of excellence, competitive individuals compete against external opponents.

It should be noted that the use of undergraduate participants and a sample of convenience may limit the generalizability of the results. However, the findings identify potentially important relationships between competitiveness, occupational interests and RIASEC types. Since the findings do not preclude the possibility that competitive characteristics may be altered by work experiences, future research incorporating longitudinal strategies is needed to explore competitiveness over the course of a career. Finally, given the conceptual link between competitiveness and status seeking within social hierarchies (Alba et al., 2014), further research should focus on how competitiveness and occupational interests relate to status maintenance and career development.

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