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Testing the choice model of social cognitive career theory across Holland themes: A meta-analytic path analysis

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ABSTRACT

Social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994) seeks to explain the factors that shape educational and vocational interests and choices. We used meta-analytic path analyses to synthesize data (from 1981 to 2008) relevant to SCCT's interest and choice hypotheses, organizing the literature according to Holland's (1997) broad occupational themes. Sufficient data were available to test (a) a 6-variable version of the interest/choice model in the Realistic, Investigative, and Enterprising themes, and (b) a 4-variable version of the model in the Artistic, Social, and Conventional themes. Analyses of both model versions were generally consistent with theoretical expectations. However, tests of the 6-variable model indicated better support for representing the pathways from contextual variables to choice goals as being partially mediated by self-efficacy and outcome expectations rather than as producing only direct linkages to goals. We consider implications of the findings for theory, research, and SCCT-based interventions.

1. Introduction

Social cognitive career theory (SCCT; Lent et al., 1994) has received a good deal of empirical attention as a framework for understanding various aspects of academic and career development. SCCT is based on Bandura's (1986, 1997) general social cognitive theory, a heuristic theory of motivation and self-regulation that has been applied to many areas of psychosocial functioning. The concept of self-efficacy (Bandura, 1977), a central part of social cognitive theory, has especially captured the interest of career researchers and practitioners. Hackett and Betz (1981) and Betz and Hackett (1981) introduced this concept to the vocational psychology literature, noting its potential to help explain important aspects of career behavior, such as women's underrepresentation in male-dominated career fields. Their work helped to spark a great deal of subsequent inquiry linking self-efficacy to choices and other aspects of career development in a broad range of student and worker samples (Betz, 2008; Lent, 2005; Swanson & Gore, 2000).

Given the large amount of inquiry that followed the formulation of social cognitive theory (Bandura, 1986) and its initial applications to career behavior, Lent et al. (1994) developed SCCT to summarize and organize existing career-related findings on self-efficacy; to incorporate other social cognitive concepts and predictions that had been understudied in the career

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literature; and to offer a set of formal hypotheses to guide further inquiry on career development from a social cognitive perspective. SCCT originally consisted of three segmental models aimed at explaining the processes through which people develop basic academic and career-related interests, make and revise educational and vocational choices, and achieve performances of varying quality in the academic and career domains. A fourth model, focusing on educational and work satisfaction, has recently been introduced (Lent & Brown, 2006).

SCCT's interest and choice models, which are the specific focus of the current meta-analytic study, involve an overlapping set of variables. As shown in Fig. 1, the basic predictions of the interest model hold that interests (defined as the extent to which an individual likes a particular activity, academic subject, college major, or occupation) are jointly predicted by self-efficacy and outcome expectations. Consistent with general social cognitive theory, self-efficacy refers to beliefs in one's ability to successfully perform particular behaviors or courses of action; outcome expectations involve beliefs about the consequences of performing particular behaviors or courses of action. People are expected to develop interests in a behavioral activity or domain when they hold favorable beliefs about (a) their performance capabilities and (b) the likely outcomes of their engagement in this activity or domain. Conversely, a lack of interest in, or dislike of, particular activities and domains is expected to result when people seriously doubt their capabilities and when they anticipate negative outcomes to attend their behavior.

According to SCCT's choice model, people develop goals to pursue academic and career-relevant activities that are consistent with their interests as well as with their self-efficacy and outcome expectations. For example, science-related interests, along with high self-efficacy and positive outcome expectations regarding science pursuits, are likely to promote choice of science-relevant activities in school and work contexts. Self-efficacy and outcome expectations are posited to affect choice both directly and indirectly through interests. In addition, goals are assumed to be affected by exposure to environmental (e.g., social, financial) supports and barriers. The presence of supports and the relative absence of barriers can promote choice goals both directly and via several indirect paths (see Fig. 1). The choice model also deals with the process whereby goals become translated into choice actions, though that part of model is not included in Fig. 1.

Although qualitative reviews have been helpful in summarizing the general pattern of findings related to SCCT's interest and choice hypotheses (e.g., Betz, 2008; Lent, 2005), meta-analyses offer a valuable quantitative complement to traditional qualitative reviews. In particular, meta-analyses enable more precise and objective estimates of aggregate effect sizes and detailed study of moderators. In the earliest meta-analysis of findings relevant to SCCT's interest and choice predictions, Lent et al. (1994) reported meta-analytic correlations of self-efficacy to interests and choice goals, respectively, of .53 and .40. This meta-analysis also found theory-consistent correlations of self-efficacy to outcome expectations (.49), outcome expectations to interests (.52) and goals (.42), and interests to goals (.60). A more recent meta-analysis of the relation of self-efficacy to interests found a correlation of .59 over 60 samples (Rottinghaus, Larson, & Borgen, 2003).

Despite the advantages of meta-analyses over "box score" approaches to synthesizing research findings, existing meta-analyses of research on SCCT are limited in several respects. First, they have tended to focus either primarily or exclusively on self-efficacy, omitting other key theoretical variables (e.g., outcome expectations, choice goals). Second, meta-analytic studies have centered around only a few hypotheses from SCCT's interest and performance models; little attention has thus

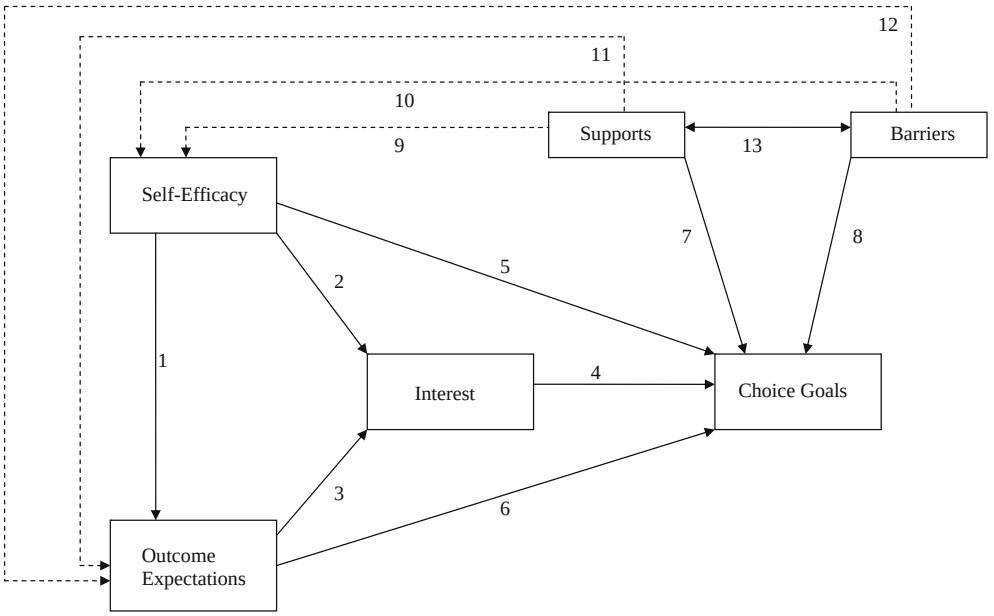

Fig. 1. The 4-variable (paths 1–6) and 6-variable (paths 1–13) versions of the SCCT interest/choice models.