Integrating Proactive Personality into a SCCT Model of Professional Development

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Social cognitive career theory (SCCT)

- Applies Bandura’s social cognitive theory (see Bandura, 1997) to career development issues (Lent et al., 2000).
- Considers cognitive-person variables (i.e., self-efficacy, outcome expectations) and contextual supports and barriers as they influence intentions and actions surrounding academic and career goals, choices, and performance (Brown et al., 2011; Lent et al., 2011).
- Because SCCT emphasizes individual personal agency and the importance of individual differences in career development, proactive personality is a natural extension.

Proactive Personality

- A relatively stable tendency that differentiates people based on the extent to which they take action in their environments (Bateman & Crant, 1993).
- Those with a proactive personality “identify opportunities and act on them, show initiative, take action, and persevere until meaningful change occurs” (Crant, 2000, p. 439).
- Proactive personality is directly linked to motivation to learn and indirectly related to professional development actions (Major et al., 2006).

Central Thesis:

Proactive personality will improve model fit and the variance accounted for in students’ professional development intentions in an SCCT model.

Method

- 205 computer science or engineering students recruited during fall semester from two universities who received course credit or cash payment ($20/survey). Completed two online surveys, one at recruitment and another at end of semester.
- Mean age = 20.40 (SD = 4.22), and the majority were male (68.3%) engineering majors (67.3%). Of those reporting ethnicity, 44.1% were White, 34.8% were Black, 5.4% were Hispanic, 5.9% were Asian, and 9.8% were of another race.
- Survey 1: Development self-efficacy and professional development intentions (Mauer et al., 2003; support, barriers, and outcome expectations (Lent et al., 2003; Noe & Wilk, 1993); and proactive personality (Bateman & Crant, 1993).
- Survey 2: Professional development actions (Mauer et al., 2003); persistence intentions; major involvement (Kanungo, 1982); and career identity (Lodahl & Kejner, 1965).

Results

- Used EQS 6.1 to test two fully latent structural equation models:
  1. Model without proactive personality
  2. Model with proactive personality
- Chi-square, CFI, SRMR, and RMSEA were used to assess model fit.
- Fit of Model 1: $\chi^2(1211) = 2010.97, p < .001$, CFI = .86, SRMR = .14, RMSEA = .06.
- Fit of Model 2: $\chi^2(1206) = 1917.86, p < .001$, CFI = .88, SRMR = .08, RMSEA = .05.
- Model with proactive personality fits significantly better, $\Delta \chi^2(5) = 77.17, p < .001$.
- Proactive personality incrementally predicts intentions to engage in professional development, $\Delta R^2 = .06$ ($R^2$ Model 1 = .21 & $R^2$ Model 2 = .27).

Discussion

Major findings:

1. The SCCT model of professional development predicts important outcomes for STEM student retention.
2. Proactive personality predicts all cognitive-person variables and contextual inputs as well as professional development intentions.

3. Proactive personality improves SCCT model fit and accounts for additional variance in intentions to engage in professional development.

Future research: Given the positive outcomes associated with professional development, future research should investigate strategies for increasing the professional development intentions of those low in proactive personality.

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