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Accountants' Commitment to Their Profession: Multiple Dimensions of Professional Commitment and Opportunities for Future Research

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ABSTRACT: Professional commitment (PC) refers to attachments that individuals form to their profession and has been linked to outcomes such as improved job satisfaction and reduced likelihood of leaving the profession (Harrell et al. 1986; Meixner and Bline 1989). Recent arguments in the organizational behavior literature have emphasized the importance of developing a more complete understanding of PC (Irving et al. 1997; Meyer and Allen 1997). Research has demonstrated empirically the existence of multiple dimensions of PC and found that they relate differently to important affective and behavioral outcomes (Meyer et al. 1993; Irving et al. 1997). Despite these developments, no published studies have examined the existence and/or effects of multiple dimensions of accountants' PC. This paper reviews the literature to identify important antecedents and outcomes of accountants' PC. Opportunities for future research that incorporate a multidimensional view of accountants' PC are presented.

INTRODUCTION

The concept of professional¹ commitment (PC) has been of interest to accounting researchers and practitioners for over 20 years (Aranya, Pollock, and Amernic 1981). PC refers to the attachments that individuals form to their profession and has been linked to important outcomes such as improved work performance (Lee et al. 2000), reduced turnover intentions, and greater satisfaction at both the organizational and professional levels (Harrell et al. 1986; Meixner and Bline 1989; Bline et al. 1991; Bline et al. 1992). Research in the organizational behavior literature has emphasized the importance of developing a more complete understanding of individuals' PC (Irving et al. 1997; Meyer and Allen 1997). In particular, researchers have argued, and demonstrated empirically, that PC consists of three dimensions, with each dimension developing in different ways and leading to different outcomes (Irving et al. 1997; Meyer et al. 1993; Meyer and Allen 1997; Lee et al. 2000).

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The term professional is used in this paper, rather than occupational or career, as accounting is generally regarded as a profession. However, it has been argued that this concept is conceptually no different from being committed to one's occupation, whether a profession or not (Meyer et al. 1993, 539-540; Lee et al. 2000, 800).

These are affective PC (individuals want to stay in their profession), continuance PC (individuals feel they have to stay in their profession), and normative PC (individuals feel they ought to stay in their profession).

Despite these developments, studies of accountants' PC continue to examine only affective PC. As multiple dimensions of PC have been found to exist across other occupations and professions (Meyer et al. 1993; Irving et al. 1997), it can be argued that focusing on only one dimension of PC provides only a partial description of accountants' PC. It may also lead to an incomplete understanding of the antecedents and consequences of PC, which may differ for each cimension (Meyer et al. 1993; Irving et al. 1997). Characteristics of the accounting profession, such as high levels of technical knowledge and training and significant financial rewards, may impact on the relative importance of each dimension of accountants' PC in explaining outcomes such as turnover and job satisfaction. Therefore, there are strong motivations for examining the different dimensions of PC, how they develop, and how they affect accountants' professional and organizational outcomes. Such research can lead to a greater understanding of how the accounting profession and organizations may influence accountants' PC as a way to improve work performance and job satisfaction, and to reduce the flow of accountants out of the profession.

The purpose of this paper is to review empirical research that has focuse I on accountants' PC and to explore future research opportunities related to multiple dimensions of accountants' PC. The paper is organized in four main sections. The first section examines the concept of commitment and the development of the PC construct. The second section describes a three-component model of commitment. The third section reviews the literature on accountants' PC, focusing on antecedents, correlates, and outcomes of PC. The fourth section draws on the literature review to highlight areas for future research, and conclusions are presented in the final section.

THE CONCEPT OF PROFESSIONAL COMMITMENT

The construct of PC developed from the more established construct of organizational commitment (OC). PC refers to the relative strength of an individual's identification with, and involvement in, a profession and includes the belief and acceptance of the goals and values of the profession, a willingness to exert effort on its behalf, and a desire to maintain members up in the profession (Aranya and Ferris 1984). Interest in PC developed as researchers and practitioners began exploring the positive impact of having employees who are highly committed to their profession.

Lee et al. (2000) identify four reasons for understanding PC. First, a person's career represents a major focus in life. Second, because PC affects retention, it has important in plications for human resource management. Third, because professional expertise develops from work experience, work performance may be linked to PC. This may be particularly relevant for accountants whose expertise develops from extensive experience and continuing education. Finally, further study of PC may lead to an understanding of how individuals develop and integrate multiple con mitments inside *and* outside the workplace.

MULTIPLE DIMENSIONS OF PROFESSIONAL COMMITMENT The Three-Component Model of Professional Commitment

Commitment to an entity, such as a profession, is generally conceptualized as a three-dimensional construct consisting of affective, continuance, and normative commitment. Affective commitment relates to the extent to which individuals "want to stay" with the focal entity (Meyer and Allen 1997). Affective commitment concerns emotional attachments that individuals develop toward the focal entity and can result from positive or negative exchanges and experiences. Continuance commitment relates to the extent to which individuals "have to stay" with the focal entity (Meyer and

See Ketchand and Strawser (2001) for a review of the OC literature.

Allen 1997). Continuance commitment is based on Becker's (1960) theory of side bets, which argues that individuals will remain committed due to an accumulation of investments associated with the focal entity, or a lack of comparable alternatives. Normative commitment relates to the extent to which individuals believe they "ought to stay" with the focal entity (Meyer and Allen 1997). This may arise through socialization experiences that emphasize the appropriateness of remaining with the entity or through the receipt of benefits that the individual feels should be reciprocated (Meyer and Allen 1997).

Meyer et al. (1993) argued that examining multiple dimensions of PC might provide a more complete understanding of an individual's commitment to their profession. Although all three dimensions may influence the likelihood of an individual remaining in the profession, each dimension of PC may develop differently. Affective professional commitment (APC) is based on identification with the profession's goals and a willingness to assist the profession in achieving those goals. A person with high APC will more strongly identify with, and experience more positive feelings about, their profession compared to a person with low APC (Lee et al. 2000). APC may develop through positive professional experiences or the development of professional skills. Continuance professional commitment (CPC) leads to individuals staving in the profession because of the high costs of leaving. CPC may develop as individuals acquire investments in the accounting profession that would be lost upon leaving, including technical accounting expertise, high status, and rewards. Poor labor market conditions, the development of nontransferable skills, and the costs of retraining may limit comparable alternatives, and thus increase CPC. Normative professional commitment (NPC) leads to individuals remaining in the profession due to a sense of obligation. NPC may arise as a result of experiencing significant benefits from working in the profession, or pressure from colleagues or family that emphasizes the importance of remaining in the profession.

Meyer et al. (1993) argue that each dimension of PC may have different implications for the extent of an individual's involvement in a profession. Individuals with high APC and high NPC may be more likely to be involved in activities within the profession and to keep up to date with professional developments, over and above meeting the minimum requirement for maintaining membership. However, individuals with high CPC are less likely to engage such extra-role behavior.³

Empirical research supports the existence of affective, continuance, and normative PC. Meyer et al. (1993) studied nurses to determine the discriminant validity of each dimension of PC and demonstrated that the three dimensions correlated differently with various antecedents and outcomes. For example, both APC and NPC were positively correlated with job satisfaction. However, CPC was negatively correlated. A sense of obligation to others was positively correlated with NPC and CPC, but not with APC. Irving et al. (1997) provided support for multiple dimensions of PC in other occupations, including executives, air traffic controllers, technical operators, radio operators, and clerical staff. Again, the dimensions of PC correlated differently with antecedents and outcomes. For example, APC and NPC were positively correlated with job satisfaction. However, CPC was not related. In addition, only CPC was correlated with organizational turnover intentions. As such, these studies provide support for the validity of the three-component model of professional commitment.

Extending the Three-Component Model of Professional Commitment to the Accounting Profession

Findings from previous research concerning the relationship between each dimension of PC and important outcome variables have sometimes conflicted. For example, Meyer et al. (1993) reported negative associations between each dimension of PC and professional turnover intentions among nurses. However, in Irving et al. (1997) only CPC was negatively associated with professional

As noted in footnote 1, in the commitment literature occupation and career have been equated to profession.

³ Accountants are required to keep up to date with professional standards as part of mandatory continuing professional education requirements. Higher levels of PC may result in more "active" involvement and contributions to such activities.

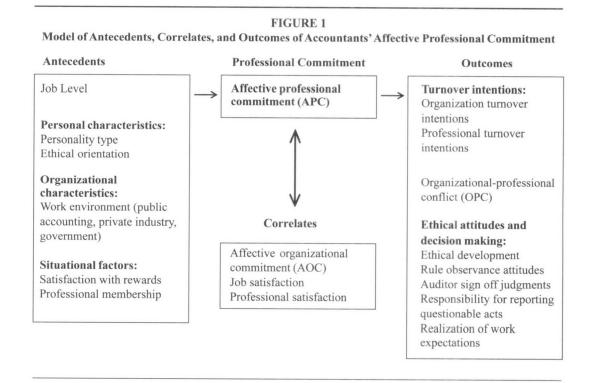
turnover intentions for their sample of executives, air traffic controllers, technical operators, radio operators, and clerical staff. In addition, Meyer et al. (1993) reported a negative association between CPC and job satisfaction. However, no significant relationship was found by Irving et al. (1997). These results suggest that the relationship between each dimension of PC and important outcome variables differs across occupations and professions.⁵

The unique features of the accounting profession, such as the "up-or-out" promotional structure of public accounting firms, highly valued and marketable accounting skills, high technical skills requirements, low levels of non-salary benefits compared to salaried benefits, and high client service orientations may prevent the generalization of results from other occupations to accountants (Ketchand and Strawser 1998; Jackofsky et al. 1986).

Despite some interest in considering multiple dimensions of PC, studies of accountants have only examined APC and its relationship with other variables, such as job satisfaction and turnover intentions. The following section presents a review of this literature.

REVIEW OF RESEARCH INTO ACCOUNTANTS' APC

Figure 1 summarizes the antecedents, correlates, and outcomes of accountants' APC that have been studied in prior research. Antecedents have focused on both personal and organizational characteristics that may influence the development of APC. However, most of the iterature on accountants' PC has focused on the correlates and outcomes of APC. Correlates include affective OC, job satisfaction, and professional satisfaction. Major outcome variables are organizational and professional turnover behavior. A summary of these accounting studies is provided in Table 1.



⁵ Different sample sizes and statistical issues may also explain conflicting results.

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	Summary of Res	ults Concerning Affective	TABLE 1 Professional Co	TABLE 1 Summary of Results Concerning Affective Professional Commitment in Accounting-Related Studies
Study	Sample	Variables	Method	Results ^a
Ferris (1981)	123 junior-level and 46 senior-level auditors at one accounting firm	AGE, MS, FATHOCC, UTILITY, PERF, JOBLEVEL, TENURE, APC ^b , AOC, ORGTURN	Correlation	APC +ve desire to maintain organizational membership (ORGTURN) Same relationship for juniors and seniors
Aranya, Barak, and Amernic (1981)	1206 public Chartered Accountants (CAs) in Canada	APC, AOC, PERTYPE	Correlation	APC +ve enterprising and conventional PERTYPE PC -ve realistic, investigative and artistic PERTYPE
Aranya, Pollock, and Amernic (1981)	1206 public CAs in Canada	AOC, APC, OPC, REWSAT, JOBLEVEL	ANOVA, Regression	AOC +ve APC REWSAT +ve APC (overall and only for partners) OPC –ve APC (overall and only for seniors) Supervisor/partner APC > senior APC
Aranya et al. (1982)	1206 public CAs in Canada	APC, AOC, RELEXP, JOBSAT, ORGTURN, ORGTYPE, JOBLEVEL	Path analysis	APC +ve AOC APC +ve RELEXPf APC +ve JOBSAT (only for partners) APC not associated with any variables for bureaucratic ORGTYPE
Adler and Aranya (1984)	810 CPAs in California	NEEDSAT, JOBSAT, APC, AOC, STAGE, PROFTURN	MANOVA, ANOVA	APC increase across STAGE (but not significantly)
Aranya and Ferris (1984)	1206 public CAs in Canada and 810 CPAs in California	APC, AOC, OPC JOBSAT, ORGTURN, ORGTYPE, JOBLEVEL	t-tests, ANOVA, correlations	APC higher in professional than non professional ORGTYP APC +ve JOBLEVEL APC +ve AOC (correlation higher in professional ORGTYPE) APC*AOC interaction –ve OPC
Norris and Niebuhr (1984)	62 accountants from three big firms in U.S.	APC°, AOC, JOBSAT, JOBLEVEL, MEMBER	Correlation, regression	APC +ve AOC APC +ve JOBSAT
Lachman and Aranya (1986a)	1206 public CAs in Canada	AOC, APC, JOBSAT, ORGTURN, ORGTYPE, RELEXP	Correlation, path analysis	APC +ve AOC APC +ve RELEXP
Aranya et al. (1986)	Aranya et al. (1986) 1053 CAs and CPAs in Canada and U.S. (45 female)	AOC, APC, JOBSAT, NEEDSAT, AGE, TENURE, GENDER, JOBLEVEL	Correlation, regression, ANCOVA	APC +ve AOC APC +ve JOBSAT APC +ve low and high NEEDSAT

	Results ^a	MEMBER +ve APC APC +ve AOC APC -ve OPC APC -ve ORGTURN APC*AOC interaction significant OPC (no sign reported)	partners/sole practitioners: APC +ve RELEXP, APC +ve JOBSAT, APC +ve AOC employees in CA firms: APC +ve RELEXP, APC +ve AOC employees in nonprofessional firms: no significant relationships between APC and other variables	PERTYPE (conventional and enterprising) +ve APC	APC –ve OPC only for CMA MEMBERS	APC +ve AOC APC +ve JOBSAT APC -ve PROFTURN PROFSAT +ve APC	APC +ve AOC APC +ve JOBSAT APC +ve JOBSAT APC -ve EXPREL APC -ve ORGTURN APC +ve AOC in professional and nonprofessional ORGTYPE APC hot associated with ORGTURN in regression model (in both professional and nonprofessional ORGTYPE)
	Method	Path analysis	Path analysis	Canonical correlation	Correlation, path analysis	Path analysis	Correlation, regression
	Variables	AOC, APC, OPC, JOBSAT, ORGTURN, MEMBER, TENURE, SUPER	APC, RELEXP, AOC, ORGTURN, JOBSAT, ORGTYPE	APC, AOC, PERTYPE, Canonical ORGTYPE, JOBLEVEL correlation	APC, AOC, OPC, JOBSAT, ORGTURN, MEMBER, TENURE, SUPER, SSCON	APC, AOC, PROFSAT, Path analysis JOBSAT, OPC, ORGTURN, PROFTURN	AOC, APC, JOBSAT, ORGTURN, SKILL, ORGTYPYE, EXPREL, OPC
	Sample	59 internal auditors in three banks in U.S.	810 CPAs in U.S.	1206 public CAs in Canada 810 CPAs in U.S.	201 management accountants in U.S.	427 state and municipal government accountants in U.S.	245 CPAs in Singapore
	Study	Harrell et al. (1986)	Lachman and Aranya (1986b)	Aranya and Wheeler (1986)	McGregor et al. (1989)	Meixner and Bline (1989)	Aryee et al. (1991)

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		TAB	TABLE 1 (continued)	
Study	Sample	Variables	Method	Resultsa
Bline et al. (1991)	427 government accountants and 350 academic accountants	APC, AOC, JOBSAT, PROFSAT, ORGTURN, PROFTURN	Item analyses, factor analyses, correlation, t-tests	APC +ve JOBSAT APC +ve PROFSAT APC -ve ORGTURN APC -ve PROFTURN Tests provide support for internal reliability and convergent and discriminant validity of the 15-item APC instrument
Gregson (1992)	Data from Lachman and Aranya (1986) and Colarelli (1987)	AOC, APC, JOB SAT, ORGTURN, RELEXP	SEM	APC +ve AOC APC +ve RELEX PAPC +ve JOBSAT
Bline et al. (1992)	Data from Aranya and Ferris (1984) and Meixner and Bline (1989)	AOC, APC, OPC, ORGTYPE, PROFSAT, MEMBER, TENURE	GLM regression	PROFSAT +ve APC APC –ve OPC public and governmental accountants +ve APC (departmental accountants not significant) APC of public accountant significantly different to APC of department accountant (no sign) APC of government accountant significantly different to APC of department accountant (no sign)
Shaub et al. (1993)	207 auditors from four offices of one U.S. public acct. firm	IDEAL, RELAT, AOC, APC, ETHSEN	Path analysis	IDEAL +ve APC RELAT -ve APC APC +ve AOC
Jeffrey and Weatherholt (1996)	102 public and 85 private accountants	APC ^d , ETHDEV, RULEATT, JOBLEVEL, ORGTYPE	ANOVA	partner APC > senior APC APC +ve RULEATT high APC = conventional ETHDEV, low APC =post-conventional
Jeffrey et al. (1996)	75 accountants in Taiwan	APCd, ETHDEV, RULEATT, JOBLEVEL	ANOVA	staff APC > senior APC, staff APC > manager APC APC +ve RULEATT high and low APC = post-conventional ETHDEV
Poznanski and Bline (1997)	281 staff accountants at one public accounting firm	JOBSAT, PERF, AOC, APC°	Factor analysis, SEM	APC +ve AOC APC +ve JOBSAT APC +ve PERF (no significance levels reported for correlations)
Dwyer et al. (2000)	159 public, private, and government accountants	APC, IDEAL, PROFTURN, ETHDEV	Factor analysis, SEM, correlations	IDEAL +ve APC APC –ve PROFTURN Tests provide support for a reduced 5-item APC instrument
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(pa	Results ^a	APC +ve AOC high APC lower SIGNJUD APC no effect SIGNJUD after CONPRES and OBPRES are included	APC +ve PERRES
TABLE 1 (continued)	Method	Correlation, ANOVA	MANOVA, correlations
TA	Variables	AOC, APC, OBPRES, CONPRES, MORDEV, SIGNJUD	APC, REPINT, PERCOST, PERRES, SERIOUS, RISK, INTEGRITY
	Sample	171 audit staff	73 audit seniors
	Study	Lord and DeZoort (2001)	Kaplan and Whitecotton (2001)

between the variables is as shown in the table (e.g., APC +ve AOC means APC was modeled as an antecedent to AOC). Where studies have tested several models, only the Only significant results are shown. Where studies have used regression, path analysis, or SEM analysis techniques, the direction of the relationship (specified or implied) results from the final/revised model are shown. Finally, all studies used the 15-item Professional Commitment Questionnaire, except where noted

APC measured using a single item.

APC measured as part of a professionalism scale (which included autonomy, APC, ethics, identification and collegial maintenance standards). APC measured using a 14-item instrument.

APC measured using a 15-item instrument but reduced to three composite items in analysis.

relationship between APC and work needs deprivation. However, for consistency, the variable is relabeled realization of work expectations in this paper, hence the positive sign Aranya et al. (1982) labeled their variable "work needs deprivation," which is the same construct as "realization of work expectations." Aranya et al. (1982) report a negative between APC and RELEXP.

= age of respondent; AGE

affective organizational commitment; 11 AOC

affective professional commitment; 11 APC

conformance pressure; 11 CONPRES

ethical development; 11 ETHDEV

father's occupation; ethical sensitivity; 11 ETHSEN FATHOCC

male or female; GENDER idealism ethical orientation; 11 IDEAL

job level of respondent (partner, senior, etc); manager's professional integrity; 11 11 INTEGRITY JOBLEVEL

job satisfaction; JOBSAT

member of professional accounting association; MEMBER

moral development; MORDEV

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MS = marital status; NEEDSAT = needs satisfaction; OBPRES = obedience pressure;

= organizational-professional conflict;

ORGTURN = organizational turnover intentions;
ORGTYPE = type of organization;

PERCOST = perceived personal cost of reporting questionable act;

PERF = performance;
PERRES = perceived personal responsibility for reporting questionable act;

PERTYPE = personality type; PROFSAT = professional satisfaction; PROFTURN = professional turnover intentions; RELAT = relativism ethical orientation;

RELEXP = relativism ethical orientation; RELEXP = realization of work expectations;

KELEAP = realization of work expectations,
REPINT = auditor's intention to report questionable acts;

REWSAT = reward satisfaction;

RISK = inherent risk of the audit client;

RULEATT = rule observance attitudes; SERIOUS = perceived seriousness of questionable act;

SIGNJUD = auditor sign-off judgment; SKILL = skill utilization;

SSCON = self-supervisor conflict regarding status of management accounting profession;

STAGE = career stage;

SUPER = supervisory status (how many individuals supervised); TENURE = length of employment with organization; and

UTILITY = utility of the job.

Antecedents of APC

Antecedents are factors or characteristics that influence the development of APC. APC is expected to develop during the socialization processes that take place when entering the profession, where emphasis is placed on understanding professional values and require nents (Aranya et al. 1982; Jeffrey and Weatherholt 1996).

Job Level

Prior research supports that expectation that senior accountants will have higher APC as they will have experienced more socialization processes, compared to more junior accountants (Aranya and Ferris 1984; Jeffrey and Weatherholt 1996). Adler and Aranya (1984) examined differences in APC across career stage, and found that APC increased (but not significantly) as accountants moved to progressively later stages in their careers.

Personal Characteristics

Aranya, Barak, and Amernic (1981) examined the relationship between accountants' personality type and APC. Using Holland's (1973) classification of personality types, they found that enterprising and conventional types were positively correlated with APC, realistic, investigative, and artistic types were negatively correlated with APC. Aranya and Wheeler (1986) found that the correlations between scores for personality types and APC generally supported those found by Aranya, Barak, and Amernic (1981). In addition, the relationship between personality type and APC differed across work settings.

The relationship between accountants' ethical orientation and APC has also been examined. Shaub et al. (1993) examined the relationship between the idealism and relativism of an auditor's ethical orientation and APC. Idealism refers to the extent to which individuals believe that desirable consequences can eventuate without violating moral guidetines (Forsyth 1980). Idealists are more willing to maintain professional idealistic standards, which may be reflected in higher levels of APC. Relativism rejects the use of absolute moral rules to guide behavior and recognizes multiple ways of looking at ethics (Forsyth 1980). Relativists reject absolute moral principles which, in an accountants' work environment, may be similar to professional standards and guidelines, which may lead to lower APC. Results of Shaub et al. (1993) support these arguments and demonstrate how individual characteristics, such as ethical orientation, have important consequences for accountants' APC.

Organizational Characteristics

Another strong focus has been to study how characteristics of different types of organizations impact on accountants' PC. Aranya et al. (1982) argued that accountants working in public accounting firms may perceive there are greater professional rewards and opportunities available to satisfy their work goals compared to accountants not working in public accounting firms. They may also experience stronger socialization processes due to the dominance of the profession in their firms and increased opportunities to interact with other members of their profession. Emp rical results support these arguments. Aranya et al. (1982) and Aranya and Ferris (1984) found that the APC of partners and employees in public accounting firms was higher than that of accountants in industry/governmental organizations. Bline et al. (1992) report similar results. However, more recent research by Jeffrey and Weatherholt (1996) found no significant differences in the APC of accountants working in different work environments. This may suggest that the distinction between public accounting and private industry may be becoming less important. A difficulty in interpreting the results of this

⁶ The career stages were establishment, advancement, maintenance, and preretirement

The series of papers by Aranya and colleagues draw on two data sets: £206 public Chartered Accountants in Canada and 810 CPAs in California. Thus, caution should be exercised when assessing findings from these papers.

The four work settings were sole practitioners and partners in small firms, partners in sarge it us, employees in public accounting firms, and employees in industry and government.

research is that, with the exception of Bline et al. (1992), who drew on theories of autonomy and bureaucratization (Scott 1965; Hall 1968), little theory has been advanced to explain why accountants may develop different levels of APC in different work environments.

Situational Factors

Other studies have examined situational factors that may influence accountants' APC. Aranya. Pollock, and Amernic (1981) argued that accountants who have greater satisfaction with rewards have higher levels of APC, and found a positive relationship between satisfaction with income⁹ and APC. Further analysis by job level revealed that this relationship was only significant for partners. ¹⁰

The relationship between professional membership within subgroups of the accounting profession and APC has also been examined. Harrell et al. (1986) reported a positive relation between membership of the internal audit profession and APC. However, Bline et al. (1992) found that being CPA-certified had a negative impact on accountants' APC. A possible explanation is that CPA certification may be positively related to CPC, rather than APC, as CPA certification and associated training represents an investment that would be lost upon leaving the profession.

Correlates with APC

Affective Organizational Commitment

The most studied relationship in the literature examining accountants' APC is between APC and affective organizational commitment (AOC). Early research argued for a negative relationship between APC and AOC, as the values of the organization and the profession inevitably conflict (Lee et al. 2000), so employees could be committed to their organization or to their profession, but not to both (Meyer and Allen 1997). However, empirical research on accountants' APC has not always supported this conflict. Ten studies listed in Table 1 provide support for a *positive* relationship between APC and AOC (see, for example Aranya, Barak, and Amernic 1981; Harrell et al. 1986; Meixner and Bline 1989). Aranya, Pollock, and Amernic (1981) found that the relationship between APC and AOC was invariant across different job levels and Aranya and Ferris (1984) found a positive relationship between APC and AOC for accountants in public accounting firms. Overall, the results support the view thatAPC and AOC among accountants are positively related, rather than in conflict.

Job Satisfaction

The relationship between accountants 'APC and job satisfaction has also been a focus of empirical research. It is generally argued that accountants with high levels of APC will also be more satisfied with their jobs (Poznanski and Bline 1997; Gregson 1992). Eight studies reported in Table 1 support a positive relationship between APC and job satisfaction. Aranya et al. (1982) showed that the relationship between APC and job satisfaction differed across job levels, with a significant positive relationship found only for partners. These results generally are consistent with the argument that accountants who are more committed to the profession are also likely to experience higher levels of job satisfaction.

Professional Satisfaction

Finally, the relationship between accountants' APC and professional satisfaction has been explored. Meixner and Bline (1989) argued that accountants must be satisfied with their profession before they can become committed to the goals and objectives of the profession (have high APC). Other empirical studies support this relationship (Bline et al. 1991; Bline et al. 1992).

The study hypothesized a positive relationship between satisfaction with rewards, including those related to security, social, self-esteem, autonomy, self-actualization, and income, with APC. However, only the relationship between satisfaction with income and APC was tested.

¹⁰ The other two groups examined were seniors and managers.

Outcomes of APC

The most common focus of prior research has been the impact of APC on professional and organizational turnover intentions and on organizational-professional conflict.

Professional and Organizational Turnover Intentions

Affective commitment to the focal entity is expected to influence individuals' turnover intentions, which in turn will influence actual turnover behavior (Mobley et al. 1979). Consequently, studies have examined the effect of APC on turnover intentions, due to the difficulties of gaining access to individuals who have exhibited actual turnover behavior.

Empirical research provides support for APC having a negative influence on accountants' professional turnover intentions for accountants working in government and academia (Meixner and Bline 1989; Bline et al. 1992). Empirical research also supports the influence of APC on organizational turnover intentions. Ferris (1981) reported a positive association between APC and the desire to stay with the organization for both junior and senior accountants. Harrell et al. (1986) and Bline et al. (1992) found a significant negative association between APC and organizational turnover intentions. In contrast, Aryee et al. (1991) did not find any significant relationship between APC and organizational turnover intentions, arguing that due to the positive relationship between APC, AOC, and job satisfaction, the effect of APC on organizational turnover intentions may be indirect. However, Harrell et al. (1986) found that job satisfaction and APC contributed independently in explaining organizational turnover intentions. Overall, these results support a negative relationship between APC and organizational turnover intentions. However, whether this relationship is direct, or indirect through other variables such as AOC, job satisfaction, or professional turnover intentions is unclear.

Organizational-Professional Conflict

It has been argued that individuals will experience conflict when the goals and values of various entities to which they are committed are incompatible (Meyer and Allen 1997). Organizational and professional conflict (OPC) arises from an incompatibility between the values of one's organization and profession, and has been modeled as an outcome of APC. Aranya and Ferris (1984) and Harrell et al. (1986) found that the interaction of AOC and APC was inversely related to OPC, and McGregor et al. (1989) reported a positive relation between OPC and APC for management accountants who were CMA members. However, Meixner and Bline (1989) did not find any evidence of a relationship between APC and OPC.

Ethical Attitudes and Decision Making

Several studies have examined the relationship between APC and accountants' ethical attitudes and decision making. Jeffrey and Weatherholt (1996) and Jeffrey et al. (1996) examined the relationship among APC, ethical development, and rule observance attitudes. Jeffrey and Weatherholt (1996) found that accountants with high APC were associated with the conventional level of ethical development while those with low APC were associated with the post-conventional level of ethical development. However, Jeffrey et al. (1996) found that accountants with high or low APC had post-conventional levels of ethical development. Further results from both studies showed that accountants with high APC placed more emphasis on rule observance than did accountants with low APC.

In a related study. Lord and DeZoort (2001) examined the relationship between APC and auditors' sign-off judgments. Results showed that auditors with low APC signed-off on higher account balances compared to auditors with high APC. ¹² However, after considering the effects of social influence pressures, the influence of APC on auditor judgments was not significant.

A conventional level of ethical development is where an individual is focused on relationships at disocietal norms. A post-conventional level of ethical development is where an individual is focused on individually held principles of conscience (Kohlberg 1969).

¹² The experiment was framed so that higher sign-off balances indicated incorrect judgments.

Kaplan and Whitecotton (2001) examined the relationship between APC and auditors' reporting intentions. They found a positive association between APC and auditors' personal responsibility for reporting, which was, in turn, positively associated with auditors' reporting intentions. Overall, these results suggest that APC influences accountants' work-related behavior, including their propensity to follow professional standards and rules.

Other Outcomes

Finally, studies have examined the effect of APC on realization of work expectations. Results show that accountants with high levels of APC are more likely to report realization of their work expectations (Lachman and Aranya 1986a, 1986b; Gregson 1992; Aranya et al. 1982).¹³

FUTURE RESEARCH OPPORTUNITIES

The literature review has outlined the relationships between APC and a range of variables and reveals that significant scope exists for future research. In particular, while research in organizational behavior has demonstrated the importance of adopting a multidimensional view of PC (Meyer et al. 1993; Irving et al. 1997), no published studies have examined the antecedents, correlates, or outcomes of all three dimensions of accountants' PC.

Considering Three Dimensions of PC

Professional Turnover Intentions

The effect of PC on professional turnover intentions is important for many accounting firms and for the profession in general. Prior research has reported a negative relationship between APC and professional turnover intentions of accountants. However, the effect of CPC and NPC on accountants' professional turnover intentions is unexplored. Future research could examine the influence of each dimension of PC on the professional turnover intentions of accountants. Given the conflicting findings reported by Meyer et al. (1993) and Irving et al. (1997), such research may also contribute to understanding how the different dimensions of PC relate to professional turnover intentions across different occupations and professions. An examination of the relative influence of each dimension of PC on professional turnover intentions may allow the accounting profession to focus their efforts on activities that target specific forms of PC, to retain individuals within the profession. It may highlight whether accountants remain in the profession either because they want to, they feel they have to, or they feel they should.

Organizational Turnover Intentions

Prior studies have reported a negative relationship between APC and organizational turnover intentions. However, this research dates back to the 1980s and early 1990s, and many of these papers are based on the same two data sets. Since then, many changes have occurred in the nature of accounting work, the regulatory environment, and in the expectations and activities of the accounting profession itself, which may impact on those relationships. Thus, more up-to-date research is needed. Also, as with professional turnover intentions, the effects of CPC and NPC on accountants' organizational turnover intentions have not been examined.

Future research could entail a holistic examination of the relationships among PC, OC, and turnover intentions, using techniques such as structural equation modeling, which allows an examination of the multiple relationships between these constructs. Research to date is equivocal regarding the incremental contribution of PC in explaining organizational turnover intentions (Harrell et al. 1986; Aryee et al. 1991; Meyer et al. 1993). Further, research suggests that the effect of PC on organizational turnover intentions is indirect through professional turnover intentions (Lee et al. 2000).

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¹³ In Lachman and Aranya (1986a, 1986b) there were no significant relationships between APC and realization of work expectations for respondents in public accounting firms.

Job Satisfaction

Future research could also explore the relationship between multiple dimensions of PC and job satisfaction. Results from research into the PC of nonaccounting professions suggest that APC and NPC are positively correlated with job satisfaction, whereas CPC is either negatively correlated or not correlated at all (Meyer et al. 1993; Irving et al. 1997). Accountants with high levels of CPC are committed to the profession because of a lack of alternatives and or the accumulation of investments that would be lost upon leaving, and are therefore unlikely to feel satisfied with their job. It would be interesting to examine how each dimension of PC works together to influence accountants' overall level of job satisfaction. Furthermore, as studies of nonaccountants have revealed that APC has a positive impact and CPC has a negative impact on job satisfaction (Meyer et al. 1993; Irving et al. 1997), an area for future accounting research would be to determine if either dimension has a greater influence on job satisfaction than the other, or whether both dimensions influence job satisfaction at the same time.

Professional Satisfaction

An area where there is insufficient knowledge is the relation between PC and professional satisfaction. Prior research has supported a positive relationship between APC and the professional satisfaction of accountants (Meixner and Bline 1989; Lee et al. 2000), and in Table 1, professional satisfaction is classified as an antecedent of APC. However, it may be argued that accountants' professional satisfaction could precede APC, or the reverse, or perhaps the relationship is reciprocal. Similar arguments can be made for the relationships between NPC and professional commitment. However, no empirical research has been done in this area

CPC has been found to have a negative relation with job satisfaction, and the same relationships may also exist between CPC and accountants' professional satisfaction. It is also likely that CPC is an antecedent to professional satisfaction. Individuals with high CPC are expected to have low professional satisfaction, wishing they could leave the profession while believing they cannot. It is difficult to argue the reverse: that accountants will decide they have to remain with a profession because their professional satisfaction is low.

Balancing Multiple Commitments

Meyer and Allen (1997) argue that an individual may feel affective, normative, and continuance commitment to virtually any entity, work-related or otherwise, to which they have a psychological attachment. While some empirical research has examined both PC and OC of accountants, an interesting extension would be to consider if and how commitment to other entities (for example, spouse, family, union) relates to PC, and how accountants balance multiple commitments.

Much of the literature has found a positive relationship between APC and AOC (Aranya, Barak, and Amernic 1981; Harrell et al. 1986; Meixner and Bline 1989). However, little research has examined the relationship between the different dimensions of PC and OC. Accountants may perceive high costs associated with leaving the profession (such as loss of status, skills, or rewards) and therefore have relatively high levels of CPC. However, many similarities exist across accounting firms (for example, structures, rewards, training programs), which has increased following recent mergers, so the costs associated with moving from one firm to another may not be high. Thus, the correlation between CPC and COC may not be as strong for accountants compared to other professions, such as nursing (Meyer et al. 1993). In general, an exploration of the relationships between the three dimensions of OC and PC may improve our understanding of how accountants balance multiple commitments at work (Meyer and Allen 1997).

¹⁴ This may not be the case for partners who may incur significant financial costs in changing it us. It also does not take into account the emotional costs of leaving the organization, which would be captured by individuals AOC.

In reviewing the association between PC and OC. Gunz and Gunz (1994, 802) argued that "the issue is sometimes referred to as a zero-sum game. One can be loyal to one's profession or to one's organization, but not both." This "zero-sum game" view of multiple commitments suggests that PC would be negatively correlated with commitment to other entities, such as OC, or commitment to a labor union (Meyer and Allen 1997). However, accounting studies have generally reported a positive association between PC and OC. Meyer and Allen (1997) argue that there will be times when multiple commitments will conflict. The individual may seek to resolve this conflict by retaining stronger affective commitment to their preferred entity (for example, choosing family as a higher priority than the profession), and reducing commitment to the entity that the individual feels most responsible for creating the conflict. At the extreme, the individual may leave one or both entities. The issue of how accountants manage multiple commitments represents a potentially rich vein for further accounting research.

Professional Involvement

It is generally accepted that the active involvement of accountants is important to the development and sustainability of the accounting profession (International Federation of Accountants Education Committee 2004). However, there is no empirical research that has been undertaken to support the relation between accountants' involvement in the profession and PC. Professional involvement, beyond compliance with minimum membership standards, can be described as a discretionary behavior (as opposed to a focal behavior). As such, it would be expected that only APC and NPC would foster involvement in professional activities. This finding is supported for nurses (Meyer et al. 1993). A negative relationship between CPC and professional involvement of accountants could be expected, as accountants who only remain in the profession because they have to are unlikely to engage in discretionary behaviors such as "extra" professional activities.

Work Behavior

The distinction between focal and discretionary behavior is also relevant when explaining the effect of different forms of PC on accountants' work behavior. As noted in the literature review, APC has been shown to influence positively rule observance attitudes, auditor sign-off judgments, perceived responsibility for reporting questionable acts, reporting of wrongdoings by others, and being a mentor to junior accountants (Miceli et al. 1991; Viator 1999; Kaplan and Whitecotton 2001; Kaplan et al. 2001). This is due to accountants' enhanced identification and commitment to the goals, objectives, and standards of the profession, and it would be expected that accountants with high APC would engage in discretionary work behaviors.

Currently, there is no empirical research that considers how NPC and CPC affect the work behavior of accountants. It can be argued that individuals who have high levels of NPC may feel a moral obligation to engage in behaviors that are beneficial to the profession, such as reporting the questionable acts of others (discretionary behaviors). In contrast, CPC may have a negative effect on rule-observance attitudes and some aspects of accountants' job behavior: those accountants may comply with professional standards to maintain membership (engage in focal behavior), but may be less likely to engage in discretionary behaviors, such as reporting the wrongdoing of others.

Meyer and Herscovitch (2001) argue that commitment may lead to focal behavior and or discretionary behavior. Focal behavior is actions to which an individual is bound by his or her commitment (e.g., remaining in the profession). Discretionary behavior is action not specified within the terms of the commitment but that can be included within those terms at the discretion of the individual (e.g., performing extra role behaviors). Meyer and Herscovitch (2001) argue that all three forms of commitment should lead to focal behavior; however, whether an individual will engage in discretionary behavior may depend on the type of commitment (affective, continuance, or normative).

The distinction between the three dimensions of PC is important when studying accountants' work behaviors. ¹⁶ While all three forms of PC may result in behaviors that are required to maintain membership in the accounting profession (focal behavior), engagement in discretionary behavior may only be associated with APC and NPC.

Factors Influencing the Development of PC

Job Level and Work Environment

Little research has examined the processes through which accountants develop commitment to their profession. Some research has demonstrated links between accountants, job level and APC, partially as a result of increased socialization experiences. It is unclear, however, how highly skilled accountants who progress to more senior levels in a relatively short time ach eve high APC when such socialization experiences are more limited.

Also, as accountants move to higher levels in their profession and receive increased rewards and status, the costs of leaving the profession may increase, leading to higher CPC. Although not identical to job level, Meyer et al. (1993) found a significant positive correlation between years in nursing and CPC.

Accountants may also have different levels of PC, depending on the type of organization in which they work. Consistent with the results for APC, accountants working in public accounting firms may have higher CPC as they may be more likely to develop specialized skills, which may be lost on leaving the profession. It may be argued that accountants working outside of public accounting also develop specialized skills, but may also gain general management and business skills that may transfer more easily outside of the profession. Thus, they may have access to employment outside of the traditional accounting role, particularly within their own organization. These factors may reduce the perceived costs of leaving the profession and therefore reduce the CPC of accountants working outside public accounting. The work environments experienced by accountants may also represent an important institutional difference between the accounting profession and other professions, such as nursing, where working outside the traditional professional work environment may be less common. However, the move to adopt different forms of flexible work arrangements in the accounting profession, including part-time employment, job sharing, and working from home, may lead to changes in PC. Studies that examine differences in all three forms of PC in different work environments, and changes in PC from moving between work environments, represent a fruitful avenue for further accounting research.

Individual-Level Variables

Studies in the organizational behavior literature have examined the impact of important individual-level variables on the development of PC. However, this has not been studied for accountants. A relevant variable examined in organizational behavior literature is locus of control, which is the extent to which an individual believes that events are under his or her control (Spector 1998). Individuals with internal locus of control believe that events result primarily from their own behavior, whereas externals believe that other factors determine events that influence their lives. Several studies have found that internals tend to be more affectively committed to their profession (Irving et al. 1997; Lee et al. 2000; Colarelli and Bishop 1990). Irving et al. (1997) also found, unexpectedly, that internals reported lower CPC; however, no explanation was provided. Perhaps internals feel that they have control over events and therefore are aware of a greater availability of alternatives, or feel they can create such alternatives, compared to externals. This may reduce CPC. Other studies have argued for a reciprocal relationship between locus of control and PC, as having an internal locus of

This is because the correlation between APC and the work behavior variable may be influenced by an omitted variable, such as CPC or NPC, which is correlated with both APC and work behavior.

control may lead to greater PC, and as individuals become more committed to their profession their sense of control over events may also increase (Colarelli and Bishop 1990).

Autonomy is another individual-level variable that has been linked to PC. Autonomy, or self-determination, is the extent to which individuals perceive they have a choice in initiating and continuing their work behaviors and processes (Spreitzer 1995). Employees with greater autonomy are more likely to carry out tasks in ways that are consistent with professional values and responsibilities, and thus increase their commitment to the profession. Several studies have examined the relationship between autonomy and APC. Lee et al. (2000) reported a positive correlation between autonomy and APC in their meta-analysis. Similarly, Wallace (1995), in studying lawyers' commitment in professional and nonprofessional organizations, reported a positive correlation between autonomy and APC for lawyers working in law firms. Thus, autonomy may be an antecedent to APC.

A concept relevant to both PC and autonomy is professionalism. Professionalism is the extent to which a person subscribes to the ideal tenets of a profession (Morrow 1991). The work of Hall (1968) identified five attitudes that indicate professionalism: (1) a sense of calling to a profession. (2) a belief in service to the public, (3) a belief in self-regulation, (4) autonomy, and (5) the use of the profession as a major referent. Some studies have drawn similarities between the first attitude, a sense of calling, and PC (Morrow and Goetz 1988; Norris and Niebuhr 1983). The professionalism construct developed from sociology (Hall 1968), whereas the concept of PC arose from psychology (Porter et al. 1974; Meyer et al. 1993). These perspectives have not been integrated, and Morrow (1991) noted that little is understood about how professionalism relates to other career-orientated constructs, such as PC. In addition, we are not aware of any empirical research that has examined whether the attributes of professionalism are similar to, or relate to the three dimensions of PC. Thus, theoretical and empirical studies linking professionalism to PC and autonomy could represent an opportunity for future research.

Another area that is unexplored is the relationship between gender and accountants' PC. With a high proportion of females entering the accounting profession, a question arises as to why so few females remain in the profession and achieve more senior accounting roles. The various forms of PC may be relevant in explaining this issue.

In general, research examining the relationship between PC and individual-level variables may have implications for the recruitment and socialization of accountants in the profession and work-place. Some personality variables that are relatively stable over time, such as locus of control, may provide a screening mechanism to help recruit the most appropriate individuals into the accounting profession. Research concerning PC and individual-level variables that are more easily influenced by the professional or work environment would be useful for understanding how the structuring of accountants' work can effect the development of PC. Such research would aid in both the selection and retention of accountants into the accounting profession.

Professional Services and Membership Benefits

The application of exchange theory in the context of accountants' PC presents another area for future research. Exchange theory argues that individuals' commitment is a function of the comparison between time and effort required and the benefits and rewards received (Whitener and Walz 1993). Little research has linked the accumulation of side bets at a professional level to the various dimensions of PC. Arguably, many benefits accrue to members of the accounting profession, including job security, high status, professional networking opportunities, and brand promotion. These factors may increase the potential losses associated with leaving the profession and thus influence PC. Furthermore, an examination of whether perceptions of costs and alternatives at the professional level affect commitment at the organizational level may also be important, particularly given the possible effect of profession turnover intention on continued organizational membership.

Many of the benefits that accrue to members of the accounting profession are linked to the services and benefits provided by the professional accounting bodies. For example, the status of members of the accounting profession arises from a quality reputation developed through adherence to minimum standards of practice enforced by the profession and through continued promotion of the accountant image and brand. Research in relationship marketing suggests that services provided by professional associations have important implications for members' commitment to, and involvement in, their relevant association (Gruen et al. 2000). Services provided by professional accounting associations may enhance all three forms of PC. For example, the provision of membership services creates a series of positive exchanges between the professional association and members, and thus may enhance APC. Also, membership services would be lost on leaving the profession, and thus may enhance CPC. The receipt of membership services may also create a sense of obligation to the association that the member feels should be reciprocated and thus may increase NPC. Future research linking membership benefits to accountants' PC may provide practical suggestions for ways that the accounting profession can influence the commitment and retention of its members.

Professional Qualifications

Perhaps the most significant contact between the profession and its members is through the completion of professional qualifications. This represents an important socialization process including exposure to the values, expectations, ethical requirements, and responsibilities of the profession. Future research could examine which aspects of this socialization process are important determinants of accountants' PC, particularly APC. Links have been drawn between accountants' ethical orientation, PC, and important outcomes such as ethical sensitivity and rule-observance attitudes (Shaub et al. 1993; Jeffrey and Weatherholt 1996). Research linking exposure to professional requirements and professional conduct to ethical orientation and PC may provide important insights into the development of accountants' ethical behavior. Such research would provide significant scope for extending our understanding of the way that accountants develop attachments to their profession and the subsequent implications for important organizational and professional outcomes.

International Research Opportunities

There are many opportunities for examining accountants PC in an international context. Accountants' role and place in society is likely to vary across countries due to cultural differences; Jeffrey et al. (1996) argue that different cultural and legal environments can lead to differing interpretations of professional goals and values, of the nature of effort that should be exerted on behalf of the profession relative to other commitments, and of the importance of members tip in the profession relative to other social groups. In particular, drawing on Hofstede (1980), Jeffrey et al. (1996) argue that the status of the accounting profession is likely to be lower in collectivistic illures compared to individualistic cultures, with a lower status being reflected in lower levels of PC. Future research could examine how PC varies among accountants from different cultures, and whether national culture affects accountants' interpretation of professional values and the amount of effort directed toward advancement of the accounting profession (for example, professional my olvement).

Another opportunity for international research is to examine differences in the institutional framework of the accounting profession across countries and whether such differences affect the development of PC. For example, the form and extent of membership services provided by professional accounting associations may vary across countries, as may the qualifications, training, and work experience necessary to gain and retain membership of a professional accounting association (International Federation of Accountants Education Committee 2003). These differences could affect accountants' level of exposure to the goals and values of the profession, which may be reflected in varying levels of PC. Overall, examining the effect of cultural and institutional differences on the development of PC represents an important avenue for future research.

Methodological Issues

As noted in a prior section, future research into accountants' PC may benefit from increased use of structural equation modeling (SEM). Many studies of accountants' PC listed in Table 1 used correlation, or regression analysis, which are limited in terms of the complexity of modeling. An advantage of SEM is that comprehensive models of accountants' PC may be developed, in which a range of antecedents and outcomes of affective, normative, and continuance PC can be considered. This allows the researcher to consider both direct and indirect effects of variables on the dimensions of PC, and thus develop a better understanding of the relative importance of the antecedents and outcomes of PC.

Smith and Langfield-Smith (2004) explain that some accounting researchers may avoid using SEM due to its large sample-size requirements and the need for a strong underlying theoretical base. However, researchers engaged in more exploratory research could consider the use of partial least squares (PLS), which has smaller sample size requirements and can accommodate non-normal data.¹⁷ Thus, the increasing familiarity of SEM and PLS among accounting researchers may provide an opportunity to consider more sophisticated modeling of accountants* PC.

CONCLUSION

This paper has reviewed research examining antecedents, correlates, and outcomes of accountants' PC. Findings to date have demonstrated links between accountants' PC and outcomes such as job satisfaction and organizational turnover intentions. In addition, the development of PC is affected by individual and organizational characteristics such as ethical orientation and organizational type. While research in the organizational behavior literature has demonstrated empirically the existence of multiple and distinct dimensions of PC, only a single dimension of PC—affective PC of accountants has been researched. It has been argued in this paper that a more in-depth and complete examination of accountants' PC may be achieved through consideration of all three dimensions that describe accountants' commitment to their profession.

Consistent with these arguments, future research opportunities were presented that consider relationships between the three dimensions of PC and antecedents, correlates, and outcomes of PC. Research linking the activities and benefits provided by accounting firms and the accounting profession to the development of different dimensions of accountants' PC may provide insights into ways of increasing accountants' commitment to the profession. This may, in turn, have positive implications for accountants' job satisfaction, work behaviors, and intentions to remain in the profession.

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F SEM software packages have estimation techniques that can be used to accommodate multivariate non-normal data. However, the sample size requirements for these particular estimation techniques are said to number in the thousands (Kline 1998).

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