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Turnover in public accounting firms: a literature review

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Abstract

Purpose – This paper reviews and synthesizes the extensive literature that investigates turnover in public accounting firms.

Design/methodology/approach – This paper initially identifies turnover studies by searching two commonly used business databases, *ABI and Business Source*. Subsequently, references in these studies are examined. Over 100 published studies of accounting firms are identified.

Findings – Prior turnover studies can be classified by the underlying theory: psychological attachment; role theory; mentoring; and organizational justice. Using these theories, prior research has examined a wide variety of issues such as the role of gender in turnover.

Practical implications – Turnover is a significant and long-term problem in accounting firms. Practitioners and researchers have long noted that firms lose the costs of training employees who leave the firm. Recently, many in the auditing field have recognized that employee turnover may reduce audit quality. This paper summarizes prior turnover research, which may provide guidance to future researchers and managers of accounting firms.

Originality/value – This study fills a void in the accounting literature, which is missing a comprehensive and up to date review of prior studies of turnover in accounting firms. Opportunities for future research are also explored. While much has been learned, some theoretical and methodological issues remain unresolved.

Keywords Public accounting firms, Employee turnover

Paper type Literature review

1. Introduction

For decades, accounting practitioners and academics have noted that employee turnover is an important issue in public accounting firms. Firms expend considerable resources in recruiting and training an employee; these expenditures are lost to the firm if the employee leaves. The replacement cost of entry-level staff was recently estimated to exceed $32,500 (Telberg, 2010). An additional motivation for practitioners to control turnover is the relatively recent recognition that turnover is linked to audit quality. As the Public Company Accounting Oversight Board (PCAOB, 2015) argues, "a comparatively high rate of turnover or auditor transfer within a firm may adversely affect audit quality (Section 8)." The PCAOB encourages accounting firms to measure employee turnover, both at the engagement level and firm level, as turnover represents one of several indicators of audit quality. The center for audit quality (AICPA affiliate), following the lead of the PCAOB, recommends that accounting firms report the "average annual voluntary turnover rate (expressed in percentage) by staff level with insight into how the firm monitors turnover" (2019, p. 18).

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Many large accounting firms now report turnover statistics in their annual audit quality reports (which are publicly available on the web). Companies in need of auditors may incorporate turnover information into their decision regarding auditor selection. Regarding auditor retention, if a client sees that their audit team constantly changes from year to year, the client may start to question the audit quality offered by the accounting firm[1].

Practitioner concerns about turnover have spawned an extensive research stream (over 100 studies) that is among the widest and longest in the accounting literature. Researchers have used a variety of theoretical perspectives to explore turnover such as psychological attachment (affective) theory; role theory; mentoring; and organizational justice. The earliest studies of turnover in accounting firms appeared in the 1970s (Hellriegel and White, 1973; Rhode *et al.*, 1976) and the research continues to the present (Cannon and Herda, 2016; Fogarty *et al.*, 2017; George and Wallio, 2017; Gertsson *et al.*, 2017; Kohlmeyer *et al.*, 2017; Nouri, 2016/2017; Smith *et al.*, 2017). We believe that a comprehensive and up-to-date review of this vast literature is necessary to inform researchers of the insights provided by prior studies. Regarding practitioners, we believe that they may want to know what research has to say about certain issues such as mentoring and gender (including flexible work scheduling). In the past, the Big 4 firms have expressed much interest in these issues. We also think that the firms may be interested in the results of organizational justice studies; we suspect that the firms currently know little about this area.

Not only do we summarize prior studies but also we make suggestions regarding future research. Some suggestions extend and refine prior work while other suggestions involve new approaches. For example, we discuss the need for a better understanding of the relationship between turnover and firm performance, a topic that has been ignored in the accounting literature. Some turnover may be beneficial to the firm (e.g. departure of poor performers) and some turnover may be inevitable given the nature of the promotion systems in public accounting firms. What firms should strive to avoid is the turnover of high performers. Recent research in applied psychology and organizational behavior may be useful in this area (Park and Shaw, 2013).

The structure of the paper is as follows. The next section discusses the methods used to identify the turnover studies included in our paper. The following sections review early studies of employee turnover in public accounting firms, including those studies that use expectancy theory. The subsequent four sections review studies that rely upon theories of psychological attachment, role stress, mentoring and organizational justice. The order is roughly chronological as the more recent studies, to some extent, build on prior studies. For example, the psychological attachment studies introduce important mediating variables (job satisfaction and organizational commitment) that later research streams (such as role stress and organizational justice) incorporate into their models. We also examine other topics, such as gender that do not fall exclusively into these theoretical categories. The concluding section summarizes the current research and discusses the need for new perspectives.

2. Methods

The following criteria were used to include a study for review in this paper:

- the study must include either actual turnover or intended turnover in the model; and
- the participant must be a current or former employee of public accounting firms or participant is on certified public accountant (CPA)/chartered accountant (CA) contact lists (e.g. AICPA list).

With regard to CPA/CA contact lists, the authors assume that the vast majority of these individuals work for accounting firms, although a few will not. For studies that examine accountants in different types of organizations (public firms, government, industry, etc.), the authors include the study only if the study discloses results for public accountants separately. For example, in Kemery *et al.* (1985), the researchers examine accountants in a variety of fields and report the results separately for each field. Only the results for the public accountants are discussed in our review.

Our review includes only academic papers, which have empirical data from current or former employees of public accounting firms; therefore, the authors exclude accounting studies that involve analytical modeling (Bao *et al.*, 1986) and experimental studies that use students as subjects (Waller, 1985). Regarding the use of student subjects, a meta-analysis reports that responses of student subjects frequently differ from those derived from non-student subjects both directionally and in magnitude (Peterson, 2001). Bean and D'Aquila (2003) also report that there are significant differences between students and CPAs in their responses to ethical dilemmas. So we do not include studies that rely on student subjects.

To identify relevant studies, as Step 1, the authors use two databases: *ABI* and *Business Source*. The key words used in the abstract search were "accounting firm" and "turnover" (search limited to scholarly journals). In Step 2, the authors examine the references from these studies. Some of the references in these studies are from journals that do not appear in databases. For example, *Advances in Accounting Behavioral Research (AABR)* is not indexed by *ABI* or *Business Source*, yet *AABR* has relevant turnover studies that are included in our review. The authors exclude studies that they believe have obvious theoretical flaws. In addition, the review does not include unpublished papers (not peer reviewed), proceedings or dissertations. Finally, because of the large number of studies, and the complexity of some models, the authors do not discuss all papers in detail. The authors provide an extended discussion of those studies that they believe are most relevant to accounting researchers.

3. Earliest studies

The earliest studies of turnover in public accounting firms are exploratory without well-developed theoretical models. Two studies compare the demographic and biographic factors of accountants who leave accounting firms versus those who remain in the firms (Hellriegel and White, 1973; Rhode *et al.*, 1976). Differences between accountants who leave voluntarily versus those who are forced out are examined in Rhode *et al.* (1977). Benke and Rhode (1984) note that intention to leave the firm differs for the three work areas of large firms: audit, tax and management consulting. In Carcello *et al.* (1991), researchers use an open-ended survey question to ask experienced accountants why they left their accounting firms. The number one reason cited is excessive overtime.

4. Expectancy theory

Several early accounting studies of turnover use expectancy theory (Dillard, 1979; Dillard and Ferris, 1979; Earnest and Lampe, 1987). This theory was originally developed by management researchers (Vroom, 1964) to explain an individual's work motivation. Accounting researchers adapted the theory to examine the individual's motivation to leave a public accounting firm (Dillard, 1979; Dillard and Ferris, 1979; Earnest and Lampe, 1987). Accordingly, the motivation to leave depends upon the individual's valences, the job's instrumentality and the expectancy of an alternative job. Valence is the desirability of potential outcomes (such as high pay) associated with a particular job. Instrumentality is the likelihood that the desired outcomes will be obtained from the job. Expectancy is the likelihood that an alternative job could be obtained if the individual tries to get it.

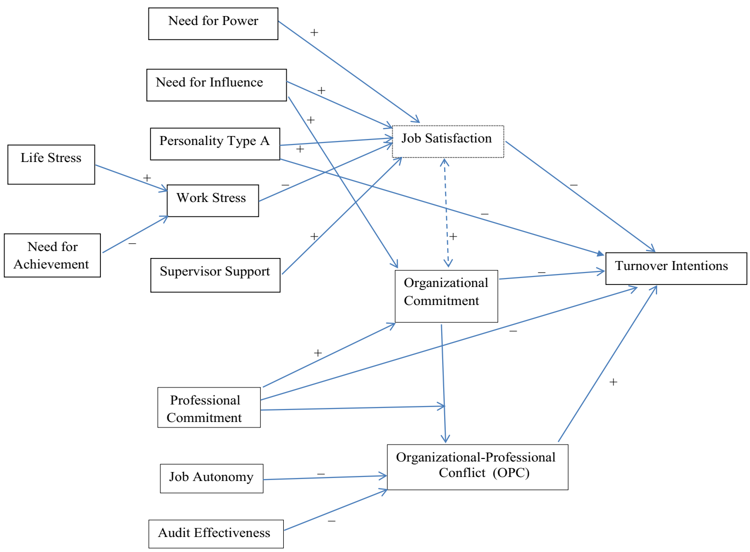
All of the studies in this area use surveys of accountants in national firms. Participants report on the valences and instrumentalities of their current job versus those of alternative jobs; additionally, they report on their intention to leave their current job. (In Dillard, 1979, participants also report on their expectancies.) In general, results support the expectancy model of turnover. Individuals intend to stay in firms when they believe that their current job in the firm has higher valence and higher instrumentality than alternative jobs outside the firm. Regarding the expectancy model, we would like to note that the most recent study we found in our review was published over 30 years ago (Earnest and Lampe, 1987). This suggests that accounting researchers have lost interest in using expectancy theory to investigate turnover.

5. Psychological (affective) attachment theory

In developing comprehensive models of turnover in public accounting firms, accounting researchers have frequently included two key affective variables: job satisfaction and organizational commitment. Researchers find strong evidence that both job satisfaction and organizational commitment are inversely associated with turnover intentions. Further, researchers also have identified numerous antecedents of satisfaction and commitment in their turnover models. Figure 1 provides an overview of the main findings.

5.1 Job satisfaction

Job satisfaction is the "pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1300). Studies in applied psychology and organizational behavior have consistently reported a significant inverse relationship



Notes: Broken arrow from and to organizational commitment and job satisfaction indicates that there could be a reciprocal relationship between these two factors

Figure 1. Psychological attachment theory

between job satisfaction and turnover, i.e. employees who are satisfied with their jobs are less likely to leave the job (Lum *et al.*, 1998; Mobley *et al.*, 1979; also see meta-analysis by Griffeth *et al.*, 2000). Researchers of turnover in accounting firms report similar findings (Aranya *et al.*, 1982; Bullen and Flamholtz, 1985; Gregson, 1990; Harrell, 1990; Harrell and Eickhoff, 1988; Harrell and Stahl, 1984; Rasch and Harrell, 1990; Snead and Harrell, 1991; also see meta-analysis by Brierley, 1999).

Several studies of turnover in public accounting firms have sought to determine the antecedents of job satisfaction using McClelland's theory of human motivation (Harrell and Eickhoff, 1988; Harrell and Stahl, 1984; Rasch and Harrell, 1990; Snead and Harrell, 1991). According to this theory, individuals have three intrinsic needs as follows: the need for achievement; the need for affiliation (need for positive interpersonal relationships); and the need for power (need to influence others). A large number of studies in organizational behavior demonstrate that these traits influence work behavior (for a summary, see Harrell and Stahl, 1984). Harrell and Stahl (1984) are among the first accounting researchers to examine the connection between these needs and turnover in accounting firms. In their sample of public accountants, the need for power is correlated with job satisfaction, which, in turn, is correlated with turnover intentions.

Subsequent accounting studies expand upon this work by examining a related construct, need for influence (Harrell and Eickhoff, 1988; Rasch and Harrell, 1990; Snead and Harrell, 1991). A high need for influence consists of a high need for power and a low need for affiliation. Several studies report that public accountants with a high need for influence have greater job satisfaction, greater organizational commitment and lower turnover (Harrell and Eickhoff, 1988; Rasch and Harrell, 1990; Snead and Harrell, 1991).

In this stream of turnover research, several other antecedents of job satisfaction have been identified such as personality types (A/B), work stress and supervisory support. Individuals with Type A personalities tend to be more competitive and less relaxed than Type B. As reported in Rasch and Harrell (1990), accountants who are Type A have higher satisfaction and lower turnover intentions. Undesirable work stress may reduce job satisfaction, and hence, increase turnover (Snead and Harrell, 1991). Further, high life stress and a low need for achievement may increase work stress (Snead and Harrell, 1991). Finally, the support of supervisors may be important to the job satisfaction of public accountants and their turnover intentions (Sweeney and Boyle, 2005).

5.2 Organizational commitment

Organizational commitment is the link between an employee and his/her organization (Mathieu and Zajac, 1990). While several conceptualizations of organizational commitment appear in the business literature, affective commitment has been the most relevant for work outcomes in public accounting firms. Affective commitment involves: acceptance of organizational goals and values; willingness to exert effort that benefits the organization; and desire to maintain organizational membership (Porter *et al.*, 1974). The majority of studies in the accounting literature have used affective commitment conceptualization (e.g. see reviews by Ketchand and Strawser, 1998; Ketchand and Strawser, 2001). Studies of turnover in accounting firms consistently report an inverse relationship between affective commitment and turnover intentions (Ferris and Aranya, 1983; Herda and Lavelle, 2012; Ketchand and Strawser, 2001; Parker and Kohlmeyer, 2005). Several accounting studies report that affective commitment has a significantly stronger correlation with job satisfaction and turnover intentions than other types of commitment (Ferris and Aranya, 1983; Ketchand and Strawser, 1998).

Several early turnover studies propose that organizational commitment conflicts with professional commitment and this conflict may increase turnover (Aranya and Ferris, 1983; Aranya and Ferris, 1984; Sorensen and Sorensen, 1974). Professional commitment is the identification with and commitment to the public accounting profession (Sorensen and Sorensen, 1974). An accountant may experience discomfort if forced to choose between commitment to their firm and commitment to their profession; if so, the accountant may leave the organization (Aranya and Ferris, 1984; Sorensen and Sorensen, 1974). Several studies (Aranya and Ferris, 1984; Bamber and Iyer, 2002) report a significant relationship between organizational/professional conflict (OPC) and turnover intentions (although Aryee *et al.*, 1991 does not). As reported in Bamber and Iyer (2002), OPC has two significant antecedents as follows: job autonomy (the greater the autonomy of the auditor, the less conflict); and audit effectiveness (the greater the belief that the firm performs quality audits, the less conflict).

Other studies propose that professional commitment is an antecedent to organizational commitment, which, in turn, influences turnover; OPC is not included in the model (Aranya *et al.*, 1982; Lachman and Aranya, 1986a; Lachman and Aranya, 1986b). Still, other studies propose organizational commitment as a mediating variable in explaining turnover in public accounting firms without including professional commitment or OPC in the model. These studies draw upon role and mentoring theories to identify antecedents to the commitment and are discussed in subsequent sections in our paper.

According to Gregson (1992), accounting researchers should include both organizational commitment and job satisfaction in turnover models for public accounting firms; indeed, several researchers have included both commitment and satisfaction as mediators in their turnover studies (Chong and Monroe, 2015; Hall and Smith, 2009; Harrell, 1990; Parker and Kohlmeyer, 2005; Pasewark and Strawser, 1996). Including both raise the issue of their causal ordering. Gregson (1992) investigates this issue using structural equation modeling and a sample of public accountants. He finds that job satisfaction is an antecedent to organizational commitment. Poznanski and Bline (1997) also acknowledge the importance of including both job satisfaction and organizational commitment in turnover models; however, their results, based upon structural equation modeling, suggest that organizational commitment is an antecedent to job satisfaction.

The issue of causal direction between commitment and satisfaction is complex. In the applied psychology and organizational behavior literatures, researchers have proposed causal links such as job satisfaction → organizational commitment; organizational commitment → job satisfaction; job satisfaction ←→ organizational commitment (reciprocal); or no causal link between job satisfaction and organizational commitment (e.g. see reviews by Huang and Hsiao, 2007; Raton, 2006). One of the limitations of using a survey approach, the dominant approach in the turnover literature, is the difficulty of establishing causal order.

5.3 Future research

Prior accounting studies using job satisfaction and organizational commitment typically rely on "traditional" conceptualizations of these variables. Alternative conceptualizations appear in the business and applied psychology literature and could be useful to accounting researchers. For example, regarding job satisfaction, Hulin and Judge (2003) note that job satisfaction involves multidimensional psychological responses to an individual's job, and that these personal responses have cognitive (evaluative), affective (or emotional) and behavioral components. Other researchers propose that job satisfaction, to some extent, is dispositional, i.e. job satisfaction, to some extent, is an individual trait (Staw *et al.*, 1986; Staw and Cohen-Charash, 2005).

Regarding organizational commitment in accounting firms, as we noted previously, Ketchand and Strawser (2001) report that most studies examine affective commitment. Ketchand and Strawser (2001) argue that while affective commitment has strong links with employee outcomes such as turnover, other forms of commitment also may be useful in understanding employee behavior in the firms. In the organizational behavior literature, several researchers propose that employees have different combinations of the various forms of commitment (i.e. employees differ regarding their commitment profile) and that these combinations influence employee attitudes (Meyer and Herscovitch, 2001; Meyer and Parfyonova, 2010; Stanley *et al.*, 2013). Among the first studies to explore this issue is Meyer and Herscovitch (2001), who argue that individuals vary regarding their affective commitment (AC: mindset and desire), normative commitment (NC: obligation to remain with the organization or support a change initiative) and continuance or instrumental commitment (CC or IC: mindset of cost-avoidance). Further, employees may be grouped by their differing levels of these forms of commitment and their behavior will vary in predictable ways across profile groups. Meyer and Parfyonova (2010, p. 283), in their review of this literature, argue that NC has received the least attention and that it has a dual nature, which "manifests itself differently depending on the strength of other components in an employee's commitment profile." Using a combination of high or low scores on the three components of organizational commitment, these researchers identify eight potential profile groups. Adopting these profiles, we propose that turnover in public accounting firms would be affected as indicated in Table AI.

Organizational researchers also have proposed links between turnover and commitment profiles using additional forms of commitment. For example, in Stanley *et al.* (2013, p. 176), researchers examine "how affective (AC), normative (NC), perceived sacrifice (PS) and few alternatives (FA) commitments combine to form profiles and determine turnover intention and turnover." These researchers found that the AC dominant, AC–NC dominant and committed profiles displayed lower turnover intention than the continuance dominant and not committed profiles. Moreover, the continuance dominant profile, and the profiles in which AC was high had lower turnover rates than the not committed profile. Accounting researchers could use these profiles to examine employee behavior, such as turnover, in public accounting firms.

6. Role theory

Accounting researchers, in their investigation of turnover in accounting firms, have borrowed extensively from role theory in the organizational behavior literature. As proposed in Kahn *et al.* (1964), a seminal study in the area, individuals within an organization have expected roles regarding their work. When the individual is unclear about the expectations (role ambiguity) or the individual experiences conflicting role expectations (role conflict), the individual experiences role stress, which reduces job satisfaction. Subsequent researchers in organizational behavior also developed the related concept of role overload – having too much to do in the available time (Beehr *et al.*, 1976; Sales, 1970). Regarding measures, almost all the accounting studies involving role ambiguity and role conflict use scales developed by Rizzo *et al.* (1970). As noted in Fogarty *et al.* (2000), the Rizzo scales for role ambiguity and role conflict have been widely accepted; however, there is no consensus regarding the measure of role overload.

Early studies in the accounting literature propose a direct relationship between role stressors (role ambiguity/conflict/overload) and turnover intentions in public accounting firms; however, the results are mixed (Bartunek and Reynolds, 1983; Collins and Killough, 1992; Senatra, 1980). Subsequent studies propose that the relation between the stressors and turnover is indirect, i.e. mediated (See Figure 2 for main results). Among the proposed

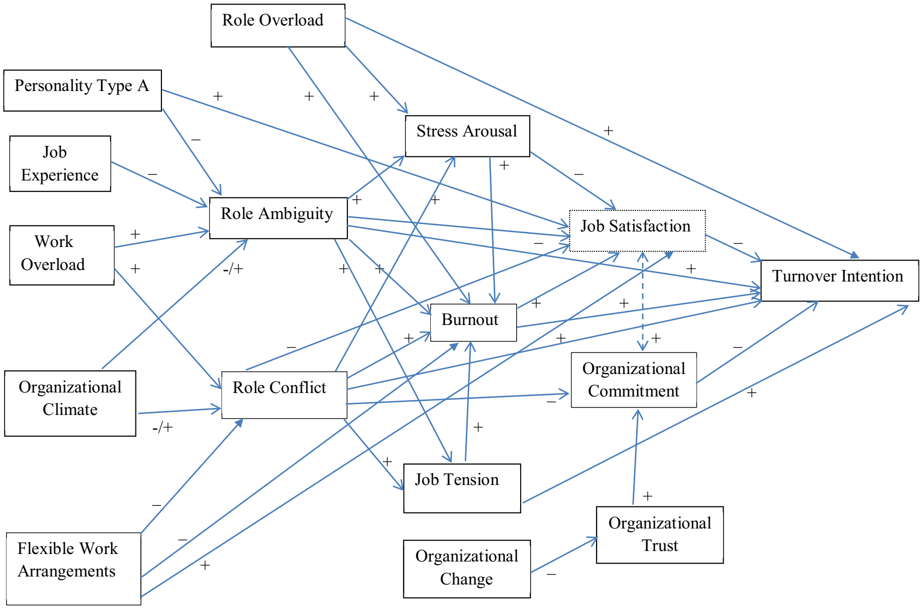


Figure 2.
Role theory

intervening variables are: job satisfaction (Kemery *et al.*, 1985); organizational commitment (Pasewark and Strawser, 1996); stress arousal (Smith *et al.*, 1995); job tension (Fogarty, 1996a); and burnout (Fogarty *et al.*, 2000).

6.1 Burnout

In our opinion, burnout is a particularly useful mediator in understanding the effect of role stressors on turnover. As explained in the most notable accounting study in this area (Fogarty *et al.*, 2000), the burnout construct consists of three inter-related dimensions as follows: emotional exhaustion; a loss of belief in personal accomplishment; and depersonalization (treating others as objects). Each role stressor (role ambiguity, role conflict and role overload) increases the risk of job burnout, which, in turn, leads to higher turnover intentions. Subsequent to Fogarty *et al.* (2000), most accounting studies that examine turnover using role theory include job burnout in their models (Almer and Kaplan, 2002; Chong and Monroe, 2015; Jones *et al.*, 2010; Jones *et al.*, 2012; Smith *et al.*, 2007; Smith *et al.*, 2017)[2]. In general, empirical results support burnout as a mediator although the evidence is conflicting at times.

6.2 Antecedents of role stressors

As noted in Schaubroeck *et al.* (1989), in developing comprehensive turnover models involving role stressors, an important issue is identifying the antecedents of the role stressors. Missing antecedent variables that are correlated with both role stressors and turnover may produce spurious relations between the role stressors and turnover. Further, there is the practical issue of understanding what causes role stressors so as to control role stressors and ultimately their outcomes such as turnover. Several accounting studies attempt to identify the antecedents of role stressors in their turnover models. For example, an individual with a Type A personality (highly competitive and hard-driving) may have a lower role ambiguity (Smith *et al.*, 1998). Job experience may reduce role ambiguity (Kalbers and Cenker, 2007). Having a mentor might also decrease role ambiguity (Viator, 2001b; this study is discussed in the next section of our paper). Work overload, feelings of being overwhelmed at work, may lead to higher role ambiguity and role conflict (Smith *et al.*, 1995; Smith *et al.*, 1998). Senatra (1980) reports that certain characteristics of the organizational climate, such as violations of chain command, contribute to role ambiguity/conflict. Finally, flexible work arrangements may reduce role stress (Almer and Kaplan, 2002).

6.2 Future research

Studies in applied psychology and business suggest that social support may be an important antecedent of role stressors in turnover models (Lee and Ashforth, 1993; Schaubroeck *et al.*, 1989). Social support involves relationships that help an individual cope with stress. Such help includes emotional support, constructive feedback and the provision of information useful in solving problems (House, 1981). In the workplace, social support comes from co-workers and superiors (Ganster *et al.*, 1986). In accounting firms, co-workers and supervisors could provide social support that helps clarify role expectations and reduces role conflict. The accounting literature has largely ignored social support with the exception of social support provided by mentors (Scandura and Viator, 1994, discussed in the next section).

Finally, Smith and Emerson (2017) examine role stressors, stress arousal and burnout (but not turnover) in public accounting firms. They expand upon prior studies by adding auditor resiliency to the model. They report that resiliency, a personality characteristic involving the ability to face adversity, is associated with lower stress arousal and reduced burnout. The role of resiliency in turnover could be a topic for future research given the demanding nature of work in public accounting firms.

7. Mentoring

A stream of accounting research examines how mentoring influences turnover intentions in public accounting firms using survey methodology (Figure 3). This stream borrows extensively from the organizational behavior literature. In an early and influential accounting study in this area, Viator and Scandura (1991, p. 20) define a mentor as "an older, more experienced employee who advises, counsels and supports the career development of younger, less experienced employees (referred to as protégés)"[3]. In their survey of public accountants, Viator and Scandura (1991) report that having a mentor is associated with lower turnover intentions. In their related follow-up study, Scandura and Viator (1994) argue that mentors in accounting firms provide protégés with several career-related benefits as follows: career development assistance; social support; and role modeling. Further, these benefits reduce protégé turnover intentions. Their results partially support their model (later, studies report similar findings: Barker *et al.*, 1999; Herbohn, 2004).

Most subsequent studies that examine the relationship between mentoring and turnover have focused on the two issues raised by Scandura and Viator:

(1) Does having a mentor influence turnover intentions? Many employees in accounting firms do not have mentors. Are these employees at higher risk for turnover?

(2) For those accountants who have a mentor, how do the career-related benefits provided by the mentor influence turnover?

Regarding the first question, the answer seems to be yes, although the empirical evidence is somewhat mixed. Studies that report an association between having a mentor and lower turnover intentions include: Almer and Kaplan (2002), Barker *et al.* (1999) and Viator and

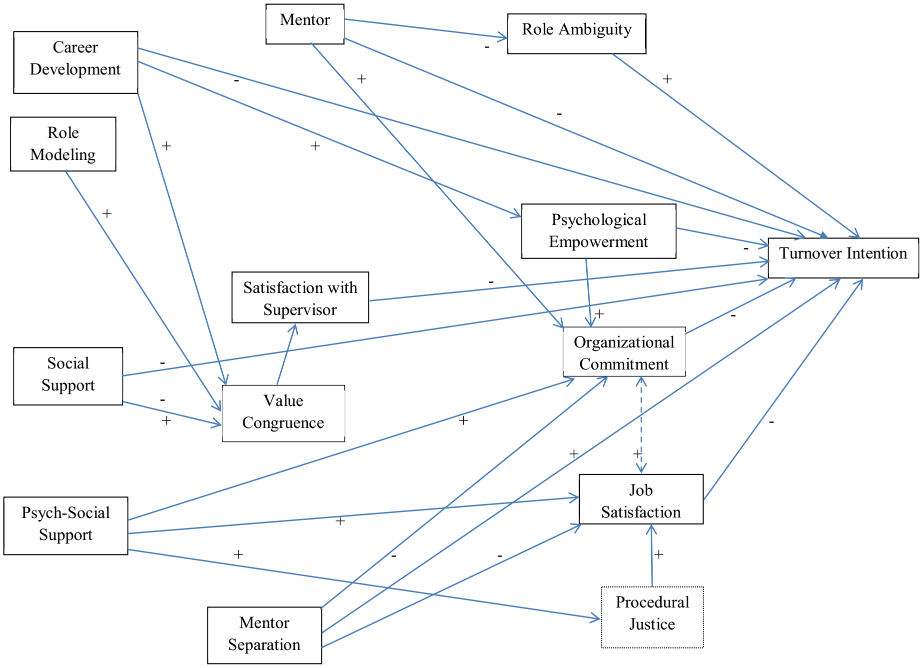


Figure 3.
Mentoring theory

Scandura (1991). Studies that report no association include: Hall and Smith (2009), Herbohn (2004) and Viator (1999). Viator (2001b) does not find a direct relation between mentorship and turnover intentions but does find that mentorship leads to reduced role ambiguity, which, in turn, is associated with lower turnover intentions[4].

Regarding the second question, how to explain the effect of career related benefits on turnover, several studies find evidence of mediating effects. Psychosocial support (combination of social support and role modeling) provided by mentors to protégés is positively associated with organizational commitment, which, in turn, is associated with lower turnover intentions (Chan *et al.*, 2008). Hall and Smith (2009) report that the effect of career development assistance on turnover intentions is mediated by psychological empowerment. Further the effect of psych-social support on turnover is mediated by procedural justice and organizational commitment. Fogarty *et al.* (2017) report that value congruence is a key intervening variable in the relationship between careers related benefits and turnover intentions. Value congruence involves the "protégé's perception of the amount of congruence between his or her values and those of the employing organization" (Fogarty *et al.*, 2017, p. 64). To summarize, prior accounting studies demonstrate a connection between the careers related benefits provided to protégés and their turnover intentions. How the benefits influence turnover intentions appear to be complex. Organizational commitment appears to be a key mediating variable (Chan *et al.*, 2008; Hall and Smith, 2009).

Other studies examine additional issues. For example, Kohlmeyer *et al.* (2017) report that auditors in accounting firms receive career-related benefits from not only mentors but also from other superiors; further these benefits (especially role modeling) are linked to turnover intentions through several mediators (this study is not depicted in Figure 3 because of the complexity of model). Finally, Viator and Pasewark (2005) find that when the relationship between mentor and protégé weakens (mentorship separation), the turnover intentions of the protégé increase.

7.1 Future research

Studies in management and applied psychology suggest that mentors may also benefit from mentoring relations. As summarized in a meta-analysis by Ghosh and Reio (2013), there is a significant association between the career benefits provided to a protégé and the job outcomes of the mentor such as higher job satisfaction, higher organizational commitment and lower turnover intentions. To the knowledge of the authors, accounting researchers have not examined this issue in public accounting firms.

Another possible area for future research is the role of mentoring as a moderator in explaining turnover. Previous accounting researchers have theorized that mentoring has direct and/or mediated effects on turnover; the possibility of mentoring as a moderator has largely been ignored. As an example of this possibility from the human resource literature, Dawley *et al.* (2010) report that mentoring (absence/presence) interacts with several career-related variables (perceived organizational support, supervisor support and job fit) in their effects on turnover intentions. Finally, we also suggest that accounting researchers follow suggestions made by Bozeman and Feeney (2007) when using mentoring theory to examine turnover. They note the need for greater conceptual clarity with regard to such basic issues as the definition of mentoring.

8. Organizational justice

Organizational justice is defined as "the conditions of employment that lead individuals to believe they are being treated fairly or unfairly (Folger and Cropanzano, 1998, preface, xii)." A long stream of research in management and applied psychology, involving hundreds of studies, demonstrates that justice affects employee outcomes such as turnover (e.g. see meta-analysis by: Cohen-Charash and Spector, 2001; Colquitt *et al.*, 2001). Despite the strong evidence linking justice and turnover, only a few accounting researchers have explored the

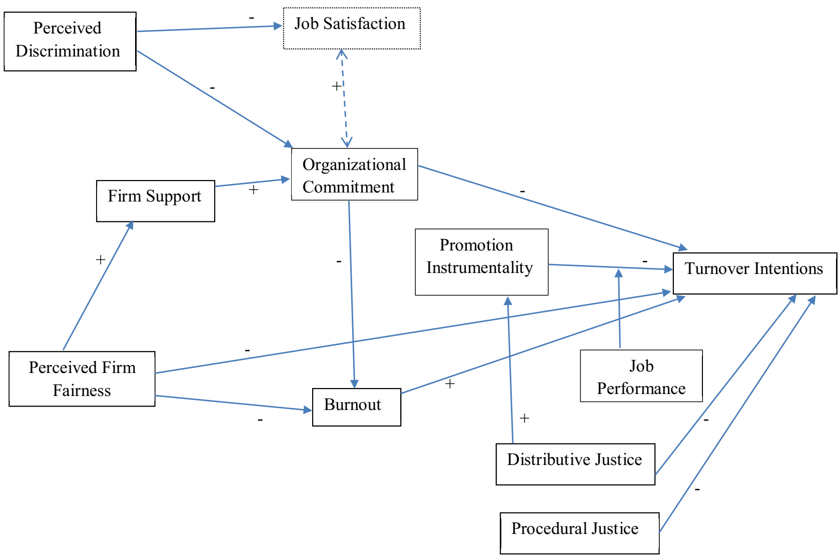


Figure 4.
Organizational justice

role of justice in turnover in public accounting firms. The accounting studies are depicted in Figure 4.

Among the earliest study is Parker and Kohlmeyer (2005). In their study, accountants evaluate the fairness of the accounting firm in making decisions regarding pay, promotions and job assignments. Perceptions of unfairness (perceived discrimination) in these decisions are associated with lower job satisfaction, lower organizational commitment and higher turnover intentions. A related study examines the links between distributive justice and turnover intentions (Parker *et al.*, 2011). Distributive justice involves the individual's perceptions of the fairness of organizational rewards (such as pay) received by the individual relative to the individual's contribution to the organization. A firm with high distributive justice provides the greatest rewards to those who contribute the most to the firm. Survey results suggest an inverse relationship between distributive justice and turnover. Also, important for turnover is promotion instrumentality, the belief that the organization promotes based upon performance. Promotion instrumentality interacts with job performance in its effect on turnover intentions. Specifically, individuals who are high performers and believe that the firm does not promote based upon performance are most likely to leave the firm[5].

In the turnover study by Herda and Lavelle (2012), the key variable is the perceived fairness of the firm, which is an overall measure of the firm's fairness; theoretically, it is related to specific justice facets such as distributive and procedural justice. Survey results suggest that perceived fairness has a direct effect on turnover intentions. Further, perceived fairness has indirect paths to turnover intentions through firm support, organizational commitment and burnout. Cannon and Herda (2016) replicate the study using the same model and a somewhat different measure of organizational commitment.

9. Other topics

In this section, we discuss studies of specific topics, such as gender, and other theoretical perspectives, such as organizational culture. Many of these studies build upon the frameworks discussed previously such as psychological attachment.

9.1 Gender

Researchers have consistently reported that female turnover is higher than male turnover in public accounting firms (Chi *et al.*, 2013; Collins, 1993; Dalton *et al.*, 2014; Fogarty, 1996b; Greenhaus *et al.*, 1997; Nouri, 2016/2017; Padgett *et al.*, 2005; Pasewark and Viator, 2006; Pillsbury *et al.*, 1989). While roughly half the new hires in US firms are female, the percentage of partners is far lower as women leave the firms in higher proportion (Dalton *et al.*, 2014). This issue is longstanding. From a historical viewpoint, the number of women entering the accounting profession in the USA increased sharply in the late 1970s and early 1980s. According to the AICPA, the proportion of female hires at large firms increased from 28 per cent in 1977 to roughly 50 per cent by 1985 (Pillsbury *et al.*, 1989). As noted in this era by Pillsbury *et al.* (1989), despite the changing gender composition of the new hires, the percentage of female partners lagged as women were more likely to leave the firms. Gammie and Whiting (2013) note a similar situation in the contemporary UK. They point out that almost half of the new hires are female and that female turnover is higher than male turnover.

The desire to explain the higher turnover rate for women has motivated many studies. This includes research exploring work/life balance, lifestyle preferences (LP), flexible work arrangements and possible gender discrimination. Regarding work/life balance, several researchers suggest that a high proportion of women believe that work in public accounting firms is not compatible with a rewarding personal life and this leads to high turnover. Marxen (1996) uses structured interviews of alumni of large firms to assess why the employees left their firms. Women cited "excessive job demands" as the critical reason more frequently than men. Dalton *et al.* (1997a) also contact alumni of large firms. Many female managers and partners left their jobs because of their belief that they could no longer balance their work and non-work commitments (See also: Trapp *et al.*, 1989; Hooks *et al.*, 1997).

Further, regarding work/life balance, in Greenhaus *et al.* (1997), researchers focus on accountants who may be more "at risk," i.e. accountants who are married and/or have at least one child. Results indicate that women have a higher turnover than men. For both genders, work-family conflict is associated with increased life stress, which, in turn, is associated with higher turnover intentions. The researchers note a gender difference for the question, "Do you want to eventually become a partner in your firm?" Women were less likely than men to answer yes. The researchers argue that this may explain the difference in male/female turnover as this question is a significant predictor of turnover. Greenhaus *et al.* (2001) explore similar issues. Pasewark and Viator (2006) find that work/family conflict leads to higher turnover intentions especially for women. They also find that some of this conflict is ameliorated with flexible work arrangements.

The life preferences (LP) of young female accountants might account for some gender differences in turnover (Bernardi, 1998; Bernardi and Arnold, 1998; Bernardi and Hooks, 2001). Within the LP framework, there are several categories regarding marriage, children and desire to work while raising children. At one LP extreme, the female employee prefers full-time work, no marriage and no children. At the other LP extreme, the female employee prefers to work until having children then never return to work. In a sample of junior accountants in large public accounting firms, Bernardi (1998) found that 40 per cent of women plan to work until childbirth, then not work for several years, and thereafter, return to work once the children are in school. As a large percentage of female accountants intend to leave the firms to raise children, this may account for some of the higher female turnovers. Bernardi and Arnold (1998) note that women comprise roughly 50 per cent of entry-level accountants in large firms. In their sample, they find that the female percentage declines in the upper levels of the firm but is congruent with predicted gender mix if LS of entry-level female accountants is included in the prediction model. In a further extension, Bernardi and Hooks (2001) examine actual turnover two years after new hires complete a survey that includes LS questions. The highest turnover is for women who did not want full-time employment when their children are young but want to return to work after the children start school.

As work–life in public accounting firms is often viewed as incompatible with family life, many large firms have implemented flexible work arrangements. Almer and Kaplan (2002) investigate the effect of flexible work schedules on turnover intentions. They examine "high risk" accountants regarding work/life conflict such as accountants with young children. Within this group, they further subdivide into two categories as follows:

(1) those who opt for flexible work schedules; and

(2) those who do not.

Those who opt for flexible time are overwhelming female (94 per cent) and report significantly higher job satisfaction and lower turnover intentions. Further, when controlling for flexible work schedules in the statistical analysis, women have a lower propensity for turnover than men.

Another potential explanation for the gender difference in turnover in public accounting firms is discrimination (Dalton *et al.*, 2014; Law, 2010). In their survey of auditors in USA firms, Dalton *et al.* (2014) find that perceptions of gender discrimination are linked to turnover intentions. Results also suggest that firms may be able to reduce perceptions of gender discrimination through: strong leadership support; strong ethical climates; organizational support for alternative work arrangements; and presence of female partners. Law (2010) also examines perceptions of gender discrimination among female auditors in accounting firms. Survey results in Hong Kong suggest that women do not leave public accounting because of discrimination but rather because of stress and conflicts with personal life. (As Law (2010) does not survey men, we do not know if women at the firms experience more stress or conflict than men.)

9.2 Ethnicity

Several researchers have examined the effect of ethnicity on turnover in public accounting firms. In Mynatt *et al.* (1997), researchers propose that ethnicity (Hispanic/Anglo) affects turnover intentions directly and indirectly through intervening variables. Survey results from accountants in Texas do not support their arguments. Viator (2001a) proposes that African-American accountants receive less mentoring in public accounting firms, and consequently, have a higher propensity to leave their firms. Survey results support the assertion regarding mentorship but the evidence regarding turnover is mixed. Nouri (2016/2017) examines actual turnover in a large international accounting firm from 1991 through 2006. Accountants are classified into several ethnic groups as follows: American Indian; Asian; African-American; Hispanic; and Caucasian. African-American have a statistically significantly higher turnover rate than Caucasians. Turnover rates for other ethnic groups are similar to Caucasians.

9.3 Organizational culture

Several researchers in organizational behavior explore the relationship between organizational culture and turnover in public accounting firms (Chatman, 1991; Chow *et al.*, 2002; O'Reilly *et al.*, 1991; Sheridan, 1992). According to this framework, firms differ in terms of the dominant organizational values held by their employees. For example, some firms emphasize teamwork while other firms emphasize competition. Individual accountants have preferences regarding these values; some prefer a firm that stresses teamwork while others prefer competitive workplaces. When organizational values coincide with the individual's preferences, "person-organization fit" occurs. Chatman (1991) and O'Reilly *et al.* (1991) assess the organizational culture of accounting firms by asking their senior employees about the values that typify the firms. The researchers also examine the value preferences of entry-level accountants in the firms. In their samples, they find that person–organization fit is linked to higher job satisfaction, higher organizational commitment and lower turnover (subsequently, Chow *et al.*, 2002 report the same findings in Taiwanese accounting firms although the measures in Chow differ somewhat).

Sheridan (1992) also investigates the relationship between organizational culture and turnover in accounting firms. Again, accounting firms are classified by the values reported by their senior employees. Sheridan (1992) examines the length of employment in the firms for entry-level accountants during a six-year period. Results suggest that employment is longer in firms with cultures that emphasize interpersonal relationship values versus firms that emphasize work task values (14-month difference on average).

9.4 Job performance

In Jackofsky *et al.* (1986), researchers investigate the relationship between job performance and actual turnover in a large public accounting firm. They find that performance and turnover have a curvilinear relation. Those most likely to leave the firm are those with very high or very low performance. In Barkman *et al.* (1992), researchers examined differences in employment longevity between high and low performers. On average, high performers were employed 40.5 months before leaving the firm while low performers left after 26.4 months. We discuss the relation between job performance, turnover and firm performance in the conclusion section.

9.5 Other studies

Researchers have investigated a number of other turnover issues. For example, is turnover lower for employees with graduate degrees? The evidence is mixed (Alford *et al.*, 1990; Siegel, 1987; Wright, 1988). Another study finds that turnover spikes when employees fulfill CPA requirements (Robson *et al.*, 1996). Fogarty (2000) examines the relationship between the socialization process of new hires and turnover. Nouri and Parker (2013) propose that employees and their firms have a social exchange relationship. Employees who believe that their firms are prestigious and provide effective training respond with higher organizational commitment and lower turnover. Gertsson *et al.* (2017) find that the auditors who have a positive perception of the audit profession are less likely to leave public accounting firms. Several studies find that tenure and position within the firm are relevant to turnover; the longer the individual has been with the firm and the higher the position of the individual, the lower the turnover intentions (Gregson, 1990; Mynatt *et al.*, 1997; Rasch and Harrell, 1990). Other turnover related issues investigated in prior studies include: organizational reality shock (Dean *et al.*, 1988); job characteristics (Fogarty 1996b; Fogarty and Uliss, 2000); career anchor (Hardin *et al.*, 2001); and litigation threats (Dalton *et al.*, 1997b).

9.6 Future research

Regarding organizational culture and "person-organization fit," future research could consider moderators of the relation between person–organization fit and turnover. As an example, Aktas (2014) examines the moderating effects of personality characteristics, allocentrism and idiocentrism. Allocentrics conform to the values and norms of society and pursue social harmony. Idiocentrics emphasize their uniqueness and favor competition. In their survey of white collar workers, Aktas (2014) finds that allocentrism (but not idiocentrism) moderates the relation between person–organization fit and turnover intentions. Specifically, the relation between "good" fit and low turnover intentions is stronger for individuals who are allocentric.

Regarding other approaches to investigating turnover in accounting firms, the concept of "job embeddedness" may be promising. The landmark study in this area is Mitchell *et al.* (2001). In their framework, an individual considers multiple works and non-work factors in the decision whether to stay in an organization. Factors include links (connections) with co-workers, supervisors and friends/family in the local area. The individual also considers sacrifices, i.e. what would the individual give up if the individual leaves the organization and the local community. In Mitchell *et al.* (2001, p. 1102), survey results suggest that in predicting turnover, job embeddedness "explained significant incremental variance over and above job satisfaction, organizational commitment, job alternatives and job search".

Mitchell *et al.* (2001) started a stream of research in the management and applied psychology literatures that examine job embeddedness (Feldman and Ng, 2007; Felps *et al.*, 2009; Ramesh and Gelfand, 2010). However, to our knowledge, no accounting researchers have investigated job embeddedness. Based on our work experiences in accounting firms, we believe that one concept from this literature may be particularly applicable to junior accountants: "turnover contagion" (Felps *et al.*, 2009). Accordingly, job embeddedness and job searches of co-workers influence the individual's decision to stay in an organization.

10. Methodological issues

The vast majority of studies that examine turnover in public accounting firms use cross-sectional surveys with intended turnover, not actual turnover, as the dependent variable in the statistical analysis. This raises the issue of the connection between turnover intentions and actual turnover. Several researchers in applied psychology, most notably Mobley, argue that the turnover process is complex and that turnover intent is a critical precursor of actual turnover (Mobley *et al.*, 1978; Mobley *et al.*, 1979; Mobley, 1982). Several accounting researchers cite the "Mobley" model in discussing turnover (Harrell, 1990; Hooks *et al.*, 1997). Findings in the organizational literature support the Mobley model in general (see meta-analysis by Hom *et al.*, 1992). Within the model, the specific link between turnover intentions and actual turnover has been repeatedly examined. In a frequently cited article, Steel and Ovalle (1984), using a meta-analytic approach, calculate a weighted average correlation of 0.50 between intended and actual turnover. Similar findings are reported in other meta-analyses (Cotton and Tuttle, 1986; Griffeth *et al.*, 2000) and studies of public accounting firms (Greenhaus *et al.*, 1997; Greenhaus *et al.*, 2001; Harrell, 1990; O'Reilly *et al.*, 1991). We conclude that in studies of turnover in accounting firms, the use of turnover intentions, in lieu of actual turnover, is warranted.

Survey studies have used a wide variety of scales to measure turnover intentions, i.e. there does not seem to be a commonly accepted set of questions for the construct (Viator 2001a also notes this). We were unable to find a study that assesses turnover intention measures in the business or applied psychology literature except for Bothma and Roodt (2013). Using a large sample in a technology company, Bothma and Roodt (2013) report strong reliability and construct validity for their six-item scale including the ability to accurately predict actual turnover.

Another issue involving measuring turnover intentions in surveys is possible social desirability response bias (Crowne and Marlowe, 1964; Ganster *et al.*, 1983). As the turnover intention is a sensitive issue, respondents may attempt to bias their responses to portray themselves as favorably as possible. Several studies of turnover in accounting firms measure social desirability response bias in their surveys; they report that this bias does not influence their results regarding turnover intentions (Arnold *et al.*, 1985; Parker and Kohlmeyer, 2005).

Survey data on turnover intentions typically has been gathered using:

- internal mailing system of accounting firm;
- web-based sites; and
- mailing list of professional organizations such as AICPA and Canadian Institute of Chartered Accountants.

As Benke and Rhode (1984) note, to become a member of AICPA, you must have a CPA, which typically takes several years of experience; consequently, in those studies that use AICPA lists, entry-level accountants in the firms are excluded from the sample. The findings of these studies may not be generalizable to the entry-level staff of public accounting firms.

As Dalton *et al.* (1997b) explain, measuring turnover intentions in a survey facilitates data collection. Examining actual turnover takes longer as it usually involves a longitudinal study of one or more years. For example, in studies of accounting firms, several researchers first conduct a survey of employees to measure predictor variables, then assess actual turnover one to two years later using company records (Bernardi and Hooks, 2001; Colarelli *et al.*, 1987; Harrell, 1990; Harrell and Eickhoff, 1988). Other researchers distribute an initial survey using the business addresses of accountants provided by professional organizations such as AICPA; subsequently, one or two years later, the researchers examine an updated AICPA list to determine if respondents have changed jobs (Arnold and Feldman, 1982; Ferris and Aranya, 1983; Greenhaus *et al.*, 1997; Greenhaus *et al.*, 2001). Collins (1993) uses a AICPA mailing list to distribute an initial survey. One year later, she mailed the participants a follow-up questionnaire with a turnover question. Rhode *et al.* (1976) surveys accounting students and then tracks those who accepted positions in accounting firms; three years after graduation, the researchers contacted the alumni regarding turnover (Rhode *et al.*, 1977 use the same sample). A few researchers rely exclusively on firm records that include employee information regarding turnover and basic demographics such as gender, ethnicity, position and type of work (Barkman *et al.*, 1992; Nouri, 2016/2017).

Studies that examine actual turnover use a categorical variable (leave/stay) as the dependent variable in the statistical analysis. An alternative approach is measuring the length of time that the accountant was employed by the public accounting firm (Barkman *et al.*, 1992; Chi *et al.*, 2013; Padgett *et al.*, 2005; Sheridan, 1992). Three of these studies use company records and survival analysis (Barkman *et al.*, 1992; Chi *et al.*, 2013; Sheridan, 1992). The other study uses a survey (Padgett *et al.*, 2005).

To investigate why individuals leave public accounting firms, instead of assessing the length of employment or actual/intended turnover, Marxen (1996) interviews former employees of the firms. Carcello *et al.* (1991) provide an open-ended question in their survey regarding why the accountant left the firm. Dalton *et al.* (1997b) survey former partners and managers to ascertain their reasons for leaving.

Several studies have noted that turnover in public accounting firms may be voluntary or involuntary (Harrell and Eickhoff, 1988; Rhode *et al.*, 1977; Sheridan, 1992). Rhode *et al.* (1977) report that in their sample of junior level accountants, 39 per cent of the turnover was involuntary (as reported by the firms). In their sample of auditors, Harrell and Eickhoff (1988) find that 31 per cent (57/181) was involuntary (as reported by firm). Sheridan (1992) reports that 12 per cent of the turnover in his study is involuntary (as reported by firms). In general, subsequent studies ignore the voluntary/involuntary turnover issue. Regarding future research, two issues seem relevant:

RQ1. What are the causes of involuntary turnover? Poor performance may account for much of this type of turnover, but are there other reasons?

RQ2. Do firms attempt to internally move employees to other areas before involuntary turnover (i.e. attempt to improve person-job fit before letting the employee goes)?

A final research issue regarding turnover is the different types of work within a typical accounting firm as follows: audit, tax and management consulting. Do turnover models differ for each group? Benke and Rhode (1980, 1984) and Nouri (2016/2017) report evidence that there are differences; other studies do not find differences (Harrell and Stahl, 1984; Rasch and Harrell, 1990).

12. Conclusion

In our study, we review the extensive literature that investigates turnover in public accounting firms. Overall, the literature indicates that many factors affect turnover. These include demographic variables (e.g. gender), firm-level variables (e.g. type of job), psychological attachment variables (e.g. job satisfaction and organizational commitment), role variables (e.g. role ambiguity), mentoring variables (e.g. whether employee has mentor and psych-social support) and organizational justice variables (e.g. distributive justice).

Most studies examine turnover in the USA; however, a significant number investigate turnover in other countries including: Australia (Herbohn, 2004); Canada (Lachman and Aranya, 1986b); Hong Kong (Law, 2010); Ireland (Barker *et al.*, 1999); Israel (Aranya and Ferris, 1983); Singapore (Aryee *et al.*, 1991); Sweden (Gertsson *et al.*, 2017); Taiwan (Chow *et al.*, 2002); and UK (Gammie and Whiting, 2013). As a generalization, results seem consistent across these countries. However, national culture may have some role in turnover. For example, Chow *et al.* (2002) argue that the national culture of Taiwan differs significantly from that of the USA. This has consequences for the relation between person-organization fit and turnover in accounting firms in Taiwan.

Regarding future research, we have additional suggestions that do not fit easily into the research streams previously discussed in this literature review. For example, the authors propose that accounting researchers should reconsider turnover from the firm's perspective. The vast majority of prior studies argue that turnover is harmful to the firms as the firm expends considerable resources on training the departing employees. While the cost of training is an undeniable loss to the firm, other potential consequences, some of them beneficial, may also occur. Recent studies in management and organizational behavior that explore the relation between turnover and organizational performance may be relevant to this issue. Within this research stream, as noted in the meta-analysis by Park and Shaw (2013), there are several theoretical perspectives. According to the human capital approach, any turnover of experienced employees with advanced knowledge and skills damages firm performance. Replacement employees will not be as effective until they gain experience. Further, recruiting and training replacement employees is costly. Most studies of turnover in public accounting firms implicitly adopt this perspective. As Park and Shaw (2013, p. 269) note, an alternative approach, the cost-benefit approach, is more complex and nuanced. While high turnover is disruptive and reduces firm performance, low levels of turnover may be beneficial "by reducing compensation costs, revitalizing the workforce and sorting out poor performers"; consequently, companies should strive for an optimal turnover rate that is neither excessive nor too low (Park and Shaw, 2013).

According to the cost-benefit approach, whether turnover damages or benefits an accounting firm depends upon who is leaving. We assume that employees who are unable or unwilling to do the work are forced to depart and that this benefits the firm in the long run if more suitable replacements are found. Also, employees who struggle to perform adequately often leave before being forced out and this benefits the firm. The turnover of low performers is worthy of study, as such hiring mistakes are expensive in terms of training costs; however, according to the cost-benefit framework, an accounting firm should be more concerned about the voluntary turnover of competent employees. In this case, the firm loses a trained and skilled employee who is difficult to replace. A certain level of turnover among competent employees may be unavoidable given the nature of the public accounting firms. Most firms have a pyramidal hierarchy and promotion to upper levels is highly competitive; only a select few advances to this level (Kalbers and Cenker, 2007). Some employees, who perform their current duties well, will leave the firm if they believe that they have reached a dead-end regarding promotions within the firm. For competent employees, premature departures, before this point in their career within the firm, is avoidable and damaging to firm effectiveness.

We believe that within the competent group, the highest performers represent a special subgroup that should be of particular concern to accounting firms. Few studies have investigated the issue of why high performers leave their firms; we believe that more research is required. Jackofsky *et al.* (1986, p. 106) report that in their sample, high performers are more likely to leave their accounting firms than average performers. The researchers attribute this to a "perceived ease of movement" by high performers although they do not collect any data about the perceptions of high or low performers. We suspect that enhanced job mobility is one of many reasons that high performers leave their firms. Organizational fairness may also be important; further, accounting firms have some control over fairness factors, whereas the firms have no control over the employment opportunities offered in industry. Parker *et al.* (2011) find that high performers are sensitive to the fairness of the firm's reward system; they may be less likely to tolerate unfairness given their contribution to the firm. As Parker *et al.* (2011) report, high performers depart firms that do not promote based upon performance. We propose that other fairness issues such as supervisor unfairness or possible gender unfairness, also interact with job performance in their effect on turnover. Finally, regarding prior studies that examine high performers, Sheridan (1992) reports that firms with cultures that stress interpersonal relationships and teamwork retain their high performers longer than firms that do not. Firms that value teamwork also retains below average performers longer. So there may be trade-offs to this approach; further research is required.

Finally, regarding future research, we note recent changes in the workplace at public accounting firms such as offshoring, remote work and the rise of the millennials. Regarding offshoring, the largest firms in the USA now have dedicated offshore centers to do services such as tax preparation and certain audit procedures. This may provide employees in the American offices with more interesting work and the opportunity for a more favorable work-life balance as "basic" tasks ("grunt" work) are done oversees (Downey, 2018). Also, because of advancements in software and electronic communications, employees now have the ability to do many tasks from remote locations such as a home. This may improve the quality of life for auditors as this provides greater work flexibility and reduces travel time to clients as fewer client visits are required (Pintabone and Caruso, 2018). The ability to do some work from home and less commuting time may be particularly advantageous for employees who are trying to juggle the demands of career and the raising of young children. Finally, much in the business literature has been written about a younger generation (often called millennials) who may differ in certain ways from previous generational cohorts (Firfiray and Mayo, 2017; George and Wallio, 2017). As noted by the US Chairman of PricewaterhouseCoopers, this newest generation wants a greater work–life balance; consequently, retaining staff is more challenging than in previous eras (Moritz, 2014). Prior research that explores quality of life issues for auditors, reviewed in our study, may be particularly relevant for this generation.

Notes

1. We thank the associate editor for insight into the topic of audit quality and turnover.
2. Exceptions to this statement include Viator (2001b) and Kalbers and Cenker (2007). Neither include burnout in their turnover models.
3. Kram (1988), a seminal mentoring study in management, is cited as source of definition.
4. Regarding other possible mediating variables, Stallworth (2003) reports that having a mentor is linked to organizational commitment, and organizational commitment is linked to turnover intentions; however, Stallworth does not hypothesize commitment as a mediating variable and does not statistically test for mediation.
5. Accounting researchers interested in moderated mediation models may want to read this paper.

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Appendix

Table AI. Effect of commitment profiles of turnover in public accounting firms

Commitment profiles	Low AC		High AC	
	Low CC	High CC	Low CC	High CC
Low NC	High turnover	High turnover	Medium turnover	Low to medium turnover
High NC	Medium turnover	Low to medium turnover	Low turnover	Low turnover

Notes: AC: affective commitment (mindset and desire); NC: normative commitment (obligation to remain with the organization or support a change initiative); CC: continuance commitment (also called instrumental commitment: mindset of cost-avoidance). These profiles were adopted from Meyer and Parfyonova (2010)

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