Psychological Contract Breach Between Coaches and Student-Athletes: The Impact on Team Commitment

Christopher R. Barnhill  
*Georgia Southern University*

Brian A. Turner  
*The Ohio State University*

The purpose of this study was to explore the impact that psychological contracts between student-athletes and their coaches have on team commitment. Division I student-athletes from three universities were sampled. The results of the study demonstrated that breaches of the psychological contract were significantly related to lower levels of affective team commitment and normative team commitment of student-athletes. The results also indicated that team sport student-athletes are more likely to experience psychological contract breaches that those who compete in individual sports.
The construct of organizational commitment has been widely studied by organizational behaviorists and sport management researchers. Within the discipline of sport management, researchers have applied organizational commitment theories to understand attitudes and behaviors of volunteers (Cuskelly & Boag, 2001; Cuskelly, McIntyre, & Boag, 1998; Engelberg, Skinner, & Zakus, 2011; Hoye, 2007), full-time employees of sport organizations (Chang & Chelladurai, 2003; Martinez, Stinson, & Jubenville, 2011), part-time employees of sport organizations (Chang & Chelladurai, 2003; Cunningham & Mahoney, 2004), game officials (Cuskelly & Hoye, 2013), interns (Cunningham, Sagas, Dixon, Kent, & Turner, 2005), and intercollegiate coaches (Rocha & Chelladurai, 2011; Rocha & Turner, 2008; Turner & Chelladurai, 2005). Outside of sport, organizational commitment theories have received substantial attention from researchers. In general, organizational commitment has been found to correlate to a variety of important in-role and extra role behaviors of organizational members (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

Organizational commitment has been deemed an important construct, worthy of study (Meyer et al., 2002). Yet, the student-athlete population has been largely ignored by scholars. It is clear that schools are making a commitment to intercollegiate athletics. Allocated funding to athletics has increased across all Division I subdivisions since 2005 (Knight Commission on Intercollegiate Athletics, 2013). According to Fulks (2013), the median expenses of National Collegiate Athletic Association (NCAA) Division I athletic departments has risen by more than 80% at all Division I levels since 2004 (FBS = 94.1%, FCS = 80.7%, Non-football = 81.7%). A large portion of the expense increase is related to coaches and student-athletes. Scholarships and coaching salaries also account for a majority of expenses in all Division I subdivisions (Fulks, 2013).

As schools increase their financial commitment to their athletic programs, it is clear that they are expecting a high level of commitment from their student-athletes. A review of handbooks from multiple Division I universities revealed that schools are mandating high levels of organizational commitment from their student-athletes (Monmouth University, 2013; Princeton University, 2012; The University of Iowa Department of Intercollegiate Athletics, 2012; University of Southern California, 2011). For example, the George Mason University Student-Athlete Handbook states, “Student-athletes at George Mason University accept responsibility to consistently demonstrate their commitment to success as a student, an athlete, a member of an intercollegiate team, and a member of the university community” (George Mason University, 2012, p. 8). The question is, how can schools affect the organizational commitment of student-athletes?

**Purpose of Study**

Turner and Pack (2007) examined the outcomes of organizational commitment of student-athletes using Meyer and Allen’s (1991) three-component model, but their study did not examine antecedents. Barnhill, Czekanski, and Turner (2013) examined the relationship between psychological contract breach and affective commitment of student-athletes but did not explore the other dimensions of Meyer and Allen’s (1991) model. No other studies have examined organizational commitment of student-athletes. The purpose of this study was to address the hole in the literature by exploring a common antecedent of organizational commitment, the...
psychological contract. More specifically, by extending previous studies related to psychological contracts of student-athletes (Barnhill et al., 2013; Barnhill & Turner, 2013) the purpose of this study was to explore the impact that psychological contract breach between student-athletes and their coaches has on team commitment using Meyer and Allen’s (1991) three-component model of organizational commitment.

**Psychological Contracts**

Born out of social exchange theory (Blau, 1964), psychological contract theory has received substantial interest from organizational behavior scholars in the last 20 years (Cullinane & Dundon, 2006; Zhao, Wayne, Glibkowski, & Bravo, 2007). Psychological contracts are defined as, “Individual beliefs, shaped by the organization, regarding terms of an exchange agreement between individuals and their organization” (Rousseau, 1995, p. 9). A traditional contract, such as a scholarship agreement or letter of intent, can only account for a small portion of the relationship between individuals and organizations (Anderson & Schalk, 1998; Shore & Tetrick, 1994). Rousseau (1990) found that employees formed distinctive beliefs regarding the nature of their obligations to the organization based on perceptions of promises made by their employer. The psychological contract fills in the gaps that a traditional contract cannot address. It allows the individual to form expectations of behaviors and roles between them and the organization giving the individual a sense of control over the relationship (Anderson & Schalk, 1998; Shore & Tetrick, 1994).

Although some studies differ (Barnhill et al., 2013; Turnley, Bolino, Lester, & Bloodgood, 2003), scholars have generally found that complete fulfillment of a psychological contract is rare (Robinson & Rousseau, 1994; Rousseau, 1995). A psychological contract breach occurs when an individual perceives a discrepancy between what they believe they were promised and what they actually received from the organization (Morrison & Robinson, 1997). Perceived breaches of the psychological contract are related to numerous negative attitudinal outcomes for the individual and organization; including lower levels of job satisfaction (Bunderson, 2001; Cantisano, Dominguez, & Depolo, 2008; Kickul, Lester, & Finkl, 2002; Robinson & Rousseau, 1994), trust (Cantisano et al., 2008; Deery, Iverson, & Walsh, 2006; Pate, 2006; Robinson, 1996; Zhao et al., 2007), and organizational commitment (Bunderson, 2001; Cantisano et al., 2008; Coyle-Shapiro & Kessler, 2000; McInnis, Meyer, & Feldman, 2009; Restubog, Bordia, & Tang, 2006). Psychological contract breach is also linked to negative behavioral outcomes (Cantisano et al., 2008; Zhao et al., 2007). Breached psychological contracts increase an individual’s intentions to leave their organization (Deery et al., 2006; Robinson, 1996; Robinson & Rousseau, 1994), while lowering organizational citizenship behaviors (Turnley et al., 2003).

**Psychological Contracts in Sport Management**

A small portion of the psychological contract literature is focused on members of sports organizations. Taylor, Darcy, Hoye, and Cuskelly (2006) examined psychological contracts of volunteers at community sports clubs. Using a qualitative method, Taylor et al. found that volunteers had different expectations for contract fulfillment than did their organizations. Nichols and Ojala (2009) conducted a similar study of event volunteers in the United Kingdom. Like Taylor et al. (2006), Nichols and Ojala (2009) found that volunteers held different
perspectives on the terms of the psychological contract than did their organizations’ managers. The results of Nichols and Ojala (2009) and Taylor et al. (2006) are congruent with studies from other organizational settings that consistently find that individuals interpret psychological contract terms differently than their organizations (Bunderson, 2001). The difference in interpretation can lead to psychological contract breaches if not addressed (Morrison & Robinson, 1997; Robinson & Morrison, 2000).

Kim, Trail, Lim, and Kim (2009) used psychological contract theory to examine the relationship between organizational fit and empowerment of volunteers. Their empirical study found that fulfillment of the psychological contract moderated the relationship between organizational fit and empowerment of event volunteers. The studies of sport organization volunteers demonstrate that psychological contracts function as a framework for a quasi-employment relationship in the absence of a formal contract. Student-athletes are not recognized as employees by the NCAA or their schools ("Coleman v. Western Michigan University," 1983; "Fred W. Rensing v. Indiana State University Board of Trustees," 1983), however their relationships with their coaches are very similar to those that employees have with management (Chelladurai, 2009).

Bravo and Won (2009) examined the impact of psychological contract breach on college coaches. They found that coaches who believed that their athletic department had breached the psychological contract were less satisfied with their jobs, less committed to the athletic department, less trusting of athletic department, and more likely to think about leaving their school. Won and Pack’s (2010) study of high school coaches had similar results.

Coaches and Athletes

Four studies have examined psychological contracts between coaches and athletes (Antunes de Campos, 1994; Barnhill et al., 2013; Barnhill & Turner, 2013; Owen-Pugh, 2007). Owen-Pugh (2007) conducted a qualitative study of professional athletes in Britain. She found that athletes on the same team form distinctly different psychological contracts with their coaches. The results of Owen-Pugh’s study are consistent with Rousseau’s (1995) research but may not be generalizable to the student-athlete population who lack formal employment contracts.

The other three studies all focused on psychological contracts between coaches and student-athletes. Antunes de Campos (1994) examined 104 female Division I soccer players at 4 schools. The study revealed that expectations of student-athletes vary from those of their coaches. Antunes de Campos’ study is also important because it established that coaches and student-athletes form psychological contracts. More recently, studies by Barnhill et al. (2013) and Barnhill and Turner (2013) examined the impact of psychological contract breach on student-athletes’ trust in their coaches and affective commitment to their teams. Using a large sample of student-athletes at one Division I university, their results indicated that breach of the psychological contract was negatively correlated with both constructs. Barnhill et al. also found that student-athletes who had experienced a psychological contract breach had greater intentions to leave their team.

Barnhill and Turner (2013) examined a large sample of Division I and Division II student-athletes at four diverse universities. Their results were similar to Barnhill et al. (2013), with a few exceptions. First, Barnhill and Turner (2013) examined multiple facets of trust. Their results indicated that psychological contract breach had a significant negative relationship with
cognitive trust, but not a significant relationship with affective trust. Unlike Barnhill et al. (2013), Barnhill and Turner (2013) did not measure the relationship between psychological contract breach and organizational commitment.

**Organizational Commitment**

Meyer and Allen (1984) proposed that organizational commitment is composed of two components - affective commitment and continuance commitment. They later added a third component, normative commitment, to the model (Allen & Meyer, 1990; Meyer & Allen, 1991). Meyer and Allen’s (1991) three-component model of organizational commitment has received substantial attention from researchers since its initial conceptualization. A meta-analysis by Meyer et al. (2002) of 155 independent studies concluded that the three components are distinguishably unique, yet related.

One reason for the three-component model’s popularity is the consistency in which the components predict important outcomes (Meyer et al., 2002). Affective commitment, has received the greatest amount of attention because of its positive relationships with satisfaction (Meyer et al., 2002; Park & Rainey, 2007), intentions to remain with the organization (Jaros, 2005; Meyer et al., 2002; Mohamed, Taylor, & Hassan, 2006; Vandenberghhe, Bentein, & Stinglhamber, 2004), and in-role performance (Meyer et al., 2002; Park & Rainey, 2007). Meyer and Allen (1991) stated, “affective commitment refers to the employee’s emotional attachment to, identification with, and involvement in the organization. Employees with a strong affective commitment continue employment with the organization because they want to do so” (p. 67).

Continuance commitment is a cognitive awareness by an employee of their options outside of the organization (Meyer & Allen, 1991). Employees with a high level of continuance commitment remain with the organization because they need to (Allen & Meyer, 1990). A meta-analysis by Meyer et al. (2002) found that continuance commitment was negatively related to turnover intentions, job performance, and positively related with absenteeism. Park and Rainey (2007) found that continuance commitment was also related to lower levels of job satisfaction.

“Normative commitment reflects a feeling of obligation to continue employment. Employees with a high level of normative commitment feel that they ought to remain with the organization” (Meyer & Allen, 1991, p. 67). Meyer et al. (2002) found that normative commitment was negatively related to turnover intentions, but positively with organizational citizenship behaviors and job performance.

**Organizational Commitment of Student-Athletes**

To our knowledge, Turner and Pack (2007) is the only study to examine the three-component model of organizational commitment using a sample of student-athletes. Their study examined the impact that student-athletes’ affective commitment and normative commitment to their coaches, university, and team had on their satisfaction and intentions to leave the university. Turner and Pack’s results illustrated that affective commitment and normative commitment to the team were the strongest indicators student-athletes’ intentions to leave their university. Affective commitment to the team and normative commitment to the team were also significantly related to student-athlete satisfaction. Turner and Pack attempted to include continuance commitment in their study, but their scale was not reliable. Nevertheless, Turner and
Pack’s study does indicate that fostering organizational commitment in student-athletes is important.

**Psychological Contracts and Organizational Commitment**

The relationship between psychological contracts and organizational commitment has been widely studied. Alcover, Martinez-Inigo, and Chambel (2012) focused on the relationship between psychological contract terms and affective commitment. They found that terms of an individual’s psychological contract are directly related to their affective commitment to their organization. McInnis et al. (2009) examined the relationship between contract terms and affective commitment and normative commitment. Their results were similar to the results of Alcover et al. (2012). McInnis et al. (2009) found that psychological contract terms are significantly related to affective commitment and normative commitment of organizational members.

The impact of psychological contract breach on affective commitment has been thoroughly studied by scholars. Cassar and Briner (2011), as well as numerous others (Barnhill et al., 2013; Coyle-Shapiro, 2002; Jafri, 2011; Restubog et al., 2006; Sturges, Conway, Guest, & Liefooghe, 2005), found that breaches of the psychological contract are related to lower levels of affective commitment. Two meta-analyses (Bal, De Lange, Jansen, & Van Der Velde, 2008; Zhao et al., 2007) also found that psychological contract breach is related to lower levels of affective commitment.

Fewer studies have examined the impact of psychological contract breaches on normative commitment and continuance commitment (McInnis et al., 2009). Jafri (2011) found that breaches of psychological contract terms related to socio-emotional factors lowered normative commitment levels, but terms related to monetary factors had no effect. McInnis et al. (2009) found that fulfillment of the psychological contract positively affected normative commitment, but they did not measure the impact of psychological contract breach. The results of studies examining the impact of psychological contract breach on continuance commitment are unclear. Sturges et al. (2005) found psychological contract fulfillment is inversely related to continuance commitment. Cassar and Briner (2011) found that psychological contract breach is related to higher levels of continuance commitment. However, when other factors were introduced to their model, the relationship between psychological contract breach and continuance commitment became insignificant.

**Method**

**Procedures**

To explore whether psychological contract breach affected student-athletes’ multidimensional commitment to their teams, surveys were distributed to student-athletes at three NCAA Division I universities located in the South and Midwest, through the cooperation of their athletic departments. To avoid bias, the surveys were distributed and collected by athletic department representatives at team meetings with no coaches present. A total of 195 surveys were collected, of which 189 were deemed usable. A rate of return could not be calculated as we were unable to determine how many surveys were actually distributed by the athletic department representatives. Given the nature of the sample size and sampling procedures, the results of the study are largely exploratory and not generalizable.
Respondents

The survey respondents were student-athletes enrolled at one of three Division I universities located throughout the Midwestern and Southern United States. In terms of demographics, 124 of the respondents (65.6%) were female compared to 65 males (34.4%). A majority of the respondents participated in team sports (n = 117, 61.9%) versus individual sports (n = 72, 38.1%). A majority of the respondents classified themselves as starters (n = 119, 63.0%), 44 respondents (23.3%) identified themselves as reserves, and 21 respondents (11.1%) were redshirting. Five respondents (2.6%) did not provide an answer to the question.

Instrumentation

An instrument was developed to measure: 1) perceived psychological contract breach by student-athletes; 2) affective team commitment; 3) normative team commitment; and 4) continuance team commitment. Rousseau (1995) argued that psychological contracts are constantly evolving. Generally a psychological contract will be over-fulfilled or under-fulfilled but rarely completely fulfilled in its original form (Rousseau, 1995). The use of even-numbered scales is appropriate when there is theoretically little chance of a neutral response (Krosnick & Fabrigar, 1997) because it forces respondents to reveal their opinion (Li, 2008). To account for Rousseau’s (1995) conceptualization, all items were measured using a six-point Likert type scales without a neural category (1 = Strongly Disagree, 6 = Strongly Agree).

Based on Morrison and Robinson’s (1997) definition, psychological contract breach (PCB) was defined as a perceived negative balance between what the student-athlete believes they were promised and what they actually received from their coaches. To measure PCB, items were adapted from Robinson and Morrison’s (2000) scale which has a high degree of validity among scholars (Freese & Schalk, 2008). Robinson and Morrison’s (2000) has five items, one of which is double-barreled so it was eliminated from the consideration. The remaining four items were adapted to the target population. To illustrate the nature of the adaptations, Robinson and Morrison’s scale contains the item, “I have not received everything promised to me by my organization.” To make the item relevant to the target population, it was adapted to, “I have not received everything promised to me by my coaches.”

Affective commitment (AC), normative commitment (NC), and continuance commitment (CC) were all defined and measured based on Allen and Meyer’s (1990) three-component model of commitment. In this study, we defined AC as the degree to which student-athletes want to remain on their teams. NC was defined as the degree to which student-athletes felt that they should remain with their team. CC was defined as the degree to which student-athletes felt that they needed to remain with their teams. To measure the three components of organizational commitment, we adapted items from Allen and Meyer’s (1990) scale which is widely utilized by organizational commitment scholars (Meyer et al., 2002). The scale contains eight items per component. Verbiage of the items was adapted to insure relevance to the sample population. References in Allen and Meyer’s (1990) scale to “the organization” were changed “the team.” For example, our scale instrument included the item, “I feel a strong sense of belonging to this team.” Some items from Allen and Meyer’s are related to employment terms not relevant to the sample population because of NCAA regulations (i.e. financial benefits and long-term employment) and had to be removed from the survey instrument. As a result, our survey contained four items from the AC and CC scales, and five items from the NC scale. Eliminating
items did create concerns about scale length. However, multiple authors (DeVellis, 2003; John & Benet-Martinez, 2000) argue that scales as short as three items are often appropriate when measuring narrowly defined, uni-dimensional constructs. Shorter scales eliminate redundancy which can artificially inflate reliability scores and enhance response fatigue bias (DeVellis, 2003).

In addition to the previously discussed items, participants were asked to respond to several demographic questions. The questions were added to control for potentially confounding variables established in the literature. Barnhill et al. (2013) found that male student-athletes were more likely to perceive a psychological contract breach. Based on Barnhill et al., a question pertaining to gender was added. Turner and Pack (2007) found that playing status affected commitment levels of student-athletes toward their coaches. A question was added to control for playing status. Finally, Rhind, Jowett, and Yang (2012) found that athletes who participate in individual sports have stronger relationships with their coaches than their team sport counterparts. The NCAA sponsors both individual and team sports. To control for sport type, a question was added.

**Reliability and Validity**

Psychological contract studies on the student-athlete population are rare (Antunes de Campos, 1994; Barnhill et al., 2013; Barnhill & Turner, 2013), as are studies examining the three components of organizational commitment of student-athletes (Turner & Pack, 2007). To establish construct validity, a panel of five experts reviewed the instrument. The panel was comprised of organizational behavior researchers and sports management scholars. Suggestions made by the panel of experts were incorporated into the instrument, thus substantiating the construct validity of the instrument.

Confirmatory factor analysis was conducted to establish reliability of the instrument. Any items with a factor loading ($\lambda$) below .70 were removed from analysis per recommendations by Hair, Anderson, Tatham, and Black (1998). All but three items met the .70 threshold. One normative commitment item was removed from the instrument leaving four items to measure the construct. The other non-reliable items were from the continuance commitment scale. As with Turner and Pack (2007), we felt uncomfortable with the reliability of the scale and removed continuance commitment from the study. Results of the confirmatory factor analysis are illustrated in Table 1.
Table 1 - Confirmatory Factor Analysis

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Almost all of the promises made by my coaches during recruitment have been kept so far. (Reversed)</td>
<td>.860</td>
</tr>
<tr>
<td>2) So far my coaches have done an excellent job of fulfilling their promises to me. (Reversed)</td>
<td>.879</td>
</tr>
<tr>
<td>3) I have not received everything promised to me by my coaches.</td>
<td>.750</td>
</tr>
<tr>
<td>4) My coaches have broken many of their promises to me even though I’ve upheld my end of the deal.</td>
<td>.838</td>
</tr>
<tr>
<td>5) I feel emotionally attached to this team.</td>
<td>.805</td>
</tr>
<tr>
<td>6) Being a part of this team has a great deal of personal meaning to me.</td>
<td>.817</td>
</tr>
<tr>
<td>7) I do not feel like “part of the family” with this team. (Reversed)</td>
<td>.808</td>
</tr>
<tr>
<td>8) I feel a strong sense of belonging to this team.</td>
<td>.877</td>
</tr>
<tr>
<td>9) Too much in my life would be disrupted if I wanted to leave this team now.</td>
<td>.783</td>
</tr>
<tr>
<td>10) It would require a great deal of personal sacrifice for me to leave this team now.</td>
<td>.772</td>
</tr>
<tr>
<td>11) It would be too costly for me to leave this team right now.</td>
<td>.593</td>
</tr>
<tr>
<td>12) It would be very hard for me to leave this team now, even if I wanted to.</td>
<td>.667</td>
</tr>
<tr>
<td>13) I feel morally obligated to do my part for the team.</td>
<td>.700</td>
</tr>
<tr>
<td>14) I believe that athletes must always remain loyal to their team.</td>
<td>.728</td>
</tr>
<tr>
<td>15) I was taught to be loyal to the team that I am on.</td>
<td>.796</td>
</tr>
<tr>
<td>16) It would not feel right to leave this team. NC</td>
<td>.701</td>
</tr>
<tr>
<td>17) It would be very hard for me to leave this team now, even if I wanted to.</td>
<td>.536</td>
</tr>
</tbody>
</table>

Factor loadings below .70 in *italics*.

Internal consistency of the instrument was tested by determining the Cronbach’s alpha (α) for each construct. Per Hair et al. (1998), an α of .70 or greater represents a consistent measure of a construct. The α levels of the remaining variables were considered acceptable per Hair et al.’s recommendations (PCB α = .85; AC α = .84; NC α = .71).
Results

Means and standard deviations for PCB, AC, and NC are presented in Table 2. The descriptive statistics indicated that, on average, student-athletes in the sample were not likely to have perceived high levels of PCB ($M = 2.57, SD = 1.21$), have higher levels of affective commitment to their team ($M = 5.02, SD = 1.00$), and have higher levels of normative commitment to their team ($M = 5.28, SD = .73$). Separate MANOVAs were conducted to determine if the control variables had significant effects on AC and NC. None of the MANOVAs indicated that AC or NC were significantly affected by gender, playing status, or type of sport. Separate ANOVAs were run to determine if the control variables had an effect on PCB. The ANOVAs indicated that gender and playing status did not have a significant effect on PCB. However, sport type did have a significant effect on PCB, $F(1, 187) = 4.039, p = .046$. Team sport student-athletes ($M = 2.71, SD = 1.21$) were significantly more likely to perceive PCB than were individual sport student-athletes ($M = 2.34, SD = 1.19$).

Table 2 - Means and (Standard Deviations) for All Variables by Gender, Sport Type, and Playing Status

<table>
<thead>
<tr>
<th>Variable</th>
<th>Females ($n = 124$)</th>
<th>Males ($n = 65$)</th>
<th>Team Sport ($n = 117$)</th>
<th>Non-Team Sport ($n = 72$)</th>
<th>Starters ($n = 119$)</th>
<th>Reserves ($n = 44$)</th>
<th>Redshirt ($n = 21$)</th>
<th>Total ($n = 189$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB</td>
<td>2.51 (1.20)</td>
<td>2.67 (1.24)</td>
<td>2.71 (1.21)</td>
<td>2.34 (1.19)</td>
<td>2.57 (1.22)</td>
<td>2.76 (1.26)</td>
<td>2.37 (1.07)</td>
<td>2.57 (1.21)</td>
</tr>
<tr>
<td>AC</td>
<td>5.04 (1.05)</td>
<td>4.99 (0.91)</td>
<td>5.10 (0.97)</td>
<td>4.90 (1.05)</td>
<td>5.14 (0.94)</td>
<td>4.82 (1.17)</td>
<td>4.80 (0.97)</td>
<td>5.02 (1.00)</td>
</tr>
<tr>
<td>NC</td>
<td>5.31 (0.71)</td>
<td>5.21 (0.79)</td>
<td>5.30 (0.76)</td>
<td>5.24 (0.70)</td>
<td>5.30 (0.72)</td>
<td>5.30 (0.70)</td>
<td>5.06 (0.96)</td>
<td>5.28 (0.73)</td>
</tr>
</tbody>
</table>

Table 3 - Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>PCB</th>
<th>AC</th>
<th>NC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB</td>
<td>1.000</td>
<td>- .198*</td>
<td>.642**</td>
</tr>
<tr>
<td>AC</td>
<td>- .198*</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>.231*</td>
<td>.642**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*Significant at the .05 level  
** Significant at the .01 level
Correlations between PCB, AC, and NC are presented in Table 3. A simple linear regression was conducted to determine the effects of PCB on the components of organizational commitment. Prior to running the analysis, the data was examined to insure that it met the assumptions required for linear regression models (Osborne & Waters, 2002). The data met requirements for linearity, independence of errors, homoscedasticity of errors, and normality of error distribution as prescribed by Field (2013) and King and Minium (2008). Linear regression revealed that PCB significantly \( (\beta = -0.198, t(187) = -2.769, p = .006) \) explained 3.9% of the variance in AC \( (F(1, 187) = 7.670, p = .006) \). PCB also significantly \( (\beta = -0.231, t(187) = -3.242, p = .001) \) explained 5.3% of the variance in NC \( (F(1, 187) = 10.512, p = .001) \).

**Discussion**

Using a sample of student-athletes from multiple of Division I schools, and a variety of sports, this study illustrated that psychological contracts do influence student-athletes’ team commitment. Perceived psychological contract breach was significantly related to lower levels of affective team commitment \( (\beta = -0.198, t(187) = -2.769, p = .006, R^2 = .039) \) and normative team commitment \( (\beta = -0.231, t(187) = -3.242, p = .001, R^2 = .053) \). The results of this study also indicated that student-athletes participating in team sports are more likely to perceive a breach than their individual sport counterparts \( (F(1, 187) = 4.039, p = .046) \).

The finding that psychological contract breach was negatively related to affective commitment is not surprising. Numerous studies have shown that individuals are less likely to want to be with an organization that broke a promise to them (Bal et al., 2008; Cassar & Briner, 2011; Coyle-Shapiro & Kessler, 2000; Jafri, 2011; Ng & Feldman, 2012; Sturges et al., 2005; Zhao et al., 2007). Barnhill et al. (2013) also had similar results. On the other hand, normative commitment has received very little attention from psychological contract researchers. The results of this study support a statement from McInnis et al. (2009) that the lack of research between regarding psychological contracts and normative commitment is surprising given that both constructs are related to felt obligations. This study indicated that student-athletes who perceive that their coaches broke a promise are less likely to want to be a part of the team and are less likely to feel that they ought to remain with their team.

The finding that gender did not affect perceptions of psychological contract breach was surprising. Barnhill et al. (2013) found that male student-athletes were more likely to perceive a breach of the psychological contract than female student-athletes were. Barnhill et al.’s study only examined student-athletes at one university. This study included student-athletes from three universities. Perhaps this study is more representative of the student-athlete population than previous research. A plausible explanation for our findings is that male and female student-athletes are equally sensitive to perceived promises from their coaches as well as the fulfillment of those promises. On the other hand, only two studies have examined the interaction of gender and psychological contracts of student-athletes. More research may provide a better understanding how gender affects perceptions of psychological contract breach amongst student-athletes.

Our study also found that gender was not a significant predictor of team commitment of student-athletes. These results contradict Turner and Pack’s (2007) findings that gender was a significant factor in predicting team commitment. The literature is sparse regarding team commitment and student-athletes. Perhaps male and female student-athletes have similar feelings.
of commitment to their teams. Once again, additional research may shed light on how gender affects team commitment of student-athletes.

The finding that sport type was a predictor of psychological contract breach was in-line with previous research. Rhind et al. (2012) found that individual sport athletes had a tighter bond with their coaches than did team sport athletes. Conceivably the tighter bond allows the individual sport student-athlete to ignore perceived breaches or understand their coaches’ decision-making better that team sport student-athletes. In contrast, it is possible that the presence of teammates will increase team sport student-athletes awareness of the psychological contract. Rousseau (1995) points out that communication from other organizational members influences how one perceives the contract. Teammates may communicate to a student-athlete when their contract has been breached. In addition, student-athletes may also make comparisons between what they have received and what their teammates have received.

Implications and Recommendations

The results of this study provide several implications and recommendations for practitioners and scholars. For athletic administrators and coaches who desire committed student-athletes, it is important to take notice of the psychological contract. Student-athletes who perceive a broken promise, regardless if an actual promise was broken, will feel less committed to their teams. Creating avenues for clear and explicit communication between coaches (managers) and student-athletes (employees) can prevent perceived psychological contract breaches (Rousseau, 1995). Athletic administrators can provide avenues for communication as well as training for coaches on the importance of the psychological contract.

For scholars, this study builds on the small amount of literature related to psychological contracts and organizational commitment of student-athletes. Specifically, this is the first study that examined antecedents of affective commitment and normative commitment of student-athletes. The results were significant, but the variance explained by psychological contract breach on affective and normative commitment of student-athletes was small. Other possible antecedents of team commitment need to be examined. For example, Meyer et al. (2002) found that work-related variables such as perceived organizational support and organizational justice are significant predictors of affective commitment. Future research on affective team commitment should include these variables as well as factors unique to intercollegiate athletics, such as team success and athletic development. Conversely, factors related to socialization tend to positively related to normative commitment (Meyer et al., 2002). Future studies on normative commitment may include variables related to coaching support of socialization activities.

Organizational commitment scales for student-athletes also need to be reevaluated. Like this study, Turner and Pack (2007), were unable to adapt Meyer and Allen’s (1991) continuance commitment scale reliably in student athletes. Continuance commitment represents an awareness of options outside the organization (Allen & Meyer, 1990). Student-athletes may have very few options to leave their team because of NCAA rules and educational options.

In addition to the problems surrounding the measurement of continuance commitment, numerous items related to affective commitment and normative commitment could not be adapted to fit the sample population. The significant differences between employees and student-athletes under current NCAA regulations create constraints that Meyer and Allen’s (1991) scale cannot account for. As a result, findings from the studies utilizing the scales may be incomplete.
or inaccurate. New adaptations to Meyer and Allen’s (1991) scale or a new scale needs to be developed to measure the three-component scale of commitment for student-athletes accurately.

**Limitations**

There are several limitations to this study that need to be addressed. The obvious limitation of the study was the inability to measure continuance commitment due to a lack of reliability. Additionally, multiple affective commitment and normative commitment items could not be adapted. More research needs to be conducted to address the measurement of organizational commitment of student-athletes. Another limitation to this study is the fact that it included only student-athletes at NCAA Division I institutions. Further investigation is needed at other levels of intercollegiate athletics to make this study generalizable to all coaches and student-athletes. Lastly, we were unable to ascertain how many surveys were distributed and thus a response rate could not be calculated. Our lack of control during survey distribution indicates that there is a possibility of bias that cannot be accounted for.
References


Coleman v. Western Michigan University (Michigan Court of Appeals 1983).


Fred W. Rensing v. Indiana State University Board of Trustees (Supreme Court of Indiana 1983).


The University of Iowa Department of Intercollegiate Athletics. (2012). *Student-athlete handbook 2012-2013*. Iowa City, IA: The University of Iowa.


