

THE COLLEGE PERSISTENCE QUESTIONNAIRE: DEVELOPING SCALES TO  
ASSESS STUDENT RETENTION AND INSTITUTIONAL EFFECTIVENESS

A Thesis  
by  
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## Foreword

This thesis is written in accordance with the style of the *Publication Manual of the American Psychological Association (6<sup>th</sup> Edition)* as required by the Department of Psychology at Appalachian State University

## Abstract

The current study extends previous research using the College Persistence Questionnaire (CPQ), an instrument designed to predict whether college freshman return for their sophomore years (Davidson, Beck, & Milligan, 2009). Between 6 to 12 weeks into their first semester, participants from three southeastern colleges and universities took the Student Experience Form of the questionnaire online. A principal component analysis was performed to determine if the Student Experience Form of the CPQ could be enhanced by a set of test questions. Two binary logistic regressions established the predictive validity of the CPQ and revealed that the additional items improved the utility of the instrument. The three most salient predictors of return status were Institutional Commitment, Academic Integration, and Scholastic Conscientiousness. A second principal component analysis used a majority of the same items and yielded an Institutional Effectiveness scale that could be used to assess a variety of campus objectives.

*Keywords:* retention, institutional effectiveness, persistence, attrition, College Persistence Questionnaire

## Dedication

I wish to dedicate this thesis to my family, Thom, Carmen, and Alex. I could not have possibly accomplished this feat without their unwavering encouragement.

## Acknowledgments

I would like to thank my thesis chair and mentor, Dr. Hall “Skip” Beck, whose fervor for producing scholarly research is rivaled only by a proclivity for helping his students. I owe

Dr. Beck my deepest gratitude for allowing me the opportunity to participate in his research laboratory. I will never forget the invaluable lessons he bestowed upon me. I would also like to thank my thesis committee, Dr. Dickinson and Dr. McElroy, who have provided me with support and guidance through this entire process.

The College Persistence Questionnaire: Developing Scales to Assess  
Student Retention and Institutional Effectiveness

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## The College Persistence Questionnaire: Developing Scales to Assess

### Student Retention and Institutional Effectiveness

Nearly half of all students who matriculate at American colleges and universities do not graduate within seven years (National Center for Public Policy and Higher Education, 2002). Although there has been a long history of efforts by colleges and universities to curtail attrition rates, several factors have recently prompted schools to increase their efforts to identify at-risk students.

The ability of the United States (U.S.) to compete in a global market is threatened by the loss of skilled workers. By 2012, the number of jobs requiring advanced skills will grow at twice the rate of those requiring basic skills (Hecker, 2004; U.S. Department of Labor, 2000). Each person who drops out of college adds to an already overcrowded unskilled and semi-skilled work force. A second fact that stimulates interest in retention is that our nation's higher education budgets and resources are dwindling. Colleges and universities lose precious funds when students do not complete their education. A third pressing matter concerns the financial ramifications that individuals encounter when they drop out of college. Many students who discontinue their educations are sacrificing an overall quality of life and must come to terms with the death of a personal dream.

One of the greatest challenges in retention research is identifying variables that have a prominent effect on persistence decisions. Davidson, Beck, and Milligan (2009) reviewed the retention literature on higher education and identified the following eight themes: institutional and degree commitment, social and academic integration, support services satisfaction, personality and psychological adjustment, academic orientation, and financial strain.

Institutional commitment is the degree that students identify with their current school. When students become displeased with their present college or university, they may seek to transfer to a new school or dropout altogether. One strategy for retaining at-risk individuals is to build mentoring and support groups into the curriculum. A number of studies have established that institutional commitment is a robust predictor of persistence decisions (Mangold, Bean, Adams, Schwab, & Lynch, 2003; Padgett & Reid, 2003).

Degree commitment refers to the value that a student places on obtaining a college education. Davidson et al. (2009) proposed that degree commitment should be distinguished from institutional commitment. For instance, a student can believe in the value of obtaining a degree, but may be dissatisfied with his or her current school. Conversely, students can be happy with their present school but may find obtaining a college degree to be nugatory. Students who have high degree commitment tend to be more likely to persist than students who see little value in a college degree (Cofer & Summers, 2000).

Social integration measures a student's sense of belonging, shared values, and similarity to others in the college environment (Davidson et al., 2009). According to Tinto (1993), students who develop satisfying relationships with peers tend to earn better grades and are more inclined to remain in college than less socially integrated students. Kennedy, Sheckley, and Kehrhahn (2000) provided support for this proposition. They found that students with low academic performance are more likely to persist if they identified with other students. A study conducted by Nicpon et al. (2007) also indicated that a student's friends strongly influence academic persistence decisions. Furthermore,

freshmen seminar programs may play a critical role. Hendel (2006) found that students who were enrolled in a first year seminar were more likely to report that they had experienced a sense of community during their first year than students not enrolled in freshman seminar.

Academic integration reflects a student's perception of how well a school's curriculum and instruction contribute to personal goals. Academic integration is influenced by such variables as class discussions, quality of instruction, and feelings of intellectual growth (Davidson et al., 2009). Although academic integration is often recognized as impacting student retention, many institutions need to develop more effective programs for increasing involvement with the scholastic environment (Tinto, 2006). One possible remedy is for professors to become more involved with their students outside of the classroom context. Pascarella and Terenzini (1998) found that frequent informal contacts with faculty members augmented academic integration.

The impact of social support services is yet another common theme given prominent attention in the retention literature. For example, students who feel well advised report being more aware of important university information (Davidson et al., 2009). Past research has demonstrated that students who rated their advising as good or excellent were more likely to interact with faculty, perceive their institutional environment as supportive, and report relatively higher levels of satisfaction with their college experience (The National Survey of Student Engagement, 2004). Freshmen seminar programs have been shown to promote positive student-advisor relationships. Hendel (2006) found that students in freshman seminar programs had higher levels of satisfaction with their academic advising than those who were not enrolled in the course.

Personality and adjustment variables measure how well a student can cope with various types of stress in the college environment. Some personality and adjustment variables related to student retention include self-efficacy (Bandura, 1997), coping strategies (Aldwin, 2007), and personal control (Perry, 2003). Bray, Braxton, and Sullivan (1999) determined that positive and negative coping strategies were associated with integration and commitment to institutions.

Academic orientation deals with student perceptions of the collegiate environment and has traditionally been viewed as consisting of two elements. Learning-oriented students focus on accumulating new knowledge and demonstrate adeptness for study skills, abstract reasoning, and self motivation (Eison, Pollio & Milton, 1982). Grade-oriented students are primarily concerned with attaining a course grade. In comparison to their learning-oriented counterparts, grade-oriented undergraduates possess poor study skills, higher test anxiety, lower grade point averages, and below average Scholastic Aptitude Test scores (Eison et al., 1982).

Davidson, Beck, and Silver (1999) contend that student perceptions of the academic environment involved more than learning and grade orientation. The authors developed and validated a short questionnaire called the Survey of Academic Orientation (SAO), which consists of the following factors: Structure Dependence, Creative Expression, Reading for Pleasure, Academic Efficacy, Academic Apathy, and Mistrust of Instructors. The SAO has been correlated with a number of important educational indices including first semester grades (Beck & Davidson, 2001), stress and coping processes (Davidson & Beck, 2006), self-actualization (Davidson, Bromfield, & Beck, 2007), and retention (Davidson & Beck, 2006).

An individual's financial situation can also affect persistence decisions. Financially strained students tend to report high levels of worry about living within their current means, difficulty of covering college costs, and feelings of inadequacy in regard to other students' financial situations (Davidson et al., 2009). Ishitani and DesJardins (2002) found that students who received financial aid generally had lower drop-out rates than non-aided students of similar financial circumstances. A six-year longitudinal study by the National Center for Education Statistics (2003) found that 56% of high-income students earned a bachelor's degree within six years while only 25 % of low-income students did.

### **Development of the College Persistence Questionnaire**

After reviewing the previously mentioned themes, Davidson et al. (2009) composed a series of questions which reflected variables associated with retention at one or more institutions. The authors named this instrument the College Persistence Questionnaire (CPQ). The purpose of the CPQ was to provide college personnel with the means to:

- (a) identify students at-risk of dropping out, (b) discover why a given student is likely to discontinue his or her education, and (c) determine the variables that best distinguish undergraduates who will persist from those who will not persist at their institutions. (p. 2)

Davidson et al. (2009) conducted a series of exploratory factor analyses. The final analysis resulted in a six-factor solution consisting of 36 items generated by a direct oblimin rotation. These items composed the Student Experiences Form of the CPQ. All retained factors yielded eigenvalues greater than 1.4. The following factor labels were

assigned: Academic Integration, Social Integration, Support Services Satisfaction, Degree Commitment, Institutional Commitment, and Academic Conscientiousness.

Davidson et al. (2009) also sought to determine how well the CPQ predicted whether freshmen would return for their sophomore year. Participants were 283 students enrolled in a freshman seminar program at a small southwestern university. Davidson et al. (2009) posited that a series of individual specific experiences occurred in the first six to eight weeks following matriculation which impacted a freshman student's persistence decisions, a view that has strong support in the higher education literature (Pascarella & Terenzini, 1991; Tinto, 1993; Upcraft & Gardner, 1989). Because of this theory, the test was administered between the seventh and eleventh weeks of the first semester rather than during freshman orientation.

Validity was measured using the six CPQ factors as predictors and retention as the outcome variable (Davidson et al., 2009). The result was statistically significant, Nagelkerke  $R^2 = .19$ , and 66% of respondents were correctly classified using .43 as the cutoff point. The three most salient factors in predicting retention were Institutional Commitment, Academic Conscientiousness, and Academic Integration. Support Services Satisfaction, Degree Commitment, and Social Integration factors did not produce a statistically significant increase in explained variance.

The incremental validity of the CPQ was assessed to determine if the Student Experience scales enhanced prediction of retention after taking high school rank and standardized test scores into account (Davidson et al., 2009). When entered as a block into a logistic regression equation, high school rank and standardized test scores successfully classified 59% of students, Nagelkerke  $R^2 = .09$ . When the six CPQ factors

were added, the overall correct classification of students was improved to 68%, Nagelerke  $R^2 = .23$ .

Although the utility of the CPQ was established, the authors noted that several important themes in the retention literature were not assessed by the original version of the instrument. Also, Davidson et al. (2009) proposed that some of the original six factors could benefit from additional items. These considerations led to the development of the College Persistence Questionnaire Version 2 (CPQ-V2).

The CPQ-V2 consisted of 36 items from the original CPQ plus 47 test items. Data were collected from 2,584 undergraduates at four institutions. A principal component analysis yielded the six scales similar to the original factors and four new scales. The factors of the CPQ-V2 were labeled: Academic Integration, Social Integration, Degree Commitment, Institutional Commitment, Academic Conscientiousness, Academic Efficacy, Academic Motivation, Collegiate Stress, Advising, and Financial Strain.

### **Purpose**

Like any good psychometric instrument, the CPQ is continually being reassessed and improved. The objective of the first study of this thesis was to determine if the Student Experience Form could benefit from additional test items. Initially, all items in the pool were correlated with retention. Next, a subset of those items yielding the highest correlations was subjected to an exploratory factor analysis. Finally, a binary logistic regression was run on the resultant components to determine the predictive validity of the Student Experience Form.

Beck and Davidson (H.P. Beck, personal communication, March 15, 2008) have proposed that the Student Experience scales of CPQ-V2 provide psychometrically

validated measures that can be useful in assessing a college or university's institutional effectiveness (IE). For example, apart from its effect on retention, a school might be interested in promoting social integration, or an institution might be concerned with bolstering scholastic conscientiousness in its own right.

A scale designed to identify at-risk students will likely have much in common with a scale intended to assess IE. On the other hand, college retention and IE are different constructs, and are best evaluated by different item sets. For instance, an item could be a good predictor of retention, but not load on a scale measuring IE. Likewise, an item may load on the IE scale (e.g. Social Integration) and have little or no correlation with retention. Therefore, a second exploratory factor analysis was conducted using all potential CPQ-V2 items regardless of their association with attrition. The results of the second exploratory factor analysis yielded a series of scales that may be useful in evaluating institutional effectiveness.

## **Method**

### **Participants**

Eight hundred and seventy four freshman from Appalachian State University ( $n = 491$ ), Catawba College ( $n = 216$ ), and Tusculum College ( $n = 167$ ) participated in the study during the fall of 2008. Appalachian State students were recruited from various sections of Introductory Psychology and received research credit for their participation. Catawba College and Tusculum College undergraduates took the questionnaire as part of a freshman seminar course.

The demographics of the sample were: 51% females, 49% males; 12.1% African-Americans, 1.3% Asians, 80.1% Caucasians, 3.2% Hispanics, 0.5% Native Americans,



and 2.9% Other. All participants were treated in accord with the American Psychological Association Guidelines for Ethical Conduct (American Psychological Association, 2002) and approval to administer the test was obtained from the Appalachian State University Institutional Review Board (see Appendix A).

### **Materials**

The two main components of the CPQ-V2 are the Student Background Form and the Student Experience Form. The present investigation is concerned with the Student Experience Form rather than the Student Background Form. The Student Experience Form assesses a student's attitudes regarding the academic and social environments at his or her school. The set of items used in this study consists of 54 questions from the CPQ-V2 and 21 test questions. The instrument will be called the College Persistence Questionnaire Test Version 3 (CPQ-TV3). Permission for use of CPQ items was granted by Hall P. Beck (see Appendix B).

Questions were answered on a 5-point Likert scale, with a sixth option, *not applicable*, available to students who thought the item did not apply to them. Verbal labels for the response scales depended on the wording of the question. For example, a question which asked, "How likely is it that you will earn a degree from here," used a response scale ranging from *very likely* to *very unlikely* (see Appendix C). Answers were later converted to "favorability" scores based on whether the response indicated something positive or negative about the student's college experience (-2 = *very unfavorable* to +2 = *very favorable*).

**Procedure**

Students signed a consent form (see Appendix D) allowing the investigators to determine if they returned to their respective schools the following fall semester.

Respondents were told that the purpose of the investigation was to assess their views about many aspects of college life and were assured that their answers would remain confidential.

The CPQ-TV3 was administered online between the sixth and twelfth week of the first semester of the freshman year. Appalachian State students responded in groups of 2 to 14 at a computer lab on campus. All remaining respondents answered online at their convenience. Most of the sample completed the CPQ-TV3 in less than 30 minutes. A screen then appeared on a computer monitor thanking them for their participation.

**Results****Student Experience Scale**

Answers on the Student Experience Form were converted to favorability scores. Data were then screened for univariate and multivariate outliers employing procedures suggested by Tabachnick and Fidell (2007). Next, each of the items was correlated with retention (whether or not a student returned for his or her sophomore year). Fifty-one items that displayed a statistically significant correlation with retention ( $p < .05$ , two-tailed) were then subjected to a principal component analysis using a direct oblimin rotation. An oblique method allowed for correlations between components.

The solution yielded nine components with eigenvalues greater than 1.0. Forty-five items had loadings of .40 or higher. The components were assigned the following labels after a review of the constituent items: Academic Integration, Financial Strain,

Institutional Commitment, Degree Commitment, Academic Motivation, Social Integration, Collegiate Strain, Scholastic Conscientiousness, and Academic Efficacy (see Table 1 for retention items by factor).

A second principal component analysis was then conducted using only those items with pattern coefficient loadings of .40 or greater. This was done to ensure that item deletion did not significantly impact the pattern coefficients. The results were similar to the initial analysis. The 9 factors yielded eigenvalues of 9.32, 3.40, 3.20, 2.02, 1.67, 1.60, 1.55, 1.23, and 1.07, respectively, after rotation, explaining 54% of the variance. All correlations between components were less than .40 (see Table 2).

Two binary logistic regressions were performed to assess the validity of the CPQ-TV3. Retention was used as the outcome variable and the means of the nine CPQ-TV3 component scores were predictors. Component scores were obtained by summing the favorability scores of the items comprising a particular component. Retention was regressed upon the nine components entered as a block. Results indicated that the nine components significantly predicted freshmen student return status,  $\chi^2(9, 834) = 188.49, p < .001, \text{Nagelkerke } R^2 = .33$ . Eighty-five percent of freshmen were successfully classified as returning or non-returning students employing .5 as a cutoff point. See Table 3 for regression coefficients, Wald Statistics, and odds ratios for each predictor.

An alternative method for assessing validity is to regress retention upon each individual item that was statistically correlated with the student's returned status. The results showed that all 51 items significantly predicted freshmen student return status,

$\chi^2(51, 834) = 234.09, p < .001, \text{Nagelkerke } R^2 = .39$ . Eighty-six percent of freshmen were successfully classified using .5 as a cutoff point.

### **Institutional Effectiveness Scale**

An exploratory factor analysis was conducted on all 75 items regardless of their correlation with retention. Like the proceeding analysis, a principal component analysis with a direct oblimin rotation was performed. The solution yielded nine components with eigenvalues greater than 1.0. Intercorrelations between components were all less than or equal to .30 (see Table 4). Fifty-seven items had loadings of .40 or higher. The first eight components retained their assigned label from the CPQ-TV3 retention scale. The ninth component was named Academic Advising rather than Academic Efficacy due to the content of the items that loaded on the pattern matrix (see Table 5 for IE items by factor).

### **Discussion**

One of the objectives of this thesis was to determine if the Student Experience form of the CPQ-TV3 could benefit from additional items. The CPQ-TV3 item pool consisted of 54 questions from CPQ-V2 plus 21 test questions. Of the test items, 11 loaded (greater than .40) on the retention scale and 14 loaded on the IE scale. Thus, including additional test questions was beneficial.

The second objective of this thesis was to develop scales for measuring retention and IE. As expected, many of the retention scale items (38) loaded on the IE scale. Nineteen items were unique to the IE scale and seven items were unique to the retention scale.

Eight of nine retention scale labels were retained on the IE scale. The main difference between these scales was that several items that loaded on the IE scale were

not correlated with retention and, thus, were not tested for inclusion on the retention scale. The other significant difference between the two scales was in the ninth factor items. Items pertaining to Academic Efficacy loaded on the retention scale but not the IE scale. On the other hand, Academic Advising items loaded on the IE scale and not the retention scale.

The third purpose of this project was to examine the predictive validity of the retention scale. Two binary logistic regressions were performed to assess the validity of the CPQ-TV3 as a retention instrument. Using return status for the sophomore year as the dependent variable, the nine scale scores produced statistically significant results, Nagelkerke  $R^2 = .33, p < .001$ . The second analysis regressed retention upon each individual item that correlated with retention. Not surprisingly, a higher percentage of the variance was accounted for, Nagelkerke  $R^2 = .39, p < .001$ , when individual items rather than scale items were used as predictors. The results of both analyses provided support for using the CPQ-TV3 to identify at-risk students.

The predictive validity of the IE scale was not assessed due to the complexity of the construct. IE is a very broad construct and encompasses many of the objectives a school may have for the student body. For instance, a student's performance, persistence decisions, and the values he or she internalizes are considered to be aspects of IE. Many of the scales of the Student Experience form from the CPQ (e.g., Social Integration, Institutional Commitment) can be viewed as partial measures of a school's effectiveness. The components of the IE scale that a school decides to use should be based on the current objectives of the institution.

**Limitations**

One focus of the present study was to identify the group of variables related to retention. However, no two colleges or universities provide identical academic and social environments. Nor are any two student bodies exactly the same. Therefore, it is important to note that we cannot predict with certainty which variables will be the most critical determinants of retention before the CPQ-TV3 is administered at a given institution. For instance, at one school degree commitment may be a powerful predictor but have little impact on persistence decisions at another college.

The findings of this study are based on responses from three southeastern colleges. The external validity of the retention and IE indices could be enhanced by including a wider variety of institutions in the sample. Another limitation is that the sample was solely comprised of freshmen. Students' feelings about college are subject to change across time as they become acclimated to their environment. Therefore, college personnel should exercise caution when generalizing the results to upperclassmen.

Internal consistency measures for four of the retention scales and two of the IE scales were below .70 and could be improved. In general, the low alpha levels were not so much due to the low correlation between items as to the few items composing each factor. Several scales could benefit from additional items. However, it would be a challenge to do so without significantly lengthening the instrument.

The ethnic distribution of the sample also needs to be considered. Eighty-one percent of the current sample was Caucasian. Future research should focus on administering the CPQ-TV3 to a larger sample of African American, Hispanic, and

Pacific Islander/Asian students to better understand persistence decisions specific to these ethnic groups.

### **Applications of the *CPQ-TV3***

Few colleges have sufficient resources to provide a great deal of individual attention to all of their students. Consequently, some students are deprived of the personable relationship they need to maintain an interest in returning to school. The CPQ-TV3 allows advisors, faculty members, and counselors to identify those students who are most in need of their services.

Once these at-risk students are recognized, college personnel may begin to investigate the origin of the problem. There are many reasons why students feel no sense of attachment to their schools. For example, one student may be at-risk because she feels that she has little in common with her classmates, a second because of an inability to meet financial means, and a third because he lacks a sense of connectedness with the faculty and staff. Information from the CPQ-TV3 could allow advisors to tailor interventions to meet each student's particular needs.

Advisors need not solely rely on scale scores to understand why a student persists or fails. Individual items provide important information that supplements scale scores. For instance, two students at-risk of dropping out due to a deficiency in Scholastic Conscientiousness may have given very different responses on the Student Experience form. The former could have had trouble meeting class attendance requirements whereas the latter might have frequently missed class assignment deadlines.

Administrators responsible for large groups of students have related but somewhat different informational requirements than personnel working with individuals. With

respect to retention, the CPQ-TV3 permits policy makers to determine the variables that have the greatest impact at their school. For example, if a given institution notices significantly high levels of financial strain, development of campus employment opportunities for students with little or no income might help to attenuate the problem.

Unfortunately, bivariate correlations do not take the interrelations among predictors into account. Retention appears to be affected by a constellation of interrelated variables with direct and indirect effects. One possible approach to delineating the relationships between predictors is to develop a structural equation model. A structural equation model could help officials determine the specific variables they need to manipulate in order to maximize the effectiveness of their intervention program.

The use of the IE scale will vary depending on the values an institution wishes to emphasize. One school may determine that resources should be concentrated toward academic advising whereas another is more concerned with enhancing social integration. A particular benefit would be to assess an IE scale before and after a program intervention is implemented. For instance, if the IE scale indicates that a student's scholastic conscientiousness is bolstered after attending a seminar on time management, there would be evidence suggesting that the program was successful.

### **Conclusions**

The CPQ-TV3 provided a strong argument for identifying the variables related to student retention. Individual item and component analyses corroborated the retention scale as a valid index for predicting student return status. A measure of institutional effectiveness was also developed to understand student experiences non-specific to retention. The retention and IE scales yielded auspicious results but could also benefit



from additional test items. Future research will seek to test the CPQ-TV3 on a more diverse sample to confirm the predictive validity of the instrument.

Enrolling in college in today's society is just as much an investment as it is an educational experience. Therefore, students deserve the best chance they can afford to keep their dream of attaining a college degree alive. A system that distinguishes at-risk students may be the next step for ensuring America's stature amongst the upper echelon of higher education systems in the world. College personnel who recognize the complex nature of attrition should begin to adopt a data driven model like the CPQ-TV3.

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Table 1

*Retention Items by Factor*

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**Factor 1: Academic Integration**

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1. On average across all your courses, how interested are you in the things that are being said during class discussions?
  13. In general, how satisfied are you with the quality of instruction you are receiving here?
  20. How well do you understand the thinking of your instructors when they lecture or ask students to answer questions in class?
  43. How concerned about your intellectual growth are the faculty here?
  57. How would you rate the quality of the instruction you are receiving here?
  63. During the first class session, many instructors present students with an overview of the course. In general, how accurate have these previews been in forecasting what you actually experienced in these courses?
  64. How much do the instructors and the courses make you feel like you can do the work successfully?
  66. In general, when you receive evaluative feedback from instructors, how useful has it been in figuring out how to improve?
  71. How fair are the tests at this school?
  75. Relative to what you expected when beginning college, how interesting have you found class sessions to be?
-

---

**Factor 2: Financial Strain**

---

15. How difficult is it for you or your family to be able to handle college costs?
29. When considering the financial costs of being in college, how often do you feel unable to do things that other students here can afford to do?
46. How much of a financial strain is it for you to purchase the essential resources you need for courses such as books and supplies?
61. How much does the cost of courses limit how many you take?
65. Based on your current financial situation, how inclined are you to work more hours per week than you want in order to pay bills?
- 

**Factor 3: Institutional Commitment**

---

8. How confident are you that this is the right college or university for you?
22. How much thought have you given to stopping your education here (perhaps transferring to another college, going to work, or leaving for other reasons)?
59. How likely is it that you will reenroll here next semester?
60. How likely is it you will earn a degree from here?
62. When you think about the advantages and disadvantages of attending this school, how much do you think the advantages outweigh the disadvantages, or vice versa?
76. How much loyalty do you feel to this college, based on your experiences here?
-

---

**Factor 4: Degree Commitment**

---

3. How supportive is your family of your pursuit of a college degree, in terms of their encouragement and expectations?
17. At this moment in time, how strong would you say your commitment is to earning a college degree, here or elsewhere?
27. When you think of the people who mean the most to you (friends and family), how disappointed do you think they would be if you quit school?
32. There are so many things that can interfere with students making progress toward a degree; feelings of uncertainty about finishing are likely to occur along the way. At this moment in time, how certain are you that you will earn a college degree?
41. After beginning college, students sometimes discover that a college degree is not quite as important to them as it once was. How strong is your intention to persist in your pursuit of the degree, here or elsewhere?
- 

**Factor 5: Academic Motivation**

---

6. In general, how enthused are you about doing academic tasks?
11. Some courses seem to take a lot more time than others. How much extra time are you willing to devote to your studies in those courses?
53. How much time do you spend proofreading writing assignments before submitting them?
-



---

**Factor 6: Social Integration**

---

2. What is your overall impression of the other students here?
  14. How much have your interactions with other students had an impact on your personal growth, attitudes, and values?
  24. How strong is your sense of connectedness with others (faculty, students, staff) on this campus?
  30. When you think about your overall social life here (friends, college organizations, extracurricular activities, and so on), how satisfied are you with yours?
  38. How much have your interactions with other students had an impact on your intellectual growth and interest in ideas?
  44. How much do you think you have in common with other students here?
- 

**Factor 7: Collegiate Stress**

---

4. Students differ quite a lot in how distressed they get over various aspect of college life. Overall, how much stress would you say that you experience while attending this institution?
  50. How much do other aspects of your life suffer because you are a college student?
  67. In general, how enthused are you about doing academic tasks?
-

---

**Factor 8: Scholastic Conscientiousness**

---

7. College students have many academic responsibilities. How often do you forget those that you regard as important?
21. How often do you turn in assignments past the due date?
37. How often do you miss class for reasons other than illness or participation in school-related activities?
- 

**Factor 9: Academic Efficacy**

---

10. How confident are you that you can get the grades you want?
40. How much doubt do you have about being able to make the grades that you want?
54. When you consider the techniques you use to study, how effective do you think your study skills are?
79. How good is your school performance relative to the expectations of your parents or others who are important to you?
- 

*Note.* Factors are presented according to their eigenvalues. Item numbers correspond to those on the original questionnaire. Only items with loadings of .40 or greater are listed.

Table 2

*Intercorrelations Among Retention Factors*

Factor	AI	FS	IC	DC	AM	SI	CS	SC	AE
AI	1.00	.09	.31	.27	.23	.31	.18	.11	.24
FS	--	1.00	.14	.10	.11	.03	.24	.12	.04
IC	--	--	1.00	.17	.15	.38	.21	.06	.07
DC	--	--	--	1.00	.09	.15	.12	.18	.03
AM	--	--	--	--	1.00	.17	.02	.06	.19
SI	--	--	--	--	--	1.00	.17	.01	.08
CS	--	--	--	--	--	--	1.00	.07	.10
SC	--	--	--	--	--	--	--	1.00	.09
AE	--	--	--	--	--	--	--	--	1.00

*Note.* AI = Academic Integration; FS = Financial Strain; IC = Institutional Commitment;

DC = Degree Commitment; AM = Academic Motivation; SI = Social Integration;

CS = Collegiate Stress; SC = Scholastic Conscientiousness; AE = Academic Efficacy.

*n* = 834.

Table 3

*Regression of Retention on Student Experience Scales*

Retention Variables	B	S.E.	Wald	df	Sig	Odds Ratio
Scholastic Conscientiousness	.246	.166	2.194	1	.139	1.279
Academic Efficacy	.161	.183	.772	1	.380	1.175
Social Integration	-.105	.171	.377	1	.539	.900
Collegiate Stress	.091	.149	.370	1	.543	1.095
Academic Motivation	.060	.184	.106	1	.744	1.062
Degree Commitment	.317	.232	1.871	1	.171	1.373
Institutional Commitment	1.302	.137	90.347	1	.001	3.765
Financial Strain	.127	.112	1.296	1	.255	1.136
Academic Integration	-.417	.257	2.632	1	.105	.659
Constant	-.033	.339	.009	1	.923	.968

*Note.* Code for retention variables was 0 = did not return, 1 = did return.

S.E. = Standard Error; df = Degrees of Freedom; Sig = Significance.

$n = 834$ .

Table 4

*Intercorrelations Among Institutional Effectiveness Factors*

	AI	FS	IC	CS	AM	SC	DC	SI	AA
AI	1.00	.02	.14	.21	.17	.15	.19	.25	.29
FS	--	1.00	.13	.22	.03	.12	.03	.01	.05
IC	--	--	1.00	.10	.01	.11	.12	.30	.24
CS	--	--	--	1.00	.06	.15	.09	.13	.11
AM	--	--	--	--	1.00	.14	.02	.15	.08
SC	--	--	--	--	--	1.00	.16	.05	.17
DC	--	--	--	--	--	--	1.00	.11	.20
SI	--	--	--	--	--	--	--	1.00	.28
AA	--	--	--	--	--	--	--	--	1.00

*Note.* AI = Academic Integration; FS = Financial Strain; IC = Institutional Commitment; CS = Collegiate Stress; AM = Academic Motivation; SC = Scholastic Conscientiousness; DC = Degree Commitment; SI = Social Integration; AA = Academic Advising.

*n* = 834.

Table 5

*Institutional Effectiveness Items by Factor*

---

**Factor 1: Academic Integration**

---

1. On average across all your courses, how interested are you in the things that are being said during class discussions?
  13. In general, how satisfied are you with the quality of instruction you are receiving here?
  20. How well do you understand the thinking of your instructors when they lecture or ask students to answer questions in class?
  57. How would you rate the quality of the instruction you are receiving here?
  71. How fair are the tests at this school?
  75. Relative to what you expected when beginning college, how interesting have you found class sessions to be?
-

---

**Factor 2: Financial Strain**

---

9. How often do you worry about having enough money to meet your needs?
  15. How difficult is it for you or your family to be able to handle college costs?
  29. When considering the financial costs of being in college, how often do you feel unable to do things that other students here can afford to do?
  46. How much of a financial strain is it for you to purchase the essential resources you need for courses such as books and supplies?
  61. How much does the cost of courses limit how many you take?
  65. Based on your current financial situation, how inclined are you to work more hours per week than you want in order to pay bills?
  80. If the costs of attending college rise in upcoming semesters, how much strain would that place on your personal budget?
-

---

**Factor 3: Institutional Commitment**

---

8. How confident are you that this is the right college or university for you?
  22. How much thought have you given to stopping your education here (perhaps transferring to another college, going to work, or leaving for other reasons)?
  59. How likely is it that you will reenroll here next semester?
  60. How likely is it you will earn a degree from here?
  62. When you think about the advantages and disadvantages of attending this school, how much do you think the advantages outweigh the disadvantages, or vice versa?
  72. The life of a college student typically has both positive and negative aspects. At this time, would you say that the positives outweigh the negatives, or vice versa?
  76. How much loyalty do you feel to this college, based on your experiences here?
-



---

**Factor 4: Collegiate Stress**

---

4. Students differ quite a lot in how distressed they get over various aspect of college life. Overall, how much stress would you say that you experience while attending this institution?
18. How much pressure do you feel when trying to meet deadlines for course assignments?
33. How often do you feel overwhelmed by the academic workload here?
50. How much do other aspects of your life suffer because you are a college student?
54. How much doubt do you have about being able to make the grades you want?
67. On a typical day, how preoccupied are you with personal troubles?
70. Compared to what you anticipated just before entering college, how much work has been involved in the courses?
74. On a typical day, how much do you worry about getting your work done on time?
77. How often do you encounter course work that makes you wonder whether you can do it successfully?
-

---

**Factor 5: Academic Motivation**

---

6. In general, how enthused are you about doing academic tasks?
11. Some courses seem to take a lot more time than others. How much extra time are you willing to devote to your studies in those courses?
16. How inclined are you to do most of your studying within 24 hours of a test rather than earlier?
23. How often do you read educationally-related material not assigned in courses?
31. Students vary widely in their view of what constitutes a good course, including the notion that the best course is one that asks students to do very little. In your own view, how much work would be asked of students in a really good course?
45. This semester, how much time do you spend studying each week relative to the number of credit hours you are taking? Assume each credit hour equals one hour of studying per week.
53. How much time do you spend proofreading writing assignments before submitting them?
78. If you are supposed to complete a reading assignment before the next class session, how likely are you to actually do it?
-

---

**Factor 6: Scholastic Conscientiousness**

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7. College students have many academic responsibilities. How often do you forget those that you regard as important?
21. How often do you turn in assignments past the due date?
37. How often do you miss class for reasons other than illness or participation in school-related activities?
52. How often do you arrive late for classes, meetings, and other college events?
81. How organized are you in terms of keeping track of upcoming assignments and tests?
- 

**Factor 7: Degree Commitment**

---

3. How supportive is your family of your pursuit of a college degree, in terms of their encouragement and expectations?
17. At this moment in time, how strong would you say your commitment is to earning a college degree, here or elsewhere?
27. When you think of the people who mean the most to you (friends and family), how disappointed do you think they would be if you quit school?
32. There are so many things that can interfere with students making progress toward a degree; feelings of uncertainty about finishing are likely to occur along the way. At this moment in time, how certain are you that you will earn a college degree?
41. After beginning college, students sometimes discover that a college degree is not quite as important to them as it once was. How strong is your intention to persist in your pursuit of the degree, here or elsewhere?
-

---

**Factor 8: Social Integration**

---

2. What is your overall impression of the other students here?
  14. How much have your interactions with other students had an impact on your personal growth, attitudes, and values?
  24. How strong is your sense of connectedness with others (faculty, students, staff) on this campus?
  30. When you think about your overall social life here (friends, college organizations, extracurricular activities, and so on), how satisfied are you with yours?
  38. How much have your interactions with other students had an impact on your intellectual growth and interest in ideas?
  44. How much do you think you have in common with other students here?
-

---

**Factor 9: Academic Advising**

---

5. How easy is it to get answers to your questions about things related to your education here?
19. How satisfied are you with the academic advising you receive here?
34. How well does this institution communicate important information to students such as academic rules, degree requirements, individual course requirements, campus news and events, extracurricular activities, tuition costs, financial aid and scholarship opportunities?
56. How would you rate the academic advisement you receive here?
- 

*Note.* Factors are presented according to their eigenvalues. Item numbers correspond to those on the original questionnaire. Only items with loadings of .40 or greater are listed.

## Appendix A: IRB Approval Form



**INSTITUTIONAL REVIEW BOARD**  
Office of Research Protections  
ASU Box 32068  
Boone, NC 28608  
828.262.2130  
Web site: <http://www.orsp.appstate.edu/protections/irb>  
Email: [irb@appstate.edu](mailto:irb@appstate.edu)  
Federalwide Assurance (FWA) #00001076  
IRB Reg. #0001458

**To:** Hall Beck  
Psychology  
CAMPUS MAIL

**From:** Dr. Timothy Ludwig, Institutional Review Board

**RE:** Notice of IRB Approval by Expedited Review (under 45 CFR 46.110)

**Date:** 1/28/2011

**Study #:** 09-0146

**Study Title:** "The relationship of scores on the College Persistence Questionnaire to retention (06-43)

**Submission Type:** Renewal

**Expedited Category:** (7) Research on Group Characteristics or Behavior, or Surveys, Interviews, etc.

**Renewal Date:** 1/28/2011

**Expiration Date of Approval:** 1/27/2012

This request for renewal has been approved by the above Institutional Review Board for the period indicated.

**Investigator's Responsibilities:**

Federal regulations require that all research be reviewed at least annually. It is the Principal Investigator's responsibility to submit for renewal and obtain approval before the expiration date. You may not continue any research activity beyond the expiration date without IRB approval. Failure to receive approval for continuation before the expiration date will result in automatic termination of the approval for this study on the expiration date.

You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented. Should any adverse event or unanticipated problem involving risks to subjects occur it must be reported immediately to the IRB.

Appendix B: Permission for use of the College Persistence Questionnaire



College of Arts and Sciences  
Dr. Wiley F. Smith  
Department of Psychology  
ASU Box 32109  
Boone, NC 28608-2109  
(828) 262-2272  
Fax: (828) 262-2974

March 15, 2008

To Whom it May Concern:

As owner of the copyright, I hereby grant Mr. Jacob Lindheimer permission to use the *College Persistence Questionnaire* for the purpose of conducting his thesis.

Sincerely,

A handwritten signature in black ink that reads "Hall P. Beck, PhD". The signature is written in a cursive style.

Hall P. Beck,  
Ph.D.  
Professor of  
Psychology

## Appendix C: College Persistence Questionnaire Test Version 3

*College Persistence Questionnaire  
Student Experience Form*

*Instructions: Students differ a great deal from one another in how they feel about their college experiences. This questionnaire asks you about your reactions to many aspects of your life here at this college. Please consider each of the questions carefully, and indicate the answer that best represents your thoughts. There are no "right or wrong" answers, so mark your real impressions. There are only 81 questions, and it is very important that you answer all of them. This should take you about 30-35 minutes. Your answers will be treated as confidential information.*

*Please circle your response to the following items. Be sure to answer each question.*

1. On average across all your courses, how interested are you in the things that are being said during class discussions?  
Very interested  
Somewhat interested  
Neutral  
Somewhat disinterested  
Very disinterested  
Not applicable
2. What is your overall impression of the other students here?  
Very favorable  
Somewhat favorable  
Neutral  
Somewhat unfavorable  
Very unfavorable  
Not applicable
3. How supportive is your family of your pursuit of a college degree, in terms of their encouragement and expectations?  
Very supportive  
Somewhat supportive  
Neutral  
Somewhat unsupportive  
Very unsupportive  
Not applicable



4. Students differ quite a lot in how distressed they get over various aspect of college life. Overall, how much stress would you say that you experience while attending this institution?  
Very much stress  
Much stress  
Some stress  
A little stress  
Very little stress / not applicable
5. How easy is it to get answers to your questions about things related to your education here?  
Very easy  
Somewhat easy  
Neutral  
Somewhat hard  
Very hard  
Not applicable
6. In general, how enthused are you about doing academic tasks?  
Very enthusiastic  
Somewhat enthusiastic  
Neutral  
Somewhat unenthusiastic  
Very unenthusiastic  
Not applicable
7. College students have many academic responsibilities. How often do you forget those that you regard as important?  
Very often  
Somewhat often  
Sometimes  
Rarely  
Very rarely  
Not applicable
8. How confident are you that this is the right college or university for you?  
Very confident  
Somewhat confident  
Neutral  
Somewhat unconfident  
Very unconfident  
Not applicable

9. How often do you worry about having enough money to meet your needs?  
Very often  
Somewhat often  
Sometimes  
Rarely  
Very rarely  
Not applicable
10. How confident are you that you can get the grades you want?  
Very confident  
Somewhat confident  
Neutral  
Somewhat unconfident  
Very unconfident  
Not applicable
11. Some courses seem to take a lot more time than others. How much extra time are you willing to devote to your studies in those courses?  
Very much extra time  
Much extra time  
Some extra time  
A little extra time  
Very little extra time  
Not applicable
12. When interacting with disagreeable people, how often are you courteous to them?  
Always  
Usually  
Sometimes  
Rarely  
Never  
Not applicable
13. In general, how satisfied are you with the quality of instruction you are receiving here?  
Very satisfied  
Somewhat satisfied  
Neutral  
Somewhat dissatisfied  
Very dissatisfied  
Not applicable

14. How much have your interactions with other students had an impact on your personal growth, attitudes, and values?
- Very much
  - Much
  - Some
  - Little
  - Very little
  - Not applicable
15. How difficult is it for you or your family to be able to handle college costs?
- Very difficult
  - Somewhat difficult
  - Neutral
  - Somewhat easy
  - Very easy
  - Not applicable
16. How inclined are you to do most of your studying within 24 hours of a test rather than earlier?
- Very inclined
  - Somewhat inclined
  - A little inclined
  - Not very inclined
  - Not at all inclined
  - Not applicable
17. At this moment in time, how strong would you say your commitment is to earning a college degree, here or elsewhere?
- Very strong
  - Somewhat strong
  - Neutral
  - Somewhat weak
  - Very weak
  - Not applicable
18. How much pressure do you feel when trying to meet deadlines for course assignments?
- Extreme pressure
  - Much pressure
  - Some pressure
  - A little pressure
  - Hardly any pressure at all
  - Not applicable

19. How satisfied are you with the academic advising you receive here?
- Very satisfied
  - Somewhat satisfied
  - Neutral
  - Somewhat dissatisfied
  - Very dissatisfied
  - Not applicable
20. How well do you understand the thinking of your instructors when they lecture or ask students to answer questions in class?
- Very well
  - Well
  - Neutral
  - Not well
  - Not at all well
  - Not applicable
21. How often do you turn in assignments past the due date?
- Very often
  - Somewhat often
  - Sometimes
  - Rarely
  - Very rarely
  - Not applicable
22. How much thought have you given to stopping your education here (perhaps transferring to another college, going to work, or leaving for other reasons)?
- A lot of thought
  - Some thought
  - Neutral
  - Little thought
  - Very little thought
  - Not applicable
23. How often do you read educationally-related material not assigned in courses?
- Very often
  - Somewhat often
  - Sometimes
  - Rarely
  - Very rarely
  - Not applicable

24. How strong is your sense of connectedness with others (faculty, students, staff) on this campus?
- Very strong
  - Somewhat strong
  - Neutral
  - Somewhat weak
  - Very weak
  - Not applicable
25. How good are you at correctly anticipating what will be on tests beforehand?
- Very good
  - Somewhat good
  - Neutral
  - Somewhat bad
  - Very bad
  - Not applicable
26. How frequently do you become jealous of the good fortune of others?
- Never
  - Rarely
  - Sometimes
  - Usually
  - Always
  - Not applicable
27. When you think of the people who mean the most to you (friends and family), how disappointed do you think they would be if you quit school?
- Very disappointed
  - Somewhat disappointed
  - Neutral
  - Not very disappointed
  - Not at all disappointed
  - Not applicable
28. How satisfied are you with the extent of your intellectual growth and interest in ideas since coming here?
- Very satisfied
  - Somewhat satisfied
  - Neutral
  - Somewhat dissatisfied
  - Very dissatisfied
  - Not applicable

29. When considering the financial costs of being in college, how often do you feel unable to do things that other students here can afford to do?
- Very often
  - Somewhat often
  - Sometimes
  - Rarely
  - Very rarely
  - Not applicable
30. When you think about your overall social life here (friends, college organizations, extracurricular activities, and so on), how satisfied are you with yours?
- Very satisfied
  - Somewhat satisfied
  - Neutral
  - Somewhat dissatisfied
  - Very dissatisfied
  - Not applicable
31. Students vary widely in their view of what constitutes a good course, including the notion that the best course is one that asks students to do very little. In your own view, how much work would be asked of students in a really good course?
- Very much
  - Much
  - Some
  - Little
  - Very little
  - Not applicable
32. There are so many things that can interfere with students making progress toward a degree; feelings of uncertainty about finishing are likely to occur along the way. At this moment in time, how certain are you that you will earn a college degree?
- Very certain
  - Somewhat certain
  - Neutral
  - Somewhat uncertain
  - Very uncertain
  - Not applicable

33. How often do you feel overwhelmed by the academic workload here?  
Very often  
Somewhat often  
Sometimes  
Rarely  
Very rarely  
Not applicable
34. How well does this institution communicate important information to students such as academic rules, degree requirements, individual course requirements, campus news and events, extracurricular activities, tuition costs, financial aid and scholarship opportunities?  
Very well  
Well  
Neutral  
Not well  
Not at all well  
Not applicable
35. When you do not get your own way, how often do you feel resentful?  
Always  
Usually  
Sometimes  
Rarely  
Never  
Not applicable
36. How much of a connection do you see between what you are learning here and your future career possibilities?  
Very much  
Much  
Some  
Little  
Very little  
Not applicable
37. How often do you miss class for reasons other than illness or participation in school-related activities?  
Very often  
Somewhat often  
Sometimes  
Rarely  
Very rarely  
Not applicable

38. How much have your interactions with other students had an impact on your intellectual growth and interest in ideas?
- Very much
  - Much
  - Some
  - Little
  - Very little
  - Not applicable
39. How often do you encounter course assignments that are actually enjoyable to do?
- Very often
  - Somewhat often
  - Sometimes
  - Rarely
  - Very rarely
  - Not applicable
40. When you consider the techniques you use to study, how effective do you think your study skills are?
- Very effective
  - Somewhat effective
  - Neutral
  - Somewhat ineffective
  - Very ineffective
  - Not applicable
41. After beginning college, students sometimes discover that a college degree is not quite as important to them as it once was. How strong is your intention to persist in your pursuit of the degree, here or elsewhere?
- Very strong
  - Somewhat strong
  - Neutral
  - Somewhat weak
  - Very weak
  - Not applicable
42. How frequently are you irritated when people ask you for a favor?
- Never
  - Rarely
  - Sometimes
  - Usually
  - Always
  - Not applicable



43. How concerned about your intellectual growth are the faculty here?
- Very concerned
  - Somewhat concerned
  - Neutral
  - Somewhat unconcerned
  - Very unconcerned
  - Not applicable
44. How much do you think you have in common with other students here?
- Very much
  - Much
  - Some
  - Little
  - Very little
  - Not applicable
45. This semester, how much time do you spend studying each week relative to the number of credit hours you are taking? Assume each credit hour equals one hour of studying per week.
- Many more hours studying than the credit hours
  - A few more hours studying than the credit hours
  - The same number of hours studying as the credit hours
  - A few less hours studying than the credit hours
  - A lot less hours studying than the credit hours
  - Not applicable
46. How much of a financial strain is it for you to purchase the essential resources you need for courses such as books and supplies?
- Very large strain
  - Somewhat of a strain
  - Neutral
  - A little strain
  - Hardly any strain at all
  - Not applicable
47. When you are waiting for a submitted assignment to be graded, how assured do you feel that the work you have done is acceptable?
- Very assured
  - Somewhat assured
  - Neutral
  - Somewhat unassured
  - Very unassured
  - Not applicable

48. How much input do you think you can have on the decision-making process here (on matters such as course offerings, rules and regulations, and registration procedures)?
- Very much
  - Much
  - Some
  - Little
  - Very little
  - Not applicable
49. All of us make mistakes in our interactions with other people. If you realize your mistake, how often do you apologize?
- Always
  - Usually
  - Sometimes
  - Rarely
  - Never
  - Not applicable
50. How much do other aspects of your life suffer because you are a college student?
- Very much
  - Much
  - Some
  - Little
  - Very little
  - Not applicable
51. How often do you wear clothing with this college's emblems?
- Very often
  - Somewhat often
  - Sometimes
  - Rarely
  - Very rarely
  - Not applicable
52. How often do you arrive late for classes, meetings, and other college events?
- Very often
  - Somewhat often
  - Sometimes
  - Rarely
  - Very rarely
  - Not applicable

53. How much time do you spend proofreading writing assignments before submitting them?
- A lot
  - Some
  - Little
  - Very little
  - None
  - Not applicable
54. How much doubt do you have about being able to make the grades you want?
- Very much doubt
  - Much doubt
  - Some doubt
  - Little doubt
  - Very little doubt
  - Not applicable
55. Often parents or other people whose opinions are important have unrealistic expectations about how students should perform in college. Thus far, how do you think that those important people would assess your performance?
- Far below the level they expected
  - Below the level they expected
  - About the level they expected
  - Better than they expected
  - Much better than they expected
  - Not applicable
56. How would you rate the academic advisement you receive here?
- Excellent
  - Good
  - Fair
  - Poor
  - Very poor
  - Not applicable
57. How would you rate the quality of the instruction you are receiving here?
- Excellent
  - Good
  - Fair
  - Poor
  - Very poor
  - Not applicable

58. When you consider the benefits of having a college degree and the costs of earning it, how much would you say that the benefits outweigh the costs, if at all?
- Benefits far outweigh the costs
  - Benefits somewhat outweigh the costs
  - Benefits and costs are equal
  - Costs somewhat outweigh the benefits
  - Costs far outweigh the benefits
  - Not applicable
59. How likely is it that you will reenroll here next semester?
- Very likely
  - Somewhat likely
  - Neutral
  - Somewhat unlikely
  - Very unlikely
  - Not applicable
60. How likely is it you will earn a degree from here?
- Very likely
  - Somewhat likely
  - Neutral
  - Somewhat unlikely
  - Very unlikely
  - Not applicable
61. How much does the cost of courses limit how many you take?
- Very much
  - Much
  - Some
  - Little
  - Very little
  - Not applicable
62. When you think about the advantages and disadvantages of attending this school, how much do you think the advantages outweigh the disadvantages, or vice versa?
- Disadvantages far outweigh the advantages
  - Disadvantages somewhat outweigh the advantages
  - Disadvantages and advantages are equal
  - Advantages somewhat outweigh the disadvantages
  - Advantages far outweigh the disadvantages
  - Not applicable

63. During the first class session, many instructors present students with an overview of the course. In general, how accurate have these previews been in forecasting what you actually experienced in these courses?
- Very accurate
  - Somewhat accurate
  - Neutral
  - Somewhat inaccurate
  - Very inaccurate
  - Not applicable
64. How much do the instructors and the courses make you feel like you can do the work successfully?
- Very much
  - Much
  - Some
  - Little
  - Very little
  - Not applicable
65. Based on your current financial situation, how inclined are you to work more hours per week than you want in order to pay bills?
- Very inclined
  - Somewhat inclined
  - A little inclined
  - Not very inclined
  - Not at all inclined
  - Not applicable
66. In general, when you receive evaluative feedback from instructors, how useful has it been in figuring out how to improve?
- Very useful
  - Somewhat useful
  - Neutral
  - Not very useful
  - Not at all useful
  - Not applicable
67. On a typical day, how preoccupied are you with personal troubles?
- Very preoccupied
  - Somewhat preoccupied
  - A little preoccupied
  - Not very preoccupied
  - Not at all preoccupied
  - Not applicable

68. How much do the faculty at this school care about you?  
Very little  
Little  
Some  
Much  
Very much  
Not applicable
69. How much do you think class attendance should count in grading?  
Very much  
Much  
Some  
Very little  
Not at all  
Not applicable
70. Compared to what you anticipated just before entering college, how much work has been involved in the courses?  
Much less than expected  
Less than expected  
About the same as expected  
More than expected  
Much more than expected  
Not applicable
71. How fair are the tests at this school?  
Very unfair  
Somewhat unfair  
Neutral  
Somewhat fair  
Very fair  
Not applicable
72. The life of a college student typically has both positive and negative aspects. At this time, would you say that the positives outweigh the negatives, or vice versa?  
Positives far outweigh the negatives  
Positives somewhat outweigh the negatives  
Positives and negatives are equal  
Negatives somewhat outweigh the positives  
Negatives far outweigh the positives  
Not applicable

73. How clear have the instructors and syllabi usually been in detailing what you need to do in order to be successful in courses?
- Very unclear
  - Somewhat unclear
  - Neutral
  - Somewhat clear
  - Very clear
  - Not applicable
74. On a typical day, how much do you worry about getting your work done on time?
- Very much
  - Much
  - Some
  - A little
  - Very little
  - Not applicable
75. Relative to what you expected when beginning college, how interesting have you found class sessions to be?
- Much less interesting
  - Less interesting
  - About as interesting as expected
  - More interesting
  - Much more interesting
  - Not applicable
76. How much loyalty do you feel to this college, based on your experiences here?
- Very much loyalty
  - Much loyalty
  - Some loyalty
  - Little loyalty
  - Very little loyalty
  - Not applicable
77. How often do you encounter course work that makes you wonder whether you can do it successfully?
- Very often
  - Somewhat often
  - Sometimes
  - Rarely
  - Very rarely
  - Not applicable

78. If you are supposed to complete a reading assignment before the next class session, how likely are you to actually do it?
- Very likely
  - Somewhat likely
  - Neutral
  - Somewhat unlikely
  - Very unlikely
  - Not applicable
79. How good is your school performance relative to the expectations of your parents or others who are important to you?
- Far below their expectations
  - Below their expectations
  - About what they expected
  - Better than they expected
  - Much better than they expected
  - Not applicable
80. If the costs of attending college rise in upcoming semesters, how much strain would that place on your personal budget?
- A very large strain
  - Somewhat of a strain
  - Neutral
  - A little strain
  - Hardly any strain at all
  - Not applicable
81. How organized are you in terms of keeping track of upcoming assignments and tests?
- Very organized
  - Somewhat organized
  - Neutral
  - Somewhat disorganized
  - Very disorganized
  - Not applicable



## Appendix D: Consent Form

**Informed Consent for Participants in Research Projects Involving Human Subjects**

Title of Project: The relationship of scores on the *College Persistence Questionnaire* to retention

Investigator(s): Hall P. Beck, Jake Lindheimer

***I. Purpose of this Research/Project***

The purpose is to examine the correlation between attitudes about academia and college retention rates.

***II. Procedures***

This investigative session involves completing a questionnaire about the college experience and my feelings about the academic environment. It will take no longer than forty-five (45) minutes of my time. I understand that I will respond to two forms. **The first, the Student Information Sheet, asks my name, age, sex, and some questions about my educational background. If I choose not to answer any items on the Student Information Sheet I will still receive credit for participating in this study. An item on the Student Information Sheet asks for my student identification number. My student identification number will allow investigators to obtain information from my student record to be used for research purposes. I recognize that I do not need to grant permission to use information from my student records to gain participation credit.** The second form is called the *College Persistence Questionnaire*. It inquires as to my opinion regarding a number of issues concerning university life.

***III. Risks***

It is extremely unlikely that I will incur psychological, legal, or social harm from my participation in this study. If I feel uncomfortable then I may withdraw at any time without penalty. In addition, I may consult the professors conducting this experiment.

***IV. Benefits***

My participation in this study will benefit me in that it is one means of satisfying a research requirement in Introductory Psychology courses, could result in credit for an upper level psychology course, and is a way for me to see psychology at work. Not only will I study scientific research in the classroom, I will be able to actively learn about it in the laboratory. Society will benefit in that the results of this study may help psychologists understand why people leave college and thus give insight on how to intervene before it is too late.

***V. Extent of Anonymity and Confidentiality***

My answers will be saved on a data file. My name will be recorded in a separate place from the file. My name will be saved in case I need to verify my involvement in the study at a later date. This consent form is stored in a separate place from my data.

***VI. Compensation***

I will receive 45 minutes of research credit (if applicable).

***VII. Freedom to Withdraw***

I am free to leave/withdraw from the investigation at any time without penalty.

***VIII. Approval of Research***

This research project has been approved, as required, by the Institutional Review Board of Appalachian State University

01-28-2011	(Reference #) 09-0146	01-27-2012
<hr/>		
IRB Approval Date		Approval Expiration Date

***IX. Participant's Responsibilities***

I voluntarily agree to participate in this study and complete the questionnaire given to me and provide the researcher with my student identification number. By signing this form, I confirm that I am at least 18 years of age.

***X. Participant's Permission***

I have read and understand the Informed Consent and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent.

\_\_\_\_\_ Date \_\_\_\_\_  
Participant's Signature

Should I have any questions about this research or its conduct, I may contact:

<b>Hall P. Beck, Ph.D.</b>	<b>(828) 262-2725 Beckhp@appstate.edu</b>
<hr/>	
Investigator	Telephone/E-mail

<b>Timothy D. Ludwig, Ph.D.</b>	<b>(828) 262-2712 Ludwigtd@appstate.edu</b>
<hr/>	
Administrator, IRB	Telephone/E-mail
Graduate Studies and Research	
Appalachian State University	
Boone, NC 28608	

### Vita

Jacob Benjamin Lindheimer III was born in Greensboro, North Carolina. He received his Bachelor of Science degree in Psychology at Appalachian State University in May 2009. In the fall of 2009, he accepted a research assistantship in Psychology at Appalachian State University and began study toward a Master of Arts degree. The Master of Arts degree was awarded in August 2011. Mr. Lindheimer currently resides in Athens, Georgia where he is pursuing his Ph.D. in Exercise Psychology at the University of Georgia.