The influence of familial responsibility, extra-curricular activity participation, and employment status on the undergraduate academic performance of traditional and non-traditional aged students

Constance Wilson
THE INFLUENCE OF FAMILIAL RESPONSIBILITY, EXTRA-CURRICULAR ACTIVITY PARTICIPATION, AND EMPLOYMENT STATUS ON THE UNDERGRADUATE ACADEMIC PERFORMANCE OF TRADITIONAL AND NON-TRADITIONAL AGED STUDENTS

by
Constance Lisa Wilson

A Thesis
Submitted to the
Department of Psychology
College of Science and Mathematics
In partial fulfillment of the requirement
For the degree of
Masters of Arts in School Psychology
at
Rowan University
April 30, 2013

Thesis Chair: Roberta Dihoff, Ph.D.
Acknowledgements

The author wishes to express her appreciation to the members of her graduate committee, Roberta Dihoff, PhD and Terri Allen, PhD for their guidance.
Abstract

Constance Lisa Wilson
EXAMINATION OF THE RELATIONSHIP BETWEEN THE EFFECTS OF EXTERNAL CONDITIONS ON ACADEMIC PERFORMANCE ACROSS TRADITIONAL AND NON-TRADITIONAL AGED STUDENTS
2012/13
Roberta Dihoff, Ph.D.
Master of Arts in School Psychology

The present research investigated the influence of family responsibility, financial responsibility, and co-curricular activities on academic performance among traditional aged and non-traditional aged undergraduate students. It explored the association between non-academic variables and age on academic performance to determine whether there is a significant impact on academic success with students. A review of the existing literature presents factors previously implicated in affecting student performance and overall satisfaction. Data was collected from current and/or previous undergraduate students’ (n=86) completion of a 16-item questionnaire, a survey developed by the principal researcher, assessing experiences and perceptions regarding collegiate satisfaction and role demands during the Junior year of the Undergraduate career. Nonetheless, correlational analyses revealed that factors related to a student’s level of satisfaction were correlated with the amount of dependents they reported being responsible for/role demand (p=.056). Analyses of these results are discussed in response to limitations in the research design. Implications for promoting student involvement in extracurricular programming and mature aged study are discussed. Future research should explore other factors that may impact academic performance with respect to the amount of time the student attributes to participation in out-of class activities.
Table of Contents

Abstract iv
List of Figures vii
List of Tables viii
Chapter 1: 1
  1.1 Statement of the Problem 1
  1.2 Definitions of Key Terms 3
Chapter 2: Literature Review 4
  2.1 Employment 5
  2.2 Age 7
  2.3 Family Responsibility 8
  2.4 Impact of Parenthood 10
  2.5 Co-Curricular Activities 11
  2.6 Conclusion 13
Chapter 3: Methodology 14
  3.1 Participants 14
  3.2 Design 14
  3.3 Materials 15
  3.4 Procedure 16
Chapter 4: Results 17
Chapter 5: Discussion 22
  5.1 Limitations 23
  5.2 Recommendations for Further Research 24
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1 Comparison of strength of correlations among academic performance across various age groups</td>
<td>18</td>
</tr>
<tr>
<td>Figure 2 A comparison between Participation in extra-curricular activities with academic performance</td>
<td>19</td>
</tr>
</tbody>
</table>
List of Tables

Table                                           Page

Table 1 Descriptive Statistics: Sample Population   17
Table 2 Summary of Inter-Correlations for all Variables   20
Chapter 1
Introduction

Statement of the Problem

Over the past three decades, college campuses have evolved. They are more diverse, ethnically and with respect to age and gender. As the median age of students’ enrolled in higher education increases, the question arises as to what factors influence the overall college experience and the student’s performance. More than 45% of all college students can be termed “non-traditional” because they are over 25 years of age (Hirschorn, 1988). The question arises as to whether attending college directly after completion of high school yields optimal results. Does the traditional aged student perform better academically than the non-traditional aged student and do non-classroom activities affect the student’s performance and overall satisfaction? It is my presumption that older students will achieve higher performance rates than those of their younger counterparts. A factor that merits more investigation is how a student’s involvement with activities outside the classroom may impact his/her collegiate satisfaction across both age groups. This relationship is extrapolated from the existing literature that investigates how employment, role-demand, self-efficacy, financial responsibility, and motivation are associated with success in academia. I presume that a student’s involvement in co-curricular activities will have a positive impact on their academic performance as it will influence the connectedness with the student body and appreciation for the school. This, in turn, will positively impact the student’s degree of satisfaction. I hypothesize that increased involvement in the workforce will have a negative correlation with academic success and fulfillment.

Role demand presents a myriad of factors that may positively and/or negatively influence the amount of time available for study. Therefore, it is important that a student with increased
familial responsibility also develop advanced time management skill. I propose that the number of dependents in which a student is responsible will negatively impact their academic performance.

The findings of this exploratory research may have consequences for the level of attention that is paid to various out-of-class stressors that impact academic performance. This investigation may not only reiterate the benefits of mature age study, involvement in extracurricular activities, and minimal role demand constraints for students but may propose idealistic outcomes.

Equally important to note is that this study design operates under certain assumptions. First, it is assumed that the participants who complete this survey answer as honestly and accurately as possible. It is presumed that there is no incentive for answering questions inaccurately. Outside of these assumptions, there are additional limitations to this research study. Challenges were encountered with maintaining accuracy of the information requested due to recall and misinterpretations within the questionnaire. Challenges were also presented with obtaining a heterogeneous sampling of both non-traditional and traditional aged students.

In summary, this study will investigate the potential relationship between students’ overall satisfaction and their involvement/commitment to extracurricular activities. This study will also explore the factors that may influence satisfaction specific to the role demand and age. These elements vary from levels of out-of-class responsibility, weekly hours of commitment, to more intangible factors like the students’ accessibility to social activities, satisfaction levels of engagement with faculty and peers, and overall fulfillment with the college experience.
Definitions of Key Terms

**Dependents**: A person who depends on another person, organization, etc., for support, aid, or sustenance, especially financial support (Collins English Dictionary Complete and unabridged 2003).

**Extracurricular activities (ECA)**: Not falling within the scope of a regular curriculum; of or relating to officially or semiofficially approved and usually organized student activities (as athletics) connected with school and usually carrying no academic credit (Merriam Webster, 2012).

**Academic Performance**: Measured by grade point average or GPA (Baker 2008).

**Traditional Age Students**: Students age 23 and under

**Nontraditional Age Students**: Students age 25 and over.
Chapter 2

Literature Review

Although access to higher education has increased substantially over the past forty years, student success in college—as measured by persistence, academic performance measured by GPA, and degree attainment—has not had significant improvement over the years, the investigations of the factors that influence academic performance of undergraduate students have attracted the interest and concern of teachers, counselors, psychologists, researchers and school administrators.

Different factors are capable of influencing the academic performance of university students. Hatcher and Prus (1991) named these factors academic situational constraints. These factors include student’s relationships (significant other), employment activities and extra-curricular activities which disturb schedule and time (Barrow et al., 2009; Betts & Morell, 1999; Cohn et al., 2004; Smith & Naylor, 2001).

Over the past few decades, numerous researchers have examined the relationship between employment during school and academic performance using both quantitative and qualitative research methods over the past two decades (Salamonson & Andrew 2006; Watts 2002; King & Bannon 2002; McInnis & Hartley 2002; Curtis & Williams 2002). Although the average layperson may assume that a full time working student will show a lower academic performance relative to a student employed on a part time basis or unemployed, the empirical evidence doesn’t seem to support this assumption. Rather, other variables appear to have a much greater impact on academic performance such as self efficacy, motivation, self-regulation, and time management skill (Chartrand, 1990; Gerson, 1985; Jacobi, 1987; Kirk & Dorfman, 1983; Novak & Thatcher, 1991). The current study aims to investigate the influence of family responsibility,
financial responsibility, and non-curricular activities on academic performance among traditional aged and non-traditional aged undergraduate students. The association between non-academic variables and age on academic performance is explored in order to determine whether there is a significant impact on academic success with students. Is there any significant correlation? Or is motivation (self-efficacy, goal orientation) and self regulated learning more significant factors? While there has been extensive research on the effects of stressors (Gall, Evans, and Bellerose 2000; Mallinckrodt 1988), social factors (Linville, 1987), and meta-cognition (Robbins 2004), self-efficacy (Zajacova, Lynch, and Espenshade 2005, Bandura 1986), gender, socio-economic status, ethnicity, and personality on performance, little has been examined across age groups. Further, the literature on higher education contains many studies investigating the relationship between out of class student experiences and academic performance (Schrager, 1986, Hawkins, 2010). However, most of the studies fail to review the wide variety of constraints with respect to the student’s age. Students can better determine the most ideal time to pursue post secondary education. Several factors appear to impact the success of college students including academic support services, a positive campus climate, financial and family support, and positive self perceptions (Farley 2002; Freeman et al. 2007; Lau 2003). Students who perceived control of their time reported significantly greater evaluations of their performance, greater work and life satisfaction, less role ambiguity, less role overload, and fewer job-induced and somatic tensions.

**Employment**

Contrary to popular belief, research suggests that the amount of time spent studying or at work has no direct influence on academic performance (Calderon et al, 2001). Although working more hours per week can be one critical factor for a student to jeopardize their academic success, available research does not seem to support this hypothesis. Although Strauss and
Vokwein (2002) reported that working more hours per week positively related to a student’s GPA, Light (2001), found no significant relationship between paid work and grades. According to Light, “students who work a lot, a little, or not at all share a similar pattern of grades” (p.29). While age and ethnicity are known to be significant predictors of academic achievement among nursing students, it is important to determine if there were other predictors of achievement in more recent times (Salamonson & Andrew 2006). Decisions to combine work and study in higher education have rapidly increased over recent years. This has raised the question as to whether the students' studies will be adversely affected by their part-time employment. Survey results of 359 students at Manchester Metropolitan University (2002) revealed that more students are working compared to survey results from one year earlier. “Students reported adverse effects on study in the form of missed lectures and lower coursework grades that they attributed to working (Curtis & Shani 2002).”

Nevertheless, students recognize that working constructs a multitude of benefits that promote job readiness and enhance academic performance. These advantages are not limited to monetary outcomes but include skill development, improved business acumen, and increased confidence (Curtis & Shani 2002).

Additionally, undergraduate students are engaging in paid employment, spending less time on campus, and yet at the same time expect to get higher grades, but with less effort compared to their counterparts in the past decade (Kuh, 1999). It is important to determine if the results will be consistent with the reports of others who found that undergraduate students (McInnis 2001, McKenzie & Schweitzer 2001) and high school students (Schoenhals et al. 1998, Singh 2001) who participate in paid employment have lower academic performance than those who do not work during the academic semester. Less time for studying is the obvious
explanation for this lower academic performance, as regular part-time employment has a ‘crowding-out’ effect on study time (Astin 1997, Oettinger 1999). Paid employment may also result in spending less time in the role as a student, resulting in a negative university experience (King & Bannon 2002), and may lead to academic disengagement and a consequent increase in the likelihood of leaving the program (Astin 1997, McInnis 2001, Astin et al. 2002). Working students who were able to maintain a high GPA had stronger time management skills and effort regulation compared to working students yielding lower grades.

Age

As the average age of the U.S. population continues to rise, so does the average age of the students’ enrollment in higher education. According to the U.S. Census Bureau, the proportion of 18-24 year old high school graduates has dropped to 36.7% of all college students (The Chronicle: 1999-2000 Almanac). Moreover, college classrooms have changed and the students are older and more diverse. About 57% of all students enrolled in American colleges and universities can be termed non-traditional, 25 or older. Many of these students tend to be married, work full time and have household costs or childcare responsibilities (American Council of Higher Education, 1993; Moore & Diamond, 1995; Rice, Roger and Dalton, 1996; Yang, 1997). Mature-age students entering higher education have consistently been found to achieve better grades than younger students who are entering higher education directly from high school (Houltram 1996, Hoskins et al. 1997, Kevern et al. 1999, Ofori 2000). However, Ali and Naylor (2010) did not find an association between age and academic performance of the nursing students. This finding contradicts previous research that has found a positive relationship between age and academic performance of students (McCary et al. 2007, Hall 2003, Ofori and Charlton, 2002, Ofori, 2000; Kevern et al. 1999 and Houltram 1996). Grimes found that older
students had stronger and more goal oriented strategies than younger students. The presence of a large number of non-traditional students has become a fact of life for tertiary institutions worldwide and institutions have benefited from these enrollments at a time when the pool of traditional age students is static or declining because of demographic changes.

**Family Responsibilities**

Several studies reveal that students have to overcome many obstacles in pursuit of optimal academic achievement (Kirk & Dorfman 1983; Hammer, L. B., Grigsby, T. L, & Woods, S. (1998; Calderon, Hey, & Seabert, 2001). There are different factors which hinder student’s performance during their course of study like financial, social, and proper time management issues. The added responsibility of dependents, i.e., children and/or caregiver for elderly and domestic responsibilities that married students face may cause a barrier to success (Gerson, 1985; Jacobi, 1987; Novak & Thatcher, 1991). These, along with a myriad of other factors, may be responsible for hindering the achievement of optimal level of academic performance. Although there are many models that examine work/family conflict, research specifically exploring work/family conflict in academic careers is sparse. Married students may experience a greater degree of stress during their academic career. These married students are faced with the challenge of integrating their role as student with that of spouse and often parent (Yarbrough & Schaffer, 1990). However, the assumed connection between domestic obligations and lower levels of occupational involvement and accomplishment has not been firmly supported by empirical evidence, which is mostly mixed. Kirk and Dorfman (1983) found that significant correlates of strain in the student role included: dissatisfaction with job, rated helpfulness of financial aid, and number of years since previous school enrollment; age of youngest child was correlated negatively with strain in the student role. Research indicates that work involvement is
more influenced by the degree to which a job is challenging, autonomous, and intrinsically rewarding than by the role incumbent's sex or family status (Lorence, 1987; Toren, 1988). Academic stress can offer motivation to some students and often viewed as an expected challenge during the college experience. Nonetheless, may be a hindrance to others that find it less constructive. Ma and Wooster’s (1979) study revealed that married students generally achieve higher grades than unmarried students; but indicated that married students with children did not achieve higher GPA’s than those without the added responsibility. Therefore, marital status on its own, may not pose a significant barrier to achievement but the parenting role may. It is important to review the relationship between age and these factors as Hepker and Cloyd’s study suggest that older married students have more integrated roles and perform somewhat better (1974). However, closer examination of the data shows that role integration and academic performance were negatively related. According to the National Institute of Mental Health 2002, recent research suggests that psycho-social adjustment mechanism is influenced by various cross-cultural variables, such as the amount of contact with the university, length of residence, finance, and accommodation. It also suggested that the adjustment mechanism of married female students varies, and a range of economic and psycho-social factors that affects adjustment (Health, 2002).

In addition, the stress of academic activities for married women with children has also been examined and found to be substantial in terms of role conflict and role ambiguity (Anderson and Miezitis, 1999; Gigliotti, 2001), and time management and availability (Nelson, Dell’Oliver, Koch and Buckler, 2001). On the contrary, Novak and Thacker’s investigation (1991) found that the presence of children does not reduce research productivity, and that respondents accept their family obligations as matter of fact. Balancing parenthood and a
successful career in academia holds unique challenges, especially for women who often report
greater demands in terms of child care and family obligations (e.g. Dressel & Clark, 1990;
Piotrkowski, Rapoport, & Rapoport, 1987). Furthermore, having primary responsibility for child
care and household chores does not reduce women's work efforts outside the home; they just
work harder, i.e., expend more energy (Novak & Thacker, 1991). In terms of marital status
several studies report better performance for married undergraduates compared to their
unmarried classmates. For example Smith & Naylor (2001) explored the data for all students
graduating from all UK universities in 1993. Their findings determined that married students
(men and women) performed better than unmarried students.

**Impact of Parenthood**

The main obstacles to women's scientific production could of course be associated with
childbearing and caring. However, most recent studies examine the relations between marriage,
children, and women scientists' role performance do not find that these factors have a negative
effect on their scientific performance, particularly in terms of research productivity. Rather than
hampering women's scientific performance, marriage and family appear to be associated with
equal or somewhat higher research productivity (Fox & Faver, 1983; Hamovich & Morgenstern,
obligations negatively influenced the productivity rates only of women academics with three or
more children. The early study of Simon et al. (1967) found that married women with or without
children publish more or as much as single women. Nevertheless, they do not address the issue
that married women, in the same token, demonstrated lower performance rates regarding
employment, tenure, rank, and income.
The obvious explanation of mothers' decision to suspend study is the heavy demands associated with women's greater responsibility for domestic and child rearing work. The expectation still exists that these tasks are women's work and that other activities, including study, should take second place. However, the demands on mature women's time and energy go beyond maternal duties. A large percentage of mothers are also employed in the paid workforce and so demands of a job as well as family duties may be relevant. Women are often responsible for caring for other family members beyond the nuclear family, such as elderly parents, and these extended responsibilities may also contribute. A complex of reasons for discontinuing study were associated with these social class indicators, notably lack of support from family for the mother's study, lack of money, weight of domestic responsibility and lack of knowledge or skills expected at the university. Lower level employment is associated with poorer wages so financial difficulties are more likely for those in these circumstances. As well, lower social class is linked to more conservative beliefs about sex roles (Richards, 1987) which offer an explanation for lack of family support for the mother's study.

Co-Curricular Activities

Many universities allocate a large percentage of resources in support of extra-curricular activities in an effort to foster student engagement. Therefore, the extent to which participation in extra-curricular activities has on educational outcomes is worthy of review. While substantial research has been conducted to determine the effects of extra-curricular activities on performance in adolescents in high schools, little has been done on that of post-secondary education. Several studies (Astin, 1985; Tinto, 1993; Pascarella & Terenzini, 2005) suggest that student engagement, including extra-curricular activities, has a positive impact on student academic performance, learning, and persistence. Wang and Shiveley’s (2009) study support...
this belief as it suggests that students that engaged in these activities achieved much higher retention and graduation rates, maintained better GPA, and had higher good standing rates than their peers who were not. Kuh and Love (2004) found that students who made cultural connections through social groups that reflect their culture of origin were more likely to persist in higher education. National Survey of Student Engagement (NSSE) reports have been widely used to study the relationship between student engagement and academic performance (NSSE 2007 & 2008).

Much research has been conducted reviewing the correlation of many stress factors that college students’ experience and the effects of stress on their GPA. A name given to such stress factors by Hatcher and Prus (1991) referred to these stress factors as academic situational constraints. Their study took accounted for a variety of factors that can diminish a student’s academic performance. One extraneous variable that was taken into account was that at most universities students involved in activities such as fraternities or sororities, and also athletics, must maintain an acceptable GPA to participate. This factor by itself could attribute to these students GPAs being higher than the average college student. Guest and Schneider (2003) investigated how participation in such activities is beneficial to students. Stuart, Lido, Morgan, Soloman, and May’s investigation suggest that variations between ‘traditional’ and ‘widening participation’ student groups emerged, with older and ethnic minority students spending more time with non-university extra-curricular activities, engaged in family, religious and solitary activities. Lower socio-economic status students spent more time working, and less time engaging in Extra-curricular activity. Alumni reflected extra-curricular activities as key to developing self-identity, social networks and career prospects/pathways (2011). Employers
stressed the value of Extra-curricular activity for ‘distinguishing’ candidates, providing evidence of cultural fit, leadership, commitment, and ‘selling’ original activities.

Conclusion

College students have many obstacles to overcome in order to achieve their optimal academic performance. It takes a lot more than just studying to achieve a successful college career. Different stressors such as time management, financial hardships, sleep deprivation, social activities, and for some students even having children, can all pose their own threat to a student’s academic performance. Other factors such as involvement in a fraternal organization, or having problems with significant others have shown to also have a negative effect on academic performance (Hatcher & Prus, 1991). A college student may find him or herself in a juggling act, trying to support a family, taking care of job responsibilities, and at the same time trying to make the most of the college career. All of these factors can affect the grades of students, which ultimately affect the rest of their lives.

The evidence suggests that one sub-group of these, mature-age female students with children, is both likely to achieve well academically and to face strong pressures to discontinue study which arise out of their life circumstances. Given that these students have been encouraged to join the tertiary education enterprise, placing greater responsibility on institutions to develop ways to reduce systematic obstacles to academic success is essential.
Chapter 3

Methodology

This study examined the relationship between non-curricular responsibility and academic performance in higher education, defined here in terms of grade point average (GPA). The responses to a detailed student survey were collected from 86 current and/or previous undergraduate students across various Universities and Colleges in the United States.

Participants

The majority of the participants were comprised of the Rowan University student sample pool and the remaining subjects responded to notices posted on Facebook and distribution to colleagues and friends. The data consisted of students’ GPA, average course load per semester, and presence of role demand information. The sample included 27 male and 59 females. Data were based only on third year juniors to control for the effect of previous college experience on the dependent measure of academic performance. Approximately half (47%) of the respondents were involved in some co-curricular activity during this period with the remaining (53%) having no involvement. The sample consisted primarily of traditional aged students between the ages of 17-21 years. Respondents who reported having dependents comprised only 10% of the sample (n=9). This group was much older than the respondents without dependents.

Design

The design used for this study was correlational. The population for the study consisted of current and past students ranging from age 18 and beyond who have attended colleges and universities within the United States. All variables were coded. For example, Males (1) and Females (2) were coded for scoring purposes. The cross product of each dummy variable and continuous variable was entered into the model (to the level of two-way interactions).
Respondents who reported having dependents comprised only 10% of the sample (n=9). This group was much older than the respondents without dependents. Responses to questions 11-16 were coded from 1-4 (1-High/Extremely Satisfied to 4-Less Likely or Dissatisfied) and the scores were added together for an overall satisfaction score ranging from the lowest score (6) to the highest possible score (24). Tables 1 and 2 present the inter-correlations and means for all variables.

Materials

The research instrument used in this study was a 16-item questionnaire titled “Students’ Financial Status and Academic Performance Inventory. The instrument is made up of two sections; part one and part two. Part one is concerned with collecting basic demographic information on non-curricular responsibility and age. Part two is comprised of items constructed on a 4-point Likert-type scale format of agree (A) strongly agree (SA), disagree (D) and strongly disagree (SD) to assess academic satisfaction. The items in the current instrument measured the financial status which is reflected in the amount of money available to undergraduates for legitimate and unexpected expenses. Many of the questions were designed to ascertain the impact of responsibility and living arrangements on the overall satisfaction of the student’s college experience. Junior year was chosen as a period of interest to establish a diverse sample pool. For example, most institutions place restrictions on off campus housing to students that have not completed their Sophomore year. It was important to limit the questions to the Junior year because this year serves as a pivotal point in most student’s collegiate career as they begin coursework specific to their chosen major. It was equally important to include a question addressing the time that has elapsed since this period to increase the degree of accuracy in
reported data by participants. Moreover, the third year is a pivotal time for most students as it marks the midpoint of the traditional college experience.

**Procedure**

One hundred copies of the questionnaire were distributed. Of that distribution, 90 were returned. Four were discarded due to missing data to specific questions and 86 were used for data analysis. A written informed consent accompanied each questionnaire. Correlation matrix was used to answer the research question. Hypothesis 1, which tested the relationship of all the independent variables (age, involvement in co-curricular activity, role demands) and academic performance, was analyzed. (See Appendix A).
Chapter 4

Results

13% of the total respondents (11 of 86) were non-traditional (age 25 or older). The results reveal that the mean age of participants (n=86) was 1.56 (approx. 22.5 years). The questionnaire was coded using scores of 1-4 for each age group (17-21; 22-25; 26-30 and 30 years and beyond, consecutively). (See Table 1).

Table 1

Descriptive Statistics: Sample Population

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.5698</td>
<td>.87502</td>
<td>86</td>
</tr>
<tr>
<td>Dependents</td>
<td>1.1744</td>
<td>.53560</td>
<td>86</td>
</tr>
<tr>
<td>GPA</td>
<td>3.1977</td>
<td>.86527</td>
<td>86</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>17.7209</td>
<td>3.06268</td>
<td>86</td>
</tr>
<tr>
<td>Work</td>
<td>2.8140</td>
<td>.92687</td>
<td>86</td>
</tr>
</tbody>
</table>

Note. GPA Scores range from 1.00 to 4.00; higher scores indicate participants’ with lower GPA’s. Coding is as follows: Score 1 (4.0-3.5); Score 2 (3.4-3.0) Score 3 (2.9-2.5); Score 4 (2.4 or lower).

Figure 1 further demonstrates the gradual progression of factor scores (GPA) across age groups investigated in this research study.
Figure 1. Comparison of strength of correlations among Academic Performance measured as GPA with the Age of the Participant.

The data revealed that there is a negative correlation between Extra-curricular Activity (ECA) and GPA. Increased involvement in ECA yielded lower GPA scores.
Figure 2. Comparison of strength of correlations among Academic Performance measured as GPA with the Involvement in Out of Class Activity.

Only 1 of 47 (2%) respondents involved in out of class activity were non-traditional students. In contrast, 46 of 47 (98%) involved in ECA were traditional students.
Table 2

Summary of Inter-Correlations for all Variables (n=86)

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Dependents</th>
<th>GPA</th>
<th>Satisfaction</th>
<th>Work</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong> Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.463**</td>
<td>.000</td>
<td>.078</td>
<td>.022</td>
<td>.030</td>
</tr>
<tr>
<td>N</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td><strong>Dependents</strong> Pearson Correlation</td>
<td>.463**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.159</td>
<td>.056</td>
<td>.632</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td><strong>GPA</strong> Pearson Correlation</td>
<td>.191</td>
<td>.153</td>
<td>1</td>
<td>-.121</td>
<td>.222*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.078</td>
<td>.159</td>
<td>.267</td>
<td>.040</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td><strong>Satisfaction</strong> Pearson Correlation</td>
<td>-.247*</td>
<td>-.207</td>
<td>-.121</td>
<td>1</td>
<td>-.097</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.022</td>
<td>.056</td>
<td>.267</td>
<td>.373</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td><strong>Work</strong> Pearson Correlation</td>
<td>.234*</td>
<td>-.052</td>
<td>.222*</td>
<td>-.097</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.030</td>
<td>.632</td>
<td>.040</td>
<td>.373</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td><strong>ECA</strong> Pearson Correlation</td>
<td>-.334**</td>
<td>-.153</td>
<td>-.122</td>
<td>.275*</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.002</td>
<td>.160</td>
<td>.264</td>
<td>.010</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Respondents who reported having dependents comprised only 13% of the sample (n=11). This group was much older than the respondents without dependents. Forty-five percent (5 of 11) of the non-traditional respondents reported having the responsibility of dependents. While only 8% of the traditional respondents had dependents. The correlation between employment, presence of dependents, GPA, and satisfaction reveal significance. A correlational analysis between employment and GPA yielded significant results (p=.040). The results further indicate a significant correlation between the level of satisfaction and the age of the participant (p=.022). Based on the table of analyses on Figure 1, non-traditional aged student’s earned higher GPA scores than traditional aged students. They were also more likely to be full time students, live off campus and reported a lower degree of satisfaction with their overall college experience. The data reveals a positive correlation between the two variables that support the notion that maturity and time management skill improve over time. Bivariate correlational analyses were slightly significant in this area (p=.078).

The most significance was found with age and the amount of dependents the subject was responsible for (p=.000). Nonetheless, the data revealed significance with respect to age and involvement in out of class activity (ECA), as well (p=.002). The data revealed older students reported significantly lower engagement and satisfaction with their undergraduate experience. Ten of the 11 non-traditional students lived off campus (91%). Three of the 11 non-traditional students surveyed reported being Single. Thirty-seven of the total (75) traditional students reported being single. Conversely, thirty-eight of 75 traditional were in a relationship/married. One of the eleven non-traditional participants were part time students taking 3-9 credits during this year. Twenty seven percent (3 of 11) took 13-15 credits. The remaining 7 (64%) took 10-12 semester hours. Moreover, none of the non-traditional respondents reported taking 16-18 credits.
Chapter 5

Discussion

Both predictions concerning academic performance were upheld. Based upon the findings of this study, it is quite apparent that extracurricular activities have an impact on students’ success. Students achieved poorer GPA’s and higher degrees of satisfaction when they engaged in any out of class activities including; intercollegiate/intramural sports, sororities/fraternities, student government and involvement in campus organizations. Increased involvement in ECA yielded lower GPA scores. This may be attributed to the fact that majority (91%) of the students that participated in ECA were traditional aged students who have not mastered the skill of time management.

In contrast, the non-traditional aged students showed lower rates of satisfaction and lower rates of out of class activities. In spite of this, the mature-aged students earned higher GPA’s. Degree of satisfaction was run across variables and no significant correlation was found, with the exception of age. However, age had a positive correlation with academic performance.

Evidence for the benefits of mature age study is substantial. Studies have shown that mature age students make exceptional students who are very motivated and who perform well academically (Scott, Burns & Cooney 1996). The results of the current study substantiated the hypothesis that the mature aged students have higher academic outcomes in spite of external responsibility due to a greater appreciation for education, developed time management skill, and maturity. Many of the non-traditional aged students made an independent, conscious decision to return to school. On the contrary, most traditionally aged students attend college out of expectation from family. Most of these students are still teenagers or transitioning from adolescence at this stage and struggle with identity and socialization issues. Therefore, they
place less value and commitment to successful completion of their collegiate career as they try to find themselves. Another factor that may impact the performance of younger students is that these students tend to have their education funded by others whereas the older student’s assume the financial responsibility. Accepting the financial responsibility for an education places a greater degree of importance on the success and performance.

**Limitations**

The questionnaire used in the study should be revised to improve accuracy. In spite of the instruction at the header, many participants did not realize that each question was based on the Junior year. Each question should explicitly indicate “during Junior year” as a reminder. Placing the notation at the header of the survey does not control for error due to recall. Furthermore, some participants that did not follow a traditional progression through their undergraduate career had difficulty answering the questions since they were all based on Junior year but had no “true” Junior year. To control for this ambiguity future questionnaires may define the time period based on accumulated credits. The current investigation utilized self-reported data. However, the use of academic records and records of involvement obtained from student organizations activities offices would offer more accurate data.

Analysis of questionnaire data revealed inconclusive results on the relationship between student involvement in co-curricular activities and academic performance. To ensure confidentiality and anonymity names were not included on the surveys. The results of the current study substantiated the hypothesis that the mature aged students have higher academic outcomes in spite of external responsibility due to a greater appreciation for education, developed time management skill, and maturity. Accepting the financial responsibility for an
education can have a positive outcome on academic performance. It may also prove worthy to investigate whether a correlation exists between the amount of time spent participating in co-curricular activity and academic performance across age groups. Information regarding the number of organizations in which a student is involved may determine the level at which membership in multiple student organizations becomes detrimental to academic achievement (Hawkins, 2010). It is important to note that the optimal amount of involvement can be largely dependent on the individual and his or her level of participation.

**Recommendations for Future Research**

Future research should consider collecting data from varied institutions including types of education online, distance learning, and community college to offer a diverse sampling. Including students from Community colleges would be advantageous as these institutions tend to serve a greater population of non-traditional students with varied levels of familial and financial responsibility. Nonetheless, an adjustment to the period of interest would be required to account for the two year maximum at this type of institution. Researchers should evaluate subjects that have completed the undergraduate career in other regions throughout the United States to obtain a heterogeneous mixture because all of the participants in the current study completed education in the North East region of the US.

There are several implications for further research. Researchers should conduct a longitudinal study in which performance is monitored from freshman to senior year for more comprehensive results that may evaluate performance before and after participation in ECA. Obtaining official grades to reduce the degree of error from recall and/or dishonesty would improve the accuracy of the results. For most of the participants, the time that elapsed since the
time period reviewed exceeded five years which could have significantly impacted accuracy in responses. Future research should consider a larger more diverse sampling. 90% of the participants were comprised of the Rowan subject pool and were primarily current graduate students or undergraduate students. Most of participants shared similar experiences in the college experience with regard to the age of attendance and responsibility level. Broadening the sampling to include students across various geographic regions may offer more significant results.

Implications

Institutions should invest more time and funding in promoting participation in co-curricular activities to the mature aged students and commuters alike. This would impact the overall satisfaction of the college experience and increase enrollment in later years. The results of the current investigation may provide academicians with a greater understanding of impact of student involvement and offer more information to students on the ideal balance of course work and ECA to make informed decisions with regards to participation in co-curricular activities. Student affairs professionals can also use this information to ease the concerns of parents and students skeptical of the impact of involvement on performance.
References


Appendix A

Survey

Please note that all questions are pertaining to your third-year (Junior) of your Undergraduate career.

1. **What is your gender:**
   - [ ] Male
   - [ ] Female

2. **What was your age?**
   - [ ] 17-21
   - [ ] 22-25
   - [ ] 26-30
   - [ ] 30 yrs and beyond

3. **What was your housing arrangement?**
   - [ ] On Campus
   - [ ] Lived with Parents/Relatives
   - [ ] Rent Off Campus
   - [ ] Own
   - [ ] Other

4. **How many dependents (ie. children, disabled persons, aging adults) were you responsible for?**
   - [ ] None
   - [ ] One
   - [ ] Two
   - [ ] Three or more

5. **Did you work?**
   - [ ] Unemployed
   - [ ] Work-study
   - [ ] Part-Time (20-30 hrs per week)
   - [ ] Full-Time

6. **Did you actively participate in any Co-Curricular activities which required at least 2-3 days attendance per week?**
   - [ ] None
   - [ ] Intercollegiate/Intramural Sports
   - [ ] Organizations
   - [ ] Student Government
   - [ ] Social Fraternity/Sorority
   - [ ] Campus Publication
   - [ ] Other

7. **What was your Cumulative GPA score?**
   - [ ] 4.0-3.5
   - [ ] 3.4-3.0
   - [ ] 2.9-2.5
   - [ ] 2.4 or lower

8. **How many credits did you take each semester?**
   - [ ] 3-9
   - [ ] 10-12
   - [ ] 13-15
   - [ ] 16-18

9. **What was your relationship status?**
   - [ ] Single
   - [ ] In a relationship
   - [ ] Married
   - [ ] Divorced

10. **How many years have elapsed since you completed your Junior year?**
    - [ ] Within the last 5 years
    - [ ] 5-10 years
    - [ ] 10-20 years
    - [ ] 20 years or more

11. **How satisfied are you with your overall College experience (Academic Fulfillment)?**
    - [ ] Extremely Satisfied
    - [ ] Satisfied
    - [ ] Neutral
    - [ ] Dissatisfied
12. If you could start over again, would you attend the same institution?
   - Extremely Likely  - Likely  - Neutral  - Very Unlikely

13. How socially engaged with teachers, campus activities and students were you?
   - Highly  - Moderately  - Minimally  - None/Not as much as I would’ve liked

14. I am satisfied with the amount of time I had available to participate in social activities.
   - Strongly Agree  - Agree  - Disagree  - Strongly Disagree

15. I was able to take advantage of social activities as much as I desired.
   - Strongly Agree  - Agree  - Disagree  - Strongly Disagree

16. If you could start over again, would you complete this academic year at this age?
   - Extremely Likely  - Likely  - Neutral  - Very Unlikely