[Sample Title: The Service-Learning Experiences and Outcomes of Low-Income, First-Generation College Students Utilizing Multivariate Regression Modeling]

A Dissertation submitted to the Graduate School Valdosta State University

in partial fulfillment of requirements for the degree of

DOCTOR OF [PROGRAM]

in [Program]

in the Department of [Department Name] of the [Full College Name]

[Graduation Month and YEAR]

[NAME]

[Previous Degrees begin with most recent on top] [e.g., MED, Valdosta State University, 2008]

© Copyright [YEAR] [Name]

All Rights Reserved

This dissertation, "[Dissertation Title]," by [Full Name], is approved by:

Dissertation Committee

Travis T. York, Ph.D.

Chair

Assistant Professor of Higher Education Leadership

Dissertation

Research Member

[Name, Degree]

[Rank & Field]

Committee Members

[Name, Degree]

[Rank & Field]

[Name, Degree]
[Rank & Field]

Associate Provost for Graduate Studies and Research

Becky K. da Cruz, Ph.D., J.D. Professor of Criminal Justice

FAIR USE

This dissertation is protected by the Copyright Laws of the United States (Public Law 94-553, revised in 1976). Consistent with fair use as defined in the Copyright Laws, brief quotations from this material are allowed with proper acknowledgement. Use of the material for financial gain without the author's expressed written permission is not allowed.

DUPLICATION

I authorize the Head of Interlibrary Loan or the Head of Archives at the Odum Library at Valdosta State University to arrange for duplication of this dissertation for educational or scholarly purposes when so requested by a library user. The duplication shall be at the user's expense.

Signature	_
refuse permission for this dissertation to be duplicated in whole or in pa	art
Signature	

ABSTRACT

[NOTE: The abstract should tell the reader your topic, research methods, and major findings. The abstract is double-spaced and should not exceed one page in length. The most common length is approximately 350 words.]

TABLE OF CONTENTS

Chapter I: INTRODUCTION [HEADING 1]	1
[Heading Level 2]	1
[Heading Level 3]	1
[Heading Level 4]	1
[This is heading 5	1
Chapter II: LITERATURE REVIEW	2
Chapter III: METHODOLOGY	
Methods	•••••
Data Source	
Outcome Variables	
Analytic Procedures	•••••
Chapter IV: RESULTS (Finding)	
Chapter V: CONCLUSION	
REFERENCES	10
APPENDIX A: Blocked Regression Model Predicting GPA	12
APPENDIX B: Institution Review Board Approval/Exemption	11

[NOTE: You will need to manually add a semicolon ":" after each chapter number once your table is updated, because your actual chapter headers cannot have semicolons. Similarly, you may need to readjust the right alignment to ensure that all page numbers are in a unified line.]

LIST OF TABLES [or LIST OF FIGURES]

Table 1:	Low-Income, First-Generation Sample Demographics	. 4
	- • • •	
Table 2:	Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	ŀ
Table 3:	Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	5

[NOTE: You will need to manually add a semicolon ":" after each table number once your table is updated. Number and title all tables, figures, photographs, and illustrations. If you have three or more figures and/or illustrations, present a list showing their location after your table of contents. There should be a separate list for Tables, a list for Figures, and one for charts or illustrations if needed. Do not include a list if there are less than three tables or figures. (Hint: When using tables, present a brief summary of the contents before the table is presented rather than repeat all statistics in the narrative. Try to limit tables and figures; if there are more than 15 of each, it is permissible to place in the appendices instead of the chapters to avoid disrupting the flow of the narrative.) Capitalize first letters in titles and figures.]

ACKNOWLEDGEMENTS

[While your thesis or dissertation must be your intellectual property, you could not have written it without the assistance of a number of individuals and institutions. The acknowledgements page provides you with the opportunity to thank those who provided that assistance. You may include as many individuals as you desire. This is also the appropriate place to list permission to quote copyrighted material. This text should be single spaced.]

[NOTE: You may include an optional "DEDICATION" page after your Acknowledgements page. It will be a separate section formatted just like this one. It should be short and to the point. This statement can be one to five sentences but is usually one or two.]

Chapter I

INTRODUCTION [HEADING 1]

[Heading Level 2]

[Normal] body paragraph... This section illustrates the style settings that have been made for this document template. To apply a header style, simply highlight the header text and choose the style (Header 1, Header 2, etc.) that you'd like to apply. You can elect to NOT use the macros in Word, turn off the default settings...or...Utilizing these macros is necessary should you choose to use the automatically generated table of contents provided here. To update the Table of Contents select the "References Tab" in the Word ribbon. On the far left, you should see a "Table of Contents" button which has a dropdown that allows you to update your table. There may be some additional editing required once updated (for instance, do not combine the headings "Chapter 1" and "Introduction" on the same line. Also, the first page of each chapter should have a 2" top margin - use two, double-spaced returns to create this on the first pages of each chapter). Finally, the following section, "Chapter 2" is a truncated sample chapter utilizing the headers illustrated here.

[Heading Level 2]

[Heading Level 3]

[This is heading 4.] This text is formatted as "normal" on the style menu, but do not allow extra blank lines between paragraphs.

Chapter II

LITERATURE REVIEW

This chapter begins with a brief exploration of the broader higher education context that increasing institutionalization of and research on service-learning are situated within. Service-learning is then explored in detail along with the research that has investigated the relationship between this pedagogy and student outcomes. Next, literature on Low Income, First Generation (LIFG) college students is used to explicate the host of complex barriers these students commonly experience in their academic journeys. A critical lens is then used to illustrate the gaps in literature that give rise to persisting questions about the efficacy of service-learning as a pedagogical strategy to increase LIFG student success. These questions are further refined and undergirded with a theoretical and conceptual examination of service-learning for LIFG students which provided the foundation for this study.

Chapter III

METHODOLOGY

Data Source

[Note: Mention the Institutional Review Board (IRB) approval/exemption in this chapter (see Appendix X) – a copy should be included as an appendix.] Data used in this study is part of an ongoing mixed-methods study exploring the outcomes and experiences related to participation in service-learning courses for low-income, first-generation college students. This study utilizes national, longitudinal, data from matched responses between the 2004 Freshman Survey (TFS) and 2008 College Senior Survey (CSS), administered by the Higher Education Research Institute. TFS is given to students within the first 2 weeks of their first year in higher education, and the CSS is given to seniors in college within 6 weeks of their graduation. Low-income, first-generation students are operationalized using two items: annual family income and parental educational attainment. In a NCES report on middle- and low-income families paying for higher education, low-income is defined as annual family incomes below \$30,000 (U.S. Department of Education, 2003; Choy, 2000). First-generation status is identified as students who indicate their parents' educational attainment is less than "some college." Of the 5,270 cases in the original dataset, 312 cases from 69 institutions meet the criteria of being both low-income and first generation. Of those 312 cases, 41% (n = 128)

represent low-income, first-generation college students who participated in service-learning (Table 1).

Table 1

Low-Income, First-Generation Sample Demographics

In addard a mal Trans	NI CI 4'tt'	N C C4 14-				
Institutional Type	No. of Institutions	No. of Students				
Public	37 (53.6%)	220 (70.5%)				
Private	32 (46.4%)	92 (29.5%)				
Total:	69	312				
	Service- Learnin	Service- Learning Participation No (%) Yes (%)				
Sex	No (%)	<u>Yes (%)</u>	<u>Total</u>			
Male	71 (67.6%)	34 (32.4%)	105			
Female	113 (54.6%)	94 (45.4%)	207			
Total:	184 (100%)	128 (100%)	312			
Race/Ethnicity	<u>No (%)</u>	<u>Yes (%)</u>	<u>Total</u>			
Asian	43 (82.7%)	9 (17.3%)	52			
Black	23 (48.9%)	24 (51.1%)	47			
Hispanic	72 (57.1%)	54 (42.9%)	126			
White	24 (55.8%)	19 (44.2%)	43			
Other Race/Ethnicity	7 (50.0%)	7 (50.0%)	14			
Two or More Races/Ethnicity	15 (50.0%)	15 (50.0%)	30			
Total:	184 (59.0%)	128 (41.0%)	312			

Outcome Variables

Three dependent variables were selected: GPA, CSS Civic Awareness Score, and Cognitive Diversity Score. GPA, a stand-alone self-reported item, was chosen as a broad measurement of academic success (Kuh and Associates, 2006). The CSS Civic Awareness Scale was selected for prevalence as an outcome related to service-learning in previous literature (Astin & Sax, 1998; Eyler & Giles, 1999). The CSS Civic Awareness Scale is constructed from three self-reported items: understanding of social problems facing our nation (weight = 7.88); understanding global issues (weight = 3.32); and,

understanding of the problems facing your community (weight = 2.09). Finally, the Cognitive Diversity Scale was constructed from four self-reported items: change in critical thinking (weight = 0.783); change in analytic problem solving skills (weight = 0.736); change in knowledge of people of difference races/ethnicities (weight = 0.766); and change in ability to get along with people from different races/ethnicities (weight = 0.628). The Cognitive Diversity Scale resulted from a principle axis factor analysis (exploratory factor analysis)¹ that was employed to explore latent outcome constructs specific to a low-income, first-generation population ($\alpha = 0.814$).

Analytic Procedures

Descriptive Analysis

Descriptive analysis is used to provide information and frequency data about the population. Data was cleaned and multiple imputation analysis was utilized to accommodate missing data (missing values were found to be non-monotone and missing completely at random; 9.7% of cases were missing values for the annual parental income, all other variables were missing less than 4% of values).

Regression Analysis

Ordinary Least Squares (OLS) blocked regression analysis is then utilized to examine the direction and significance of the relationship that participation in service-learning courses has with explored outcomes. Blocked regression was chose for its ability to parse independent variables such as student demographics, such as race/ethnicity, and student pre-college experiences, such as attending a High School that required

.

¹ Varimax rotation was utilized.

community service.² Blocking was organized using the theoretical and conceptual frameworks previously discussed. For each of these analyses Q-Q plots, and Normal P-P plots of model residuals were used to check that assumptions were met for the appropriate use of this analysis. A full list of the variables utilized in this study can be found in Appendix X.

_

² Hierarchical linear modeling was considered as a method to explore the impact of institutional characteristics; however, due to the narrow specifications of this population most institutional cell counts were too low to meet the assumptions required for this analysis.

Chapter IV

RESULTS

OLS blocked regression was conducted for each of the three outcome variables. Of the three regression analyses, participation in service-learning is a statistically significant predictor only for GPA. Table 2 [included as Appendix A in this case since the data extended beyond required margins] includes the results of the regression predicting college GPA (see Appendix A). As this table shows the participation in service-learning courses has a positive ($\beta = 0.528$) relationship with college GPA. The full model accounts for 23.2% of the variance in this variable. Because of the blocked nature of this analysis, we see that service-learning, as a single item, increases the model's overall R² by 4.0%. It is also interesting to note that of the three outcomes, that college GPA, though still a self-reported item, is a much less subject measurement. Whereas the other outcomes ask students to perceive their skills and growth, this item asks students to report a more objective figure. Consistent with other literature, students' pre-college characteristics account for that largest amount of variance in the model (11.2%) and students' high school GPA ($\beta = 0.343$) is also a significant positive predictor of college GPA. Finally, it should also be noted that Hispanic ($\beta = -0.928$) and Black (β = -0.873) race/ethnicity descriptors are both significant, negative, predictors of college GPA. This finding indicates that even when financial (low-income) and cultural (firstgeneration) capital are roughly held constant, there appears to be a systemic racial inequity in GPA attainment for these subpopulations.

While not in the original conceptualization of the study, several ad hoc measures were taken in response to the initial finding that service-learning is not a significant predictor for CSS Civic Awareness Scores and Cognitive Diversity Scores. Regression analyses were run on each of the individual survey items that make up the Cognitive Diversity Scale. In each of these analyses service-learning was not a significant predictor. This contrasts with prior research that indicates that service-learning increases exposure to diversity and the cognitive development (Batchelder & Root, 1994; Eyler & Giles, 1999; Osborne, Hammerich, Hensley, 1998). Since each of these items are selfreported by college seniors just prior to graduation, this may simply be a limitation of the data. Examination of these items shows that most students tend to rate themselves high on each of these questions; concordantly, there is very little variation present, which explains why almost no independent variables were significant predictors in either of the regression models. College seniors' perception that they have grown in critical thinking, analytical problem solving, knowledge of and ability to get along with people from different races/ethnicities while in college are an expected outcomes that virtually all institutions of higher education strive for. Additionally, research indicates that students may have difficulties self-assessing these subjective measures (Gonyea, 2005; Porter, 2011). Interestingly however, regression analyses of CSS Civic Awareness Scores and of Cognitive Diversity Scores conducted for the larger overall sample of college students results in models where service-learning is a very significant (p < 0.001), positive, predictor of both of these outcomes.

[Note: Always include a space before and after each =, +, <, >, \pm symbol.]

Chapter V

CONCLUSIONS

Overview

[Note: Include <u>brief</u> overview of the study, limitations to the study, and recommendations for future research, and conclusion in this chapter.]

Limitations to the Study

Recommendations for Future Research

Conclusion

REFERENCES

[Sample References]

- American Psychological Association (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: American Psychological Association.
- Balfanz, Robert, et al. 2007. "Are NCLB's measures, incentives, and improvement strategies the right ones for the nation's low-performing high schools?" *American Educational Research Journal* 44 (September): 559-593.
- Barge, John D. 2012. "Career and technical education."

 http://www.gadoe.org/Curriculum-Instruction-andAssessment/CTAE/Pages/default.aspx (September 15, 2013)
- Castellano, Marisa, Sam Stringfield and James R. Stone III. 2001. "Career and technical education reforms and comprehensive school reforms in high schools and community colleges: Their impact on educational outcomes for at-risk youth." http://ctecenter.ed.gov/downloads/cte_rfrms_stringfield.pdf (February 20, 2014)
- Castellano, Marisa, Sam Stringfield and James R. Stone III. 2003. "Secondary career and technical education and comprehensive school reform: Implications for research and practice." *Review of Educational Research* 73 (Summer): 231-272.
- Detgen, Amy, and Corinne Alfeld. 2011. "Replication of a career academy model:

 The Georgia central educational center and four replication sites."

 National Center for Education Evaluation and Regional Assistance 101

 (January):1-44.

Eck, Alan.1993. "Job related education and training: Their impact on earnings." *Monthly Labor Review* (October): 21-38.

Ehrenberg, Ronald et al. 2001. "Class size and student achievement." *Psychological Science in the Public Interest* 2 (May): 1-30.

Georgia Department of Education. 2013. CTAE Annual Report.

http://www.gadoe.org/Curriculum-Instruction-and-

Assessment/CTAE/Documents/CTAE-Annual-Report-2013.pdf (November 9, 2014)

ETC.....

APPENDIX A:

Blocked Regression Model Predicting GPA

[NOTE: Supplemental material should be placed in appendices. You need a separate appendix for each type of material presented. Some style manuals allow you to place tables, figures, and other graphical representations in an appendix, rather than dispersed throughout your text. Each appendix should have a cover page that identifies it.

Reference the cover sheet page number in the Table of Contents. Center the title on the page. A copy of your IRB or IACUC approval or exemption (if applicable) must be included as an appendix. Be sure to mention the IRB or IACUC in your "Methodology" chapter.]

Table 2

Results for Blocked Regression Model Predicting GPA for Low-Income, First-Generation Students

Variables	M1		M2		N	13	M4	
Student Pre-College Characteristics	В	p	В	p	В	p	В	p
(Constant)	6.080	.000	3.892	.000	3.240	.021	5.508	.001
Male	223	.286	265	.201	270	.196	234	.265
Asian	300	.433	391	.291	392	.290	304	.410
Black	960	.020*	968	.014*	947	.015*	873	.025*
Hispanic	-1.087	.002*	-1.067	.001*	-1.058	.001*	966	.003*
Other Race/Ethnicity	607	.252	403	.435	368	.477	327	.524
Two or More Races/Ethnicities	-1.175	.009	-1.085	.014	-1.031	.014	-1.017	.016
TFS View: Racial discrimination is no longer a major problem in America TFS View: Realistically, an individual	.126	.659	.222	.441	.250	.405	.232	.448
can do little to bring about changes in our society	.115	.578	.159	.419	.152	.440	.120	.539
TFS View: Colleges should prohibit racist/sexist speech on campus	179	.347	124	.501	126	.495	197	.290
TFS View: Same-sex couples should have the right to legal marital status	040	.863	.073	.731	.092	.671	.115	.594
TFS View: Affirmative action in college admission should be abolished	.112	.610	.077	.716	.084	.696	.127	.549
Student Pre-College Experiences	_							
What was your average grade in high school?			.315	.000**	.313	.000**	.329	.000**
Act in Past Year: Performed community service as part of a class			275	.044	260	.065	257	.067
Act in Past Year: Performed volunteer work			.121	.395	.106	.470	.110	.450
Did your high school require community service for graduation?			.150	.494	.148	.504	.129	.562
Student College Characteristics								
Primary undergraduate major aggregated					010	.626	006	.762
Full-Time					.744	.535	.797	.500
Institutional Characteristics								
Public Institution							390	.081
Institutional Selectivity							002	.042
Participation in Service-Learning Course(s)								
Change in R ²	0.	112	0	.060	0	.001	0	.019
R ²		112		.172		.173		.192

Helpful Hints

- 1. Be sure all pages have a 1.5" left margin.
- 2. The first page of each chapter has a 2" top margin other pages have a 1" top.
- 3. The bottom and right margins are 1".
- 4. Page numbering is bottom center...no running head in this document.
- 5. Set your paragraph settings to single or double spacing, not multiple...with no extra blank lines between paragraphs (this is the default setting in Word do not use).
- 6. Spacing after a period ending a sentence two spaces.
- 7. When centering chapter titles (Chapter I, Chapter II, etc.) at the 2" mark, be sure to use the "center" button on the toolbar rather than the tab key.
- 8. NO bold-faced type anywhere in the document EXCEPT on the signature page (i.e., headings on the left of the page only). However, if material in your appendices have bold-faced text, that's okay.
- 9. Tables and/or Figures: do not include a list of tables of figures if you have less than three of each. Try not to use more than 15 of each too many can clutter the narrative.
- 10. Figures place titles *underneath* the figure, notes are single spaced; Tables place titles *above* the table, with one blank line separating the table and the title. Figures and tables can be in color or black/white.
- 11. For our purposes, when writing of units of time (years, months, weeks, days, hours, seconds, minutes, etc.), use numbers instead of spelling out (e.g., 6 years, 35 years, 7 months, 12 weeks, 30 minutes, 1 hour, 24 seconds, etc.). Use Arabic numbers when referring to chapters in text (e.g., In Chapter 1, the Definition of Terms included...). But use Roman numerals in the Table of Contents and chapter headings.
- 12. For our purposes, in the References, we ask students to capitalize the first letter of each word in Book titles.
- 13. For the Table of Contents use leaders and page numbers (do not include "p.").
- 14. When using = < > + symbols, place one space before and one space after each. For example, n=45 should read as n = 45; p<.05 should be p < .05.
- 15. Include a copy of your IRB approval or exemption as an appendix (mention it in the Methodology chapter and include in the Table of Contents).
- When discussing percentages, use either the symbol (%) or the word (percentage). Be consistent with use don't interchange!
- 17. Watch out for that pesky quotation mark be sure all are the same font and style to open quote and end quote.