

## **BCH Suggested Guidelines and Format for Manuscript Dissertation Option**

- All students will write a traditional proposal for proposal defense meeting
  - ch.1 = intro
  - ch.2 = lit review
  - ch.3 = method(s)
- If student wishes to pursue manuscript option, he/she should bring ideas for individual papers to their proposal defense meeting
  - Committee as whole will determine if the manuscript option is feasible
  - A decision should be made by the end of the proposal defense meeting which option the student will pursue
  - As with traditional dissertation guidelines, there is no formal penalty for changing topics, research aims, or methodology; there would be no formal penalty for switching to the format option not chosen at defense meeting. The informal penalty is usually more time required for the student to complete the dissertation, which oftentimes delays the anticipated graduation date.
- Format for manuscript option
  - Suggested number of manuscripts = minimum is 2 (if 2, one may not be a lit review)
  - In order to be considered “DONE”, both requirements below must be completed
    - The final version of entire document must be electronically submitted to the graduate school
    - At least one paper must be submitted to a peer-reviewed journal by the same date that the electronic version of the dissertation is submitted to the graduate school
  - Chapter 1
    - Overview of study (an expanded abstract)
    - Format of the entire dissertation (TOC in paragraph format)
  - Chapter 2
    - Literature review
  - Chapter 3
    - Manuscript 1 (or Manuscript 2 if lit review is a paper)
  - Chapter 4
    - Manuscript 2 (or Manuscript 3 if lit review is a paper)
  - Chapter 5
    - Manuscript 3 (or Manuscript 4 if lit review is a paper)
  - Chapter 6
    - Discussion of all papers
      - Implications for the Field/Future Research
      - Limitations
  - Appendices
    - Methods
    - Tables
    - Figures
    - Survey instruments
    - Consent forms
    - IRB application

- IRB approval form
- Etcetera
- References for all papers

## **ABSTRACT**

Title of Document:

**AFRICAN AMERICAN GIRLS' IDEAL  
DATING RELATIONSHIP NOW AND IN  
THE FUTURE AND FACTORS THAT  
SHAPE THESE PERCEPTIONS**

Katrina Joy Debnam, Doctor of Philosophy,  
2012

Directed By:

Dr. Donna Howard  
Department of Behavioral and Community  
Health

The quality of dating relationships in adolescence can have long lasting effects on identity development, self esteem, interpersonal skills, and shape values and behaviors related to intimate relationships and risk behaviors. However, little is understood about how adolescents view their ideal partner and what implications these perceptions may have for romantic relationships. In fact, research suggests that over 400,000 adolescents have been victims of serious dating violence at some point in their lives. Among African American adolescents, religion may be particularly salient in romantic relationships. Religious organizations not only provide a place for seeking spiritual guidance and social interactions, but also provide unifying morals, beliefs, and practices for African American families.

In this dissertation, three studies were conducted. In Study 1 participants' self-identified, defined and vividly described 8 major characteristics, *good*

*communication, honesty, trust, respect, compromise, understanding, individuality, and self-confidence*, of a healthy relationship. In Study 2 several themes emerged in comparing girls' perceptions of an ideal dating relationship in high school with their perceptions of the ideal future relationship: (1) having a partner who shared similar education and career plans, (2) 'best friend' qualities such as respect, trust, and honesty, (3) importance of family in identifying an ideal relationship, and (4) temporariness of high school relationships. Study 3 findings suggest that the influence of religion in the lives of adolescents can be found in several domains. These included whether to become sexually active, choosing a partner based on religious affiliation and issues of sexual orientation. Interestingly, girls also felt that, despite the sanctity of marriage, women should not stay in unhealthy or harmful relationships.

Dating violence prevention curricula focus on helping girls identify unhealthy or abusive relationships and provide strategies to help them leave these relationships. More programs are needed to instill in girls the values and characteristics of *healthy* relationships. Early education and modeling of healthy teen dating relationships will help educators, practitioners and advocates empower girls so they are more likely to develop healthy dating relationships and less likely to experience harm in their dating relationships.

**AFRICAN AMERICAN GIRLS' IDEAL DATING RELATIONSHIP NOW  
AND IN THE FUTURE AND FACTORS THAT SHAPE THESE  
PERCEPTIONS**

By

Katrina Joy Debnam

Dissertation submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park, in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
2012

Advisory Committee:

Associate Professor Donna Howard, Dr.P.H., Chair  
Assistant Professor Mary A. Garza  
Assistant Professor Kerry M. Green  
Associate Professor Cheryl L. Holt  
Associate Professor Mia Smith Bynum

© Copyright by  
Katrina Joy Debnam  
2012

## Table of Contents

<b>ABSTRACT</b> .....	<b>1</b>
<b>DEDICATION</b> .....	<b>II</b>
<b>ACKNOWLEDGEMENTS</b> .....	<b>III</b>
<b>TABLE OF CONTENTS</b> .....	<b>V</b>
<b>LIST OF FIGURES AND TABLES</b> .....	<b>VII</b>
<b>CHAPTER 1: INTRODUCTION</b> .....	<b>1</b>
PROBLEM STATEMENT .....	1
<i>Romantic relationships in adolescence and their adulthood trajectories</i> .....	3
JUSTIFICATION FOR CURRENT STUDY.....	5
<i>Adolescent relationship development</i> .....	5
<i>The importance of the “ideal” in teen dating relationships</i> .....	7
INFLUENCE OF RELIGION .....	8
<i>Public and Private Religiosity</i> .....	9
PUBLIC HEALTH IMPLICATIONS.....	10
THEORETICAL FRAMEWORK.....	11
STUDY OVERVIEW.....	11
DEFINITION OF TERMS.....	15
<b>CHAPTER 2: LITERATURE REVIEW</b> .....	<b>17</b>
THE DEVELOPMENT OF ADOLESCENT RELATIONSHIP RESEARCH .....	17
THE NATURE OF ADOLESCENT ROMANTIC RELATIONSHIPS .....	19
ROLE OF ROMANTIC RELATIONSHIPS IN ADOLESCENT DEVELOPMENT .....	21
<i>Parent-child Relationships</i> .....	22
<i>Relationships with Peers</i> .....	22
<i>Identity Development</i> .....	23
<i>Sexual Behavior and Intimacy</i> .....	23
<i>Future Planning and Academic Achievement</i> .....	24
INTIMATE PARTNER VIOLENCE IN ADOLESCENCE .....	25
<i>Verbal and/or Emotional Abuse</i> .....	25
<i>Physical Abuse</i> .....	26
<i>Sexual Abuse</i> .....	27
<i>Individual factors</i> .....	28
<i>Family factors</i> .....	29
<i>Contextual/Environmental factors</i> .....	30
<i>Protective factors</i> .....	32
THE ROLE OF RELIGION IN ADOLESCENTS’ LIVES .....	33
<i>Religious Affiliation</i> .....	34
<i>Public Religiosity</i> .....	35
<i>Private Religiosity</i> .....	36
<i>Socio-Demographic differences in Religious Behaviors</i> .....	37
<i>Religious Influences</i> .....	38
<i>Influence of Religious Dimensions on Adolescent Development</i> .....	39
THE ROLE OF THE CHURCH AND RELIGION IN THE AFRICAN AMERICAN COMMUNITY .....	43
THEORETICAL UNDERPINNINGS OF THE PROPOSED STUDY .....	46

<b>CHAPTER 3: STUDY 1: “IF YOU DON’T HAVE HONESTY IN A RELATIONSHIP, THEN THERE IS NO RELATIONSHIP”: AFRICAN AMERICAN GIRLS’ CHARACTERIZATION OF HEALTHY DATING RELATIONSHIPS, A QUALITATIVE STUDY.....</b>	<b>50</b>
INTRODUCTION.....	50
METHODS.....	53
RESULTS.....	56
DISCUSSION.....	67
<b>CHAPTER 4: STUDY 2: “I WANT SOMEBODY THAT’S ON TOP OF THEIR DREAMS:” AFRICAN AMERICAN GIRLS PERCEPTIONS OF THE IDEAL DATING RELATIONSHIP NOW AND IN THE FUTURE.....</b>	<b>76</b>
INTRODUCTION.....	76
<i>Romantic Partner Characteristics</i> .....	77
<i>Connection to future relationships</i> .....	78
<i>Theoretical Framework</i> .....	79
METHODS.....	81
RESULTS.....	85
<i>Ideal Dating Relationship, in High School</i> .....	85
<i>Ideal Dating Relationship, in the Future</i> .....	89
DISCUSSION.....	93
<b>CHAPTER 5: STUDY 3: THE INFLUENCE OF RELIGION IN AFRICAN AMERICAN GIRLS DATING RELATIONSHIPS.....</b>	<b>101</b>
INTRODUCTION.....	101
METHODS.....	107
RESULTS.....	110
DISCUSSION.....	118
<b>CHAPTER 6: SUMMARY .....</b>	<b>126</b>
<b>APPENDICES.....</b>	<b>132</b>
<b><i>APPENDIX I: METHODS</i>.....</b>	<b>132</b>
<b><i>APPENDIX II: RECRUITMENT FLYER</i>.....</b>	<b>143</b>
<b><i>APPENDIX III: INTERVIEW CONSENT FORMS</i>.....</b>	<b>144</b>
<b><i>APPENDIX IV: IRB APPROVAL</i>.....</b>	<b>157</b>
<b><i>APPENDIX V: INTERVIEW GUIDE</i>.....</b>	<b>159</b>
<b><i>APPENDIX VI: CODING DICTIONARY</i>.....</b>	<b>165</b>
<b>BIBLIOGRAPHY .....</b>	<b>170</b>



## List of Figures and Tables

Figure 1: Socialization Influence Framework.....	45
Table 4.1: School Demographics.....	54
Table 4.2: Participant Demographics.....	56
Table 4.3: Characteristics mentioned by participants.....	57
Table 5.1: School Demographics.....	82
Table 5.2: Participant Demographics.....	85
Table 6.1: School Demographics.....	108
Table 6.1: Participant Demographics.....	111

## ABSTRACT

Title of Document: REGULATORY EFFECTS OF ACUTE AND CHRONIC ENDURANCE EXERCISE ON NITRIC OXIDE AND REACTIVE OXYGEN SPECIES IN HUMAN CIRCULATING ANGIOGENIC CELLS

Nathan T. Jenkins, Ph.D., 2011

Directed By: Professor James M. Hagberg, Department of Kinesiology

This dissertation research comprised three studies examining the effects of acute and chronic endurance exercise on circulating angiogenic cells (CACs). Because the balance between nitric oxide (NO) and reactive oxygen species (ROS) is a critical aspect of the physiological function/dysfunction of CACs, each study determined the effects of exercise on NO-ROS balance within a variety of CAC types. Study #1 demonstrated that regular endurance exercise is associated with greater basal intracellular NO levels in cultured CACs, and that one mechanism underlying this association was increased NADPH oxidase enzyme activity in the sedentary state. Study #2 suggested an association between a sedentary lifestyle and increased nitro-oxidative stress in freshly-isolated CD34<sup>+</sup> progenitor cells. Study #3 demonstrated that prior exercise attenuates high-fat meal induced-increases in mitochondrial-derived intracellular ROS in CD31<sup>+</sup> CACs. Overall, it is concluded that acute and chronic endurance exercise enhance intracellular NO and ROS dynamics in CACs.

REGULATORY EFFECTS OF ACUTE AND CHRONIC ENDURANCE  
EXERCISE ON NITRIC OXIDE AND REACTIVE OXYGEN SPECIES IN  
HUMAN CIRCULATING ANGIOGENIC CELLS

By

Nathan Thomas Jenkins

Dissertation submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park, in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
2011

Advisory Committee:  
James M. Hagberg, Ph.D. (Chair)  
Steven Prior, Ph.D.  
Stephen Roth, Ph.D.  
Espen Spangenburg, Ph.D.  
David Mosser, Ph.D.

© Copyright by  
Nathan Thomas Jenkins  
2011

## Table of Contents

ABSTRACT.....	i
Acknowledgements .....	iv
List of Tables .....	viii
List of Figures .....	ix
Chapter 1: Introduction and Specific Aims .....	1
Background.....	1
Specific Aims.....	2
Specific Aim 1. ....	2
Specific Aim 2. ....	2
Specific Aim 3. ....	3
Chapter 2: Review of Literature .....	5
Circulating Cells for Endogenous Vascular Repair .....	5
Definitions and Functions of CAC Types.....	6
Endothelial Progenitor Cells.....	6
Issues with EPC terminology based on cell origin and phenotype.....	8
Circulating CD34+ progenitor cells as CACs.....	9
Angiogenic monocytes and T-cells.....	10
Circulating endothelial-like cells.....	13
Associations between CACs and CV Disease Risk.....	14
CV disease and CAC number .....	14
CV disease and CAC function.....	15
Mechanistic Studies Linking CACs and CV Disease.....	16
Nitric oxide .....	16
NADPH oxidase.....	17
Xanthine oxidase.....	19
Mitochondrial respiration.....	20
Antioxidant defenses.....	21
Relation of Lifestyle Factors to CAC Number and Function .....	22
Hyperglycemia and CACs .....	22
High-fat diet and CACs .....	22
Effects of acute exercise on CAC number.....	25
Effects of acute exercise on CAC function.....	27
Effects of chronic exercise on CAC number .....	27
Effects of chronic exercise on CAC function .....	28
Summary of Literature Review.....	29
Chapter 3: Effects of Acute and Chronic Endurance Exercise on Intracellular Nitric Oxide in Putative Endothelial Progenitor Cells: Role of NADPH Oxidase .....	30
ABSTRACT.....	32
INTRODUCTION .....	34
METHODS .....	35
RESULTS .....	41
DISCUSSION .....	43

Chapter 4: Effects of Acute and Chronic Endurance Exercise on Intracellular Nitric Oxide and Superoxide in Circulating CD34+ and CD34- Cells .....	57
ABSTRACT .....	59
INTRODUCTION .....	61
METHODS .....	63
RESULTS .....	68
DISCUSSION .....	70
Chapter 5: Prior Endurance Exercise Prevents Postprandial Lipemia-Induced Increases in Reactive Oxygen Species in Circulating CD31 <sup>+</sup> Cells .....	82
ABSTRACT .....	84
INTRODUCTION .....	85
METHODS .....	86
RESULTS .....	88
DISCUSSION .....	92
Expanded Materials and Methods .....	101
Chapter 6: Summary and Conclusions .....	122
Summary .....	122
Perspectives for Future Research .....	122
Conclusions .....	125
Literature Cited .....	127
Appendices .....	152

## List of Tables

Table 3.1.....	50
Table 3.2.....	51
Table 4.1.....	77
Table 5.1.....	100
Supplemental Table 5.I.....	116
Supplemental Table 5.II.....	117

## List of Figures

Figure 3.1.....	52
Figure 3.2.....	53
Figure 3.3.....	54
Figure 3.4.....	55
Figure 3.5.....	56
Figure 4.1.....	78
Figure 4.2.....	79
Figure 4.3.....	80
Figure 4.4.....	81
Figure 5.1.....	101
Figure 5.2.....	102
Figure 5.3.....	103
Figure 5.4.....	104
Figure 5.5.....	105
Supplemental Figure 5.I.....	118
Supplemental Figure 5.II.....	119
Supplemental Figure 5.III.....	120