University of Cincinnati

Date: 3/8/2017

I, Robin Lindquist-Grantz, hereby submit this original work as part of the requirements for the degree of Doctor of Philosophy in Educational Studies.

It is entitled: Youth Participatory Action Research as a Strategy for Adolescent Suicide Prevention

Student's name: Robin Lindquist-Grantz

This work and its defense approved by:

Committee chair: Lisa Vaughn, Ph.D.
Committee member: Jacqueline Grupp-Phelan, M.D.
Committee member: Farrah Jacquez, Ph.D.
Youth Participatory Action Research as a Strategy for Adolescent Suicide Prevention

A dissertation submitted to the

Graduate School

of the University of Cincinnati

in partial fulfillment of the

requirements for the degree of

Doctor of Philosophy

in the Department of Educational Studies

of the College of Education, Criminal Justice, & Human Services

by

Robin Lindquist-Grantz

MSW, Ohio University, 2005

BS, Miami University, 1998

Lisa M. Vaughn, PhD, Chair

Farrah Jacquez, PhD

Jacqueline M. Grupp-Phelan, MD, MPH
Abstract

After years of decline, there has been a steady increase in the percentage of youth who report seriously considering suicide or making a suicide plan (Kann et al., 2016) and those who have died by suicide (CDC, 2016). As of 2014, suicide moved from being the third leading cause of death for youth ages 10 to 24 to being the second leading cause of death (CDC, 2014). Public strategies and funding to prevent suicide have increased; however, the effectiveness of existing strategies varies, especially in regard to youth help-seeking behaviors, problem-solving, and treatment engagement and utilization. Although youth are among the primary targets of suicide prevention strategies, they have largely been excluded from prevention efforts except as passive participants in programs and research studies. Youth Participatory Action Research (YPAR) is a collaborative approach to research that engages youth and academics as equal partners, and aims to build youth potential for being intentional agents of change for issues that directly affect them and their peers (Cammarota & Fine, 2008). The current study utilized YPAR within an integrated social ecological and positive youth development theoretical framework as an adolescent suicide prevention strategy in Cincinnati, Ohio. Multiple methods were used to determine the usability of YPAR as an innovative approach for building youth development, to explore youth experiences with YPAR for suicide prevention, and to understand youth capacity for conducting suicide prevention research. Findings revealed that confidence gained through YPAR processes contributed to important changes in individual youth development, which then fostered group development and positive perceptions of their capacity to work collectively to address adolescent suicide amongst themselves and with their peer group. The findings have important implications for understanding key processes within YPAR that lead to individual and group development, and where in the YPAR process these changes occur.
Copyright 2017
Robin Lindquist-Grantz
Acknowledgements

When you begin the doctoral journey it is difficult to imagine all of the ways you will be transformed. I am deeply grateful to everyone who walked the path with me and contributed to my growth as a researcher and individual.

To Dr. Lisa Vaughn, your guidance, encouragement, and humor were a huge gift that made this experience enjoyable. Thank you for challenging me, providing unexpected opportunities, and modeling a strong commitment to community engaged research. I am grateful for your mentorship, friendship, and the learning community you have created for students.

To my committee members, Dr. Farrah Jacquez and Dr. Jacqueline Grupp-Phelan, thank you for your commitment to children and families and providing insights that strengthened my research. I am honored to have spent this time with you and to have learned from each of you.

To Dr. Mary Brydon-Miller and Dr. Miriam Raider-Roth, in partnership with Dr. Vaughn, you created a program of study that feeds the souls of students, communities, and humanity. I appreciate your fierce dedication to social justice and am glad I was able to study with you.

To the young people in the Youth Council for Suicide Prevention who taught me more than I could have ever possibly taught them. Your ideas, motivation, and passion to make a difference in the world are an inspiration. I know all of you will go on to do great things.

To Dr. Kimberly Downing and Dr. Eric Rademacher, raising a family, going to school, and working full-time is hard—I don’t have to tell you this. Your support, flexibility, and trust over these past few years were invaluable to me.

To my friends in the Educational and Community-Based Action Research concentration, thank you for sharing wisdom, laughter, tears, and friendly feedback—lots of it. I have appreciated learning from you and am grateful to know I do not walk this road alone.

Most importantly, to my family.

To my parents, David and Susan Lindquist, you helped me understand from an early age the value of family, education, and hard work. I am forever grateful for your unwavering love and support. Now, Papa can rest easy knowing I finally became a doctor.

To Chuck and Donna Grantz, and Marty and Shirley Hufford, you have provided so much support to our family during this crazy time. I am unbelievably blessed to have in-laws as amazing as you. Thank you.

To my children, Noah and Abram, you have profoundly changed me and constantly push me to be a better person. Thank you for reminding me daily to remain curious, joyful, and playful.

To Lee, my rock, my counselor, my faithful supporter. You believe in me even when I do not believe in myself. Thank you for never once complaining and for holding down our home during my absence. I am eternally grateful.

*This research was supported by a College of Education, Criminal Justice, and Human Services Graduate Student and Faculty Research Mentoring Grant.
# Table of Contents

Abstract .......................................................................................................................... ii

Acknowledgements ........................................................................................................ iv

List of Tables .................................................................................................................. xii

List of Figures .................................................................................................................. xiii

Chapter 1: Introduction to the Study ............................................................................. 1

  Purpose of the Research ............................................................................................... 4

  Research Questions ..................................................................................................... 5

Chapter 2: Review of Suicide Prevention Literature ..................................................... 6

  Mapping the Suicide Prevention Data Landscape ....................................................... 8

  Defining Key Terms .................................................................................................... 9

  Understanding Suicide Rates/Measurement Issues ................................................... 11

  Factors in Adolescent Suicide .................................................................................. 13

  Individual risk factors. ............................................................................................... 14

  Familial factors. .......................................................................................................... 16

  Social-environmental factors ..................................................................................... 18

  Protective factors ....................................................................................................... 19

Overview of Suicide Prevention Program Findings ....................................................... 20

Universal Strategies ..................................................................................................... 22

Selective Strategies ...................................................................................................... 26
Chapter 3: Theoretical Frameworks

Social Ecological Theory
Social Ecological Systems
The Bioecological Model
Social Ecological Perspective in Public Health
Positive Youth Development
Theoretical Foundations
The Five Cs Plus One
Developmental Assets
PYD Perspective in Public Health
Integrating Social Ecological and Positive Youth Development Frameworks
Paradigmatic Assumptions
Implications for Adolescent Suicide Research
Relevance of Youth Participatory Action Research
Conclusion

Chapter 4: Research Methodology

YPAR and Adolescent Suicide Prevention
Triangulation.................................................................................................................. 81

Complementarity............................................................................................................ 82

Social justice ................................................................................................................... 82

Implications for Research ............................................................................................... 83

Present Study .................................................................................................................. 84

Study Context .................................................................................................................. 85

Positionality: My Role in the Program and Research .................................................... 87

Research Ethics ............................................................................................................... 89

Qualitative Method: Focus Group .................................................................................... 90

Data collection ................................................................................................................. 90

Data analysis .................................................................................................................... 91

Arts-based Method: Paintings .......................................................................................... 91

Data collection ................................................................................................................. 91

Data analysis .................................................................................................................... 92

Quantitative Method: Youth Development Questionnaires .......................................... 92

Data collection ................................................................................................................. 92

Data analysis .................................................................................................................... 93

Integration of Methods .................................................................................................... 93

Additional Research Validity ........................................................................................... 94

Participants ....................................................................................................................... 98
Chapter 5: Findings

Research Question 1: Individual Youth Development

Perceptions of Self

Quantifying self-esteem

Describing self-esteem

Quantifying psychological empowerment

Describing psychological empowerment

Quantifying youth agency and self-efficacy

Describing youth agency and self-efficacy

Skill Acquisition Contributed to Individual Development

Contributions of Development on Future Goals

Research Question 2: Perspectives on the YPAR Experience

The Power of Perception

Learning Through Challenges

Engagement

Decision-making

The Process is Long, but the Payoff is Worth It

Preparation is key

A goal-oriented process

Multi-directional transfer of knowledge
Research Question 3: Youth Contributions to Suicide Prevention ........................................ 122

Awareness of Improved Research Quality ........................................................................ 123

Enhanced Relevance of Data ........................................................................................... 123

Enhanced Translation of Research Findings ...................................................................... 123

Out of the Darkness: Bridging the Personal and Societal ................................................ 125

Summary and Conclusions ............................................................................................... 127

The Central Role of Opinions .......................................................................................... 129

Expanding Notions of Confidence .................................................................................... 130

Moving Toward Collective Efficacy .................................................................................. 131

Chapter 6: Discussion, Implications, and Conclusions ..................................................... 134

Situating YPAR within an Integrated Social Ecological/PYD Model ................................. 135

A Developmental Cascade ................................................................................................. 135

Building the Developmental Cascade ............................................................................... 137

The Opinion Cycle ............................................................................................................ 138

The Intersection of Confidence and Group Cohesion ..................................................... 139

The Intersection of Group Cohesion and Collective Efficacy ......................................... 141

Viewing the YPAR Developmental Cascade .................................................................... 143

Limitations ......................................................................................................................... 145

YPAR in a Community-Based Setting ............................................................................... 145

Data Limitations ................................................................................................................ 147
Implications and Recommendations ................................................................. 147

YPAR for Adolescent Suicide Prevention .......................................................... 147

YPAR for Other Youth-Related Issues ............................................................... 150

Recommendations for Implementing YPAR ...................................................... 151

Conclusions ....................................................................................................... 152

References ......................................................................................................... 154

Appendix A: YCSP Interview Study ................................................................. 204

Appendix B: Study Information Sheets ............................................................ 225

Appendix C: Data Collection Tools ................................................................. 227

Appendix D: Youth Paintings with Full Narratives ........................................... 234
List of Tables

Table 1. Suicide Terminology and Classification System ................................................................. 10
Table 2. Levels of Prevention Strategies .......................................................................................... 22
Table 3. Six Cs of Positive Youth Development ............................................................................... 47
Table 4. Investigator’s Structured Ethical Reflection ....................................................................... 96
Table 5. Participant Profile at Start of Cohort Year ......................................................................... 98
Table 6. Descriptive Statistics for SEQ Composite Scores and Subscale Scores ....................... 101
Table 7. Changes in Individual SEQ Scores from Pretest to Posttest ........................................ 102
Table 8. Descriptive Statistics for PES Composite Scores and Subscale Scores ......................... 104
Table 9. Changes in Individual PES Scores from Pretest to Posttest ........................................... 105
Table 10. Descriptive Statistics for RASE Composite Scores and Subscale Scores .................. 106
Table 11. Changes in Individual RASE Scores from Pretest to Posttest ....................................... 106
List of Figures

Figure 1. Bronfenbrenner’s social ecological model. ......................................................... 41

Figure 2. Integrated social ecological/PYD model. .............................................................. 54

Figure 3. YPAR approach within an integrated social ecological/PYD theoretical model. ....... 76

Figure 4. Concurrent mixed methods design: QUAL + ARTS + quan. ................................. 95

Figure 5. “I have been given many tools…”, Renae, age 16. ............................................. 108

Figure 6. “I have unlocked a world of possibilities…”, Connor, age 17. ............................ 112

Figure 7. “…there is still so much that we can learn”, Brooke, age 17. ............................... 121

Figure 8. “…our influence as a council”, Margot, age 17. .................................................. 126

Figure 9. “…symbolizing life and evolution”, Amanda, age 17. ......................................... 127

Figure 10. Creating the YPAR developmental cascade. ..................................................... 144
Chapter 1: Introduction to the Study

Suicide is currently the second leading cause of death of youth ages 10 to 24 years old in the United States (CDC, 2014) and the adolescent suicide death rate has steadily increased in the last decade (CDC, 2005-2014). Furthermore, nearly one in five high school students has seriously considered suicide in the past 12 months (Kann et al., 2016) and it is estimated that for every death by suicide there are 100 to 200 suicide attempts (McIntosh & Drapeau, 2012; Drapeau & McIntosh, 2015). The passage of the Garrett Lee Smith Memorial Act (GLSMA) in 2004 and publication of the National Strategy for Suicide Prevention (DHHS, 2001, 2012) has brought attention to the issue of suicide in recent years and, in particular, has contributed to it being addressed as a serious public health issue that requires consideration of a variety of contributing factors (Goldsmith, Pellmar, Kleinman, & Bunney, 2002; Knox, Conwell, & Caine, 2004).

Substantial advances have been made in understanding adolescents who struggle with suicidal thoughts and behaviors (Bridge, Goldstein, & Brent, 2006), including a wide range of individual biological and psychological factors, as well as familial, social, and cultural factors that can be difficult to comprehensively address in clinical and research settings (Goldsmith et al., 2002; DHHS, 2001, 2012; Spirito & Esposito-Smythers, 2006). Although early evidence suggests protective factors that “serve to buffer or reduce suicide risk” (Stone & Crosby, 2014, p. 407) provide additional biopsychosocial insight to enhance prevention research, programs, and practices, few studies have focused on strengths-based and asset-building approaches to adolescent suicide prevention. Furthermore, the historical overreliance on quantitative measurement of suicidality prevalence and biomedical approaches to policy, practice, and program implementation have not adequately addressed contextualized factors that contribute to
adolescent suicide (Goldsmith et al., 2002; Knox et al., 2004). While the first decades of suicide prevention research and funding have expanded public health perspectives and attempts to address the issue, recent suicide data trends and mixed evidence on a wide range of prevention strategies indicate we have much more to learn about suicidality and the delivery of effective prevention programming (Burns & Patton, 2000; Goldsmith et al., 2002; Gould, Greenberg, Velting, & Shaffer, 2003; Hawton, Saunders, & O’Connor, 2012).

Another important point related to the issues cited above, is that young people have largely been left out of mental health and suicide prevention research and program development (Jacquez, Vaughn, & Wagner, 2012; White, 2014; White, Morris, & Hinbest, 2012). To date, public health approaches for preventing adolescent suicide have focused on universal, selective, and targeted strategies (Silverman & Maris, 1995) that are primarily developed and delivered by adults (White, 2014; White et al., 2012) and typically implemented independent of one another. And yet, adolescent suicides are on the rise and the prevention field lacks strategies that provide definitive evidence of the impact on youth suicide-related outcomes. As I detail in the following chapters, the adolescent suicide prevention literature indicates there is a need for additional research that (a) addresses suicide risk factors and increases protective factors; (b) develops adolescent problem-solving, coping, and help-seeking behaviors to promote treatment utilization; and (c) utilizes innovative methods that strengthen research quality and engage youth as active agents of change. Consequently, there is great opportunity to add to our understanding of, and approach to, adolescent suicide prevention by expanding theoretical models and using research methods that offer a holistic and inclusive approach.

I argue that an integrated social ecological/positive youth development theoretical perspective offers the best position for using novel methods in the study of adolescent suicide
prevention research. While many disciplines have adopted social ecological theory because of its utility for understanding the influence of individuals and environment on one another (Bronfenbrenner, 1979), positive youth development (PYD) specifically views youth as resources who are capable of developing their own individual competencies, having the potential to grow from unfavorable circumstances, and to cumulatively build strengths that benefit themselves as well as contribute to society (Benson, 2007; Damon, 2004; Roth & Brooks-Gunn 2003a, 2003b). This perspective adds to social ecological theory by emphasizing youth as intentional agents as opposed to passive recipients of environmental influences (Brandtstädter, 1998, 1999). In merging the major tenets of social ecological theory and PYD, and reviewing studies that have integrated the two perspectives (Atkiss, Moyer, Desai, & Roland, 2011; Christens & Peterson, 2012), for the present study I distilled key theoretical constructs that are embedded in a social ecological/PYD framework: youth agency, self-esteem, self-efficacy, and psychological empowerment.

To operationalize these youth development constructs and address the lack of active youth voice in adolescent suicide research, Youth Participatory Action Research (YPAR) was used in this study to obtain youth perspectives on the topic of suicide and suicide prevention approaches. YPAR is collaborative research approach that engages young people as co-researchers in the examination of issues that affect them and the development of strategies to take action and transform communities (Cammarota & Fine, 2008; Rodriguez & Brown, 2009). YPAR is more than the completion of an individual research project; when all of the core YPAR principles are implemented, it is considered to be deeply pedagogical and action-oriented (Cammarota & Fine, 2008; Fine, Torre, Burns, & Payne, 2007; Rodriguez & Brown, 2009). YPAR has been successfully used to address complex issues related to youth, such as improving
student health outcomes in school-based health centers (Suleiman, Soleimanpour, & London, 2006), developing youth-centered education policies and practices (Mirra, Garcia, & Morrell, 2016), and reforming practices related to juvenile justice (London, Zimmerman, & Erbstein, 2003).

The examples cited above indicate that YPAR may be particularly applicable for addressing adolescent suicide. As suggested by others, participatory research models, such as YPAR, may help to advance suicide prevention by offering a new insider perspective not present in current research (Kral et al., 2009; Kral, Links, & Bergmans, 2012; Miller, Eckart, & Mazza, 2009; White, 2014). YPAR may provide new insights that have yet to be discovered in the traditional quantitative and experimental designs that dominate suicide prevention research. YPAR could be particularly useful in addressing adolescent suicides, as the field has struggled to effectively produce improvements in adolescent help-seeking behaviors, and treatment engagement and utilization, as a means to reduce suicides and attempts. Given the novelty of YPAR as both a prevention strategy and research approach, it is necessary to understand the effect of YPAR on youth development and adolescent suicide prevention research.

**Purpose of the Research**

This study was based on the use of YPAR with a cohort of youth involved with the Youth Council for Suicide Prevention (YCSP), a program initiated by Cincinnati Children’s Hospital Medical Center as a way to engage youth in suicide prevention. During the 2015-2016 cohort year, YCSP members designed and conducted their own qualitative study that aimed to explore the ways in which the topic of suicide is perceived and addressed in order to identify methods of communication that encourage conversations about suicide (see Appendix A for a full description of the study methods and findings). The purpose of the present study was to assess
the implementation of YPAR in regard to (a) youth development, (b) youth experiences engaging in research, and (c) potential usage in adolescent suicide prevention.

**Research Questions**

This study was based on the following three research questions:

1. Does self-esteem, empowerment, and research self-efficacy and capacity for action change over time for youth developing and conducting their own research project?

2. How do youth describe the experience of participating in YPAR for suicide prevention?

3. How do youth participating in YPAR describe their capacity to contribute to suicide prevention?
Chapter 2: Review of Suicide Prevention Literature

In the United States, suicide is the second leading cause of death of youth ages 10 to 24 years old (CDC, 2014). There has been a steady increase in deaths by suicide since they were at their lowest in 2006 and 2007 (CDC, 2005-2014). The National Center for Health Statistics’ Health Indicators Warehouse (2016) lists rates for 12 to 17 year olds as 5.2 in 2014, compared to 3.1 in 2007. For 18 to 24 year olds it increased from 11.7 (2007) to 13.2 (2014). The Youth Risk Behavior Surveillance Survey (YRBSS; Kann et al., 2016) reported nearly 18% of high school students had seriously considered suicide in the 12 months prior to the 2015 survey. Although there was an overall significant linear decrease in the prevalence of youth who seriously considered suicide from 1991-2015 (29.0%-17.7%), serious attempts at suicide decreased during 1991-2009 (29.0%-13.8%) but then increased during 2009-2015 (13.8%-17.7%). The trend was similar amongst youth who reported having made a suicide plan during the 12 months prior to the YRBSS, with an overall significant decrease 1991-2015 (18.6%-14.6%). However, the observed decrease during 1991-2009 (18.6%-10.9%) reversed and showed an increase during 2009-2015 (10.9%-14.6%). Reports distributed by the American Association for Suicidology estimate 100 to 200 attempts for every death by suicide (McIntosh & Drapeau, 2012; Drapeau & McIntosh, 2015).

Although these statistics indicate a moderately prolonged attempt at data collection, suicide has only been considered a public health issue requiring comprehensive prevention strategies in recent history. The initial shift toward a public health approach was evident in the first National Strategy for Suicide Prevention (DHHS, 2001), which sought to reduce the risks associated with suicidality through collaborations between the public and private sectors, as well as community leaders. Additionally, Reducing Suicide: A National Imperative was published in 2002 (Goldsmith et al., 2002) and provided the first thorough examination of extant knowledge
regarding suicide risk and protective factors, data collection and analysis efforts, and prevention strategies. The document was an important contribution to and consolidation of suicide research at the time, and highlighted the need to look at individual factors as well as social and cultural factors that affect suicide. In 2004, Knox, Conwell, and Caine argued that the biomedical approach continued to persist and that in order to be effective, policies, practices, and programs should also look at social and environmental factors that contribute to suicidality. Passage of the Garrett Lee Smith Memorial Act (GLSMA) in 2004 promoted further expansion of these initial public health approaches. The GLSMA provided the first federal funding to directly support youth and young adult suicide prevention programming outside of clinical settings in the United States, such as improvements in screening, service accessibility, training programs, and coordination among community partners (Goldston et al., 2010). The updated National Strategy for Suicide Prevention in 2012 notably called for suicide prevention to be considered a general health issue, not just a mental health issue. It also stressed the need for a comprehensive and multi-disciplinary approach that extended beyond traditional mental health systems to include governments, health care systems and companies, educational institutions, community-based organizations, and individuals and families to increase our understanding of effective suicide prevention efforts (DHHS, 2012).

The first decades of suicide prevention research and funding have expanded public health perspectives and attempts to address the issue. However, recent suicide data trends and mixed evidence regarding prevention indicate we have much more to learn about suicidality and the delivery of effective prevention programming (Burns & Patton, 2000; Goldsmith et al., 2002; Gould et al., 2003; Hawton et al., 2012). In the search to understand whether advances have been made in the field, researchers have cited methodological concerns in studies of suicide
prevention, such as: a lack of random control trials (RCTs) in the field (Robinson et al., 2013), studies based on small sample sizes (Cusimano & Sameem, 2011; Goldsmith et al., 2002), a lack of longitudinal studies that measure the long-term gains as a result of prevention efforts (Cusimano & Sameem, 2011), and difficulties measuring outcomes related to suicide (Cusimano & Sameem, 2011; Mann et al., 2005; Robinson et al., 2013), especially due to the low base rate of suicide (Stone & Crosby, 2014).

Continued developments in the field of suicide prevention require ongoing analysis of existing research and study designs, evidence-based and promising practices, and opportunities for improvement. The purpose of this chapter is to provide an overview of recent literature on adolescent suicide prevention to provide direction for future research and application in the field. In this chapter I aim to: (1) discuss key terms in the field of suicide prevention and how this impacts our knowledge about suicide rates; (2) provide an overview of adolescent suicide risk and protective factors; (3) discuss three categories of suicide prevention, and the major components and efficacy of current programs and practices, and (4) identify gaps in suicide prevention and discuss the implications for future research.

**Mapping the Suicide Prevention Data Landscape**

Suicide can be a difficult topic to discuss, both within and outside of academia and clinical research settings. Aside from the emotional difficulty, the field has previously struggled with using common terminology, identifying appropriate outcome measures, and developing research designs that accurately measure different aspects of suicidal thoughts and behaviors (Crosby et al., 2011; Goldsmith et al., 2002; Posner, Oquendo, Gould, Stanley, & Davies, 2007). Scholars have endeavored to improve uniformity and accuracy in recent years; therefore, a thorough review of literature about adolescent suicide prevention necessitates an overview of
foundations that impact suicide measurement, as well as factors that contribute to suicide and the implementation of best practices. As such, in the following sections I (1) discuss and define common suicide-related terminology, (2) provide an overview of prevalence rates and related measurement challenges, and (3) outline risk and protective factors associated with suicide.

Defining Key Terms

As efforts to reduce suicide rates increased in the 1990s and early part of the new millennium, scholars turned their attention to limitations in the field of suicide research. In a landmark book, Goldsmith and colleagues (2002) recommended four key strategies for addressing the suicide issue in the United States, including:

1. the development of research laboratories to support large scale, population-based studies;
2. national surveillance of suicide through related mental health grants and the inclusion of suicidal patients in clinical trials (using appropriate safeguards);
3. expansion of suicide training and screening in primary care settings; and
4. the provision of federal funding through health and mental health-related agencies to support the development, implementation, and testing of suicide prevention programs.

Although Goldsmith et al. (2002) mentioned that “the lack of universally accepted definitions of suicide and suicide related terms hampers progress” (p. 27) in data collection and analysis, as well as prevention practices, the definitions cited in their book were developed to assist with a specific study and were not necessarily intended for broad usage in the field. Over the years, some researchers have attempted to refine the terminology to improve data collection and analysis. For example, Posner et al. (2007) conducted a study for the Food and Drug Administration (FDA) regarding the links between suicide and antidepressants. More specifically, the study aimed to develop a classification system that described a more precise
spectrum of suicidal thoughts and behaviors in order to improve accuracy in matching screening results with appropriate antidepressants. The classification system was an important contribution to suicide nomenclature and provided the basis for a noteworthy report commissioned by the Centers for Disease Control (CDC). In this report, Crosby, Ortega, and Melanson (2011) proposed updates to public health surveillance of mortality and morbidity through a common set of definitions and data elements. They also noted inaccuracies and methodological shortcomings of terms that had been previously used, but developed a classification system under the overarching concept of “self-directed violence”. Within this concept they categorized key terms for the field and future research. These terms and definitions within these categories are described in Table 1. I have added suicidal ideation to this list because of its repeated use in the literature and its significance in conveying suicidal thoughts that do not include preparatory acts (Posner et al., 2007).

Table 1

*Suicide Terminology and Classification System (Crosby et al., 2011)*

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-suicidal self-directed violence</td>
<td>Self-directed behavior that deliberately results in injury or the potential for injury to oneself. There is <em>no evidence</em> of suicidal intent.</td>
</tr>
<tr>
<td>Suicidal self-directed violence</td>
<td>Self-directed behavior that deliberately results in injury or the potential for injury to oneself. There <em>is evidence</em>, whether implicit or explicit, of suicidal intent.</td>
</tr>
<tr>
<td>Undetermined self-directed violence</td>
<td>Self-directed behavior that deliberately results in injury or the potential for injury to oneself. Suicidal intent is unclear based on the available evidence.</td>
</tr>
<tr>
<td>Suicide attempt</td>
<td>A non-fatal self-directed potentially injurious behavior with any intent to die as a result of the behavior.</td>
</tr>
<tr>
<td>Interrupted self-directed violence – by self or by other</td>
<td>A person takes steps to injure self but is stopped by another person, or by self, prior to fatal injury. The interruption can occur at any</td>
</tr>
</tbody>
</table>
Suicidal ideation*  
Passive thoughts about wanting to be dead or active thoughts about killing oneself, not accompanied by preparatory behavior.

Other suicidal behavior  
including preparatory acts  
Acts or preparation towards making a suicide attempt, but before potential for harm has begun, such as assembling a method (e.g., buying a gun, collecting pills) or preparing for one’s death by suicide (e.g., writing a suicide note, giving things away).*

Suicide  
Death caused by self-directed injurious behavior with any intent to die as a result of the behavior.

---

* Posner et al., 2007

My inclusion of definitions in this chapter aims to orient the reader to suicide-related terminology and to stress that prevention of suicide addresses aspects of both cognitive and behavioral functioning, particularly in determining the intent of the self-directed violence. I believe this provides a historical context and demonstrates the complexity of the issue in order to underscore the difficult task of fully understanding suicide so that prevention programs and practices can be developed and rigorously tested. The literature discussed above provides background to our current measurement and understanding of suicide rates and factors that affect adolescent suicide.

**Understanding Suicide Rates/Measurement Issues**

Attention to nomenclature has improved our understanding of the range of suicidal thoughts and behaviors, and is an important step toward more accurate data collection and reporting. Percentages and rate estimates reported at the start of this chapter were based on these improvements, as well as expansion of national surveillance systems, but leaders in the field continue to call for improved collection, analysis, and integration of suicide data (DHHS, 2012). For example, challenges in determining suicidal intent upon a person’s death or variations in
local jurisdiction standards may mean surveillance data are not accurate (CDC, 2016; Crosby et al., 2011) and are likely underreported (Gosney & Hawton, 2007). Hawton, Saunders, and O’Connor (2012) noted that clinicians and patients may view suicidal intent differently, which may not only have an impact on interventions with suicidal youth, but could also affect determination of postmortem suicidal intent and result in inaccurate documentation of cause of death. This may be avoided if medical records are available or people close to the deceased are able to provide information about the adolescent’s personal history (Hawton et al., 1998; Velting et al., 1998).

These issues continue into the literature on individual reporting of suicidal thoughts and behaviors. Christl and colleagues (2006) examined the accuracy of prevalence estimates and stability of self-reported suicide attempts in youth and young adults. They found study attrition was highest among respondents who had reported a suicide attempt and that stability of self-reports over time may be affected by age, severity of the attempt, emotional state at the time of the interview, and type(s) of diagnosis. The authors concluded from the results that existing prevalence estimates of attempts may be conservative. This finding was validated in a 12-year longitudinal study conducted by Hart and colleagues (2013), who also estimated the lifetime prevalence of suicide attempts to be higher than national samples, except when analyzed cross-sectionally, which is the norm in the field. They provided additional evidence that inconsistent reporting is common and that youth who reported attempts most consistently also reported highest mean level of suicidal ideation (Hart, Musci, Ialongo, Ballard, & Wilcox, 2013).

This section of the chapter is important because it not only identifies issues that affect knowledge of population estimates of suicide and attempt rates, but also potential errors in testing the effectiveness of suicide prevention programs and practices. As will be discussed later,
many prevention programs rely on individual youth self-report of suicidal thoughts and behaviors. Prior and current youth experiences with suicide may impact their report of knowledge, intent, and help-seeking behavior and a general lack of longitudinal data may indicate we do not actually know the extent of impact on behaviors such as suicide attempts.

**Factors in Adolescent Suicide**

Despite the challenges highlighted in the previous sections, recent decades of research have taught us much about adolescents who struggle with suicidal thoughts and behaviors (Bridge et al., 2006). The risk and protective factors for suicide span a broad spectrum from individual biological and psychological factors to familial, social, and cultural factors (Goldsmith et al., 2002; NSSP, 2001, 2012; Spirito & Esposito-Smythers, 2006). Furthermore, these factors may be multi-layered and intertwined, thus creating a complex web that clinicians and researchers have to navigate. While this can be difficult enough in intervention settings with the identified patient present, the challenge may be exacerbated by broad stroke prevention strategies; therefore, knowledge of these risk and protective factors is necessary for critical analysis of current suicide prevention efforts and identification of gaps in prevention research. As such, many noteworthy reviews of risk and protective factor studies have been conducted in recent years (Beautrais, 2000; Brent & Mann, 2005; Bridge et al., 2006; Cash & Bridge, 2009; Esposito-Smythers & Spirito, 2004; Evans, Hawton, & Rodham, 2004; Gould et al., 2003; McDaniel, Purcell, D’Augelli, 2001; Nock et al., 2008; Stone & Crosby, 2014; Spirito & Esposito-Smythers, 2006). This section of the chapter provides a brief overview of key risk and protective factor studies related to youth as part of a broader discussion of adolescent suicide prevention. An exhaustive discussion of suicidal factors can be found in the reviews cited above.
Individual risk factors. Research indicates that suicidal thoughts and behaviors vary by demographics such as sex and race. In the United States, males die by suicide at a higher rate than females; however, females attempt suicide more than males. Using 2014 CDC WISQARS data, Drapeau and McIntosh (2015) estimate that 3.4 males die by suicide for each female death. Whereas, for each male suicide attempt, three females attempt suicide (Drapeau & McIntosh, 2015). Differences between the sexes in adolescence have been attributed to increases in male aggression during puberty and male use of more lethal methods in suicide attempts and death (Brent, Baugher, Bridge, Chen, & Chiappetta, 1999; Gould, Fisher, Parides, Flory, & Shaffer, 1996; Shaffer & Hicks, 1994; Shaffer, Gould, & Hicks, 1994).

In the United States, whites have had the highest suicide rates (Drapeau & McIntosh, 2015) but, amongst non-white populations, the rate is highest for Native American/Alaskan Natives (Borowsky, Resnick, Ireland, & Blum, 1999; Drapeau & McIntosh, 2015). However, it is also important to highlight that there has been an increase in suicides among African-Americans, particularly in males and adolescents (Crosby & Molock, 2006; Joe, Baser, Breeden, Neighbors, & Jackson, 2006; Joe & Kaplan, 2001; Shaffer et al., 1994), as well as an increase in suicidal thoughts and behaviors amongst adolescent Latino females (Eaton et al., 2011; Rew et al., 2001; Tortolero & Roberts, 2001). Suicide rates for Asian Americans and Pacific Islanders (AAPI) tend to be lower than other non-White populations, but adolescent AAPI females are as likely as other females to attempt suicide and adolescent AAPI males are as likely as other race group males to have thought about suicide (Grunbaum, Lowry, Kann, & Pateman, 2000). While this overview of suicidal thoughts and behaviors by race does not provide an in-depth analysis of the factors that contribute to these differences, it is included here to emphasize that these differences should be considered in suicide prevention efforts.
Studies have demonstrated that the large majority of youth who attempt suicide or die by suicide have a diagnosable psychiatric disorder (Brent et al., 1988, 1993a; Bridge et al., 2006; Cavanaugh, Carson, Sharpe, & Lawrie, 2003; Shaffer et al., 1996) and treatment for a psychiatric disorder is predictive of suicidal behavior (Groholt, Ekeberg, & Haldorsen, 2006). Major depressive disorders are the most prevalent among all of the disorders associated with suicidal thoughts and behavior, but anxiety and conduct disorders have also been cited as suicide predictors (Beautrais, Joyce, & Mulder, 1996; Brent et al., 1993a; Nock et al., 2013). Youth who use substances (i.e. alcohol and/or other drugs) are also at an increased risk for future suicidal behavior (Brent et al., 1993a; Shaffer et al., 1996). Many studies have found that suicidal youth who have been struggling with substance use also have a psychiatric disorder and that comorbidity between psychiatric and substance abuse disorders further increases the risk for suicide attempts and fatality (Brent et al., 1999; Cavanaugh et al., 2003; Groholt et al., 2006; Shaffer et al., 1996). This is consistent with several studies that have shown youth with multiple disorders are highly associated with risk of suicide (Nock et al., 2013).

Other personal characteristics have been identified as being associated with adolescent suicide in addition to those cited above. For instance, suicidal youth who identify as a sexual minority (gay, lesbian, bisexual) or who are questioning their sexual orientation are at increased risk of suicidal thoughts and behaviors compared to heterosexual youth (Russell & Joyner, 2001; Stone et al., 2014; see McDaniel et al., 2001 for a review), especially males (Remafedi, French, Story, Resnick, & Blum, 1998). Also, body mass index, negative self-perceptions of weight, and engaging in unhealthy weight control practices have been associated with suicidal risk (Ackard, Nuemark-Sztainer, Story, & Perry, 2002; Beautrais et al., 1996; Eaton, Lowry, Brener, Galuska, & Crosby, 2005; Falkner et al., 2001; Herzog et al., 2000; Pompili, Mancinelli, Girardi, Ruberto,
Youth who have a prior suicide attempt are at a higher risk for future suicidal behavior (Brent et al., 1993a; McKeown et al., 1998; Shaffer et al., 1996). As such, the individual factors described in this section should be an important consideration in suicide programming and practices in order to prevent youth from ever attempting suicide. These factors include differences between males and females in suicides and suicide attempts, as well as higher suicide rates among whites compared to minority populations. However, notably, suicide rates are highest among Native American/Alaskan Natives and rates are rising among adolescent male African-Americans. Additionally, to prevent potential suicide attempts, it is imperative to clinically assess and treat adolescents who have a diagnosable psychiatric disorder and those who use substances, particularly youth who experience comorbidity, as these are key factors in suicidal thoughts and behaviors. Lastly, programs and practices should aim to address youth sexual orientation and sexual identity formation, negative perceptions of body image, and unhealthy weight control practices.

**Familial factors.** A full review of familial suicide conducted by Brent and Mann (2005) helped to consolidate our knowledge of the effect of family on suicidal thoughts and behaviors and to provide future direction for the field. In the years since the review, additional studies have further examined the impact of family factors. Evidence over time indicates that adolescent suicidal thoughts and behaviors are associated with parental psychiatric disorders and/or substance abuse (Afifi et al., 2009; Brent et al., 1988, 1993b, 1994; Cheng et al., 2000; Fergusson & Lynskey, 1995; Gould et al., 1996; Joffe et al., 1988; Kashani et al., 1989; Melhem et al., 2007), although the results have been mixed when controlling for youth psychiatric
disorders (Gould et al., 2003). Family history of suicide is also a risk factor for adolescent suicide (Agerbo, Nordentoft, & Mortensen, 2002; Brent et al., 2002; Cheng et al., 2000; Malone et al., 1995; Melhem et al., 2007; Nanayakkara, Misch, Chang, & Henry, 2013; Powell, Geddes, Deeks, Goldacre, & Hawton, 2000; Qin, Mortensen, & Pedersen, 2002; Runeson & Asberg, 2003), but some studies have found that genetic factors play a greater role in the mood disorders and impulsive aggression that contribute to suicide than do the environmental factors of family life (Schulsinger et al., 1979; Wender et al., 1986; see Brent & Mann, 2005 for review).

Conversely, other studies focused on the family environment have also found effects on adolescent suicide (Fu et al., 2002; Statham et al., 1998). This has included issues such as controlling fathers who do not provide affection (Groholt et al., 2006) and other types of parent-child relationship conflicts (Brent et al., 1993b, 1994, Fergusson & Lynskey, 1995; Fergusson, Woodward, & Horwood, 2000; Gould et al., 1996; Lewinsohn et al., 1993, 1994; McKeown et al., 1998). Yet, like other familial risk factors discussed in this section, some studies have found that when controlling for youth psychiatric disorders these relationship conflicts are no longer associated with suicidal behaviors (Brent et al., 1994; Lewinsohn et al., 1993). However, it is important to stress that this is not the case in situations of abuse. Abuse in childhood has been associated with increased risk of suicidal behavior in adolescence (Afifi et al., 2009; Brezo et al., 2008; Fergusson et al., 1996, 2008; Johnson et al., 2002; Molnar, Shade, Kral, Booth, & Watters, 1998; Salzinger et al., 2007), but parents who abuse often have factors that crossover with previously cited familial risk factors. For example, parents who themselves had experienced sexual abuse which resulted in psychiatric disorders and/or suicidal behaviors (Brent et al., 2002; Brodsky et al., 2008; Roy, 2002) and an increased presence of mood disorders and substance abuse (Brent et al., 2002; Brodsky et al., 2008; Molnar et al., 2001; Roy, 2002).
Recent studies have contributed to our understanding of the compounding nature of multiple adverse childhood experiences, such as childhood abuse and exposure to domestic violence, and how they contribute to psychiatric disorders and suicidal thoughts and behaviors (Afifi et al., 2008; Overholser, 2003). The impact of trauma associated with adverse childhood experiences points to the necessity for adolescent suicide prevention efforts to include family-based components. Based on the studies cited above, this includes an understanding of parental psychiatric disorders, substance use, and abuse histories that may be contributing factors, as well as parent history of suicidality as a key factor in future adolescent suicidal thoughts and behaviors. Conflicts between adolescents and parents has also been found to be a factor in youth suicidality.

**Social-environmental factors.** The previous sections highlighted the main risk factors associated with individuals and families, but it would be negligent not to acknowledge that these factors are influenced by surrounding environments. For instance, sex and race are not simply individual characteristics; cultural values and norms affect suicidal thoughts and behavior within and between different groups, which has led to calls for tailored prevention efforts that address these social-environmental factors (Langhinrichsen-Rohling, Friend, & Powell, 2009).

Additionally, frequent changes in residence within childhood, although related to family life, also has an environmental element and increases the risk for suicidal behaviors (Qin et al., 2009). Although additional study is needed on frequency of moves, it may be linked with other known individual and family stressors, such as parental divorce (Beautrais et al., 2001; Brent et al., 1993a, 1994), school problems (Beautrais et al., 2001; Gould et al., 1996; Fortune, Stewart, Yadav, & Hawton, 2007), and problems with peers, such as bullying (Barker et al., 2008; Klomek et al., 2009). Furthermore, some studies have indicated a socioeconomic disadvantage
effect on suicide attempts (Beautrais et al., 1996; Fergusson et al., 2000), whereas others have not found a correlation to suicide (Agerbo et al., 2002; Brent et al., 1988; Hourani et al., 2006). Lastly, access to lethal methods of suicide has been consistently flagged as a concern in adolescent suicide, particularly the presence of firearms in the home (Brent et al., 1988, 1991, 1993c, 1999; see Brent & Bridge, 2003 for review; Kellermann et al., 1992), but findings on the influence of peer suicides, or contagion, has been mixed (Gould et al., 2003; Evans et al., 2004).

Plenty of studies have shown the impact of the social and environmental factors on adolescent suicide, with many of them being connected to the individual and familial factors described in the previous sections. These include cultural norms related to sex and race, transient living situations, parental divorces, and problems in school and with peers. Comparatively, evidence of socioeconomic and contagion effects on adolescent suicidality has varied; however, strong evidence has shown that access to lethal methods of suicide, such as firearms, is strongly associated with adolescent suicides. Thus, comprehensive suicide prevention strategies should include attention to these social-environmental factors, in addition to individual and family-based factors.

**Protective factors.** Epidemiological studies and reviews have historically focused on risk factors for suicide; however, studying the protective factors that “serve to buffer or reduce suicide risk” (Stone & Crosby, 2014, p. 407) provides additional biopsychosocial insight to enhance prevention research, programs, and practices. Although there is an overall lack of protective factor studies, they are discussed in this chapter to provide a holistic review of what is currently known about adolescent suicidality to continuously improve prevention efforts.

First, a sense of connectedness with family and peers has been associated with lower rates of suicidal behavior (Borowsky, Ireland, & Resnick, 2001; Kaminski et al., 2010; Kleiman
& Liu, 2013; McKeown et al., 1998; O’Donnell, O’Donnell, Wardlaw, & Stueve, 2004; Resnick et al., 1997; Rubenstein et al., 1989; 1998), particularly for youth who experienced childhood sexual abuse (Lynskey & Fergusson, 1997). Religiosity and spirituality also have been associated with decreased suicide attempts (Dervic et al., 2004; Garrouthe et al., 2003; Hilton, Fellingham, & Lyon, 2002; Kleiman & Liu, 2014). More recently, Becker-Weidman and colleagues (2010) found that commitment and adaptability in problem solving were more important than self-reported ability to solve problems in adolescents who were depressed and suicidal. Also, within sexual minority populations, the absence of sexual contact protected against suicidal risk in females and medically serious attempts in males (Stone et al., 2014).

Like factors that are associated with risk, the findings in these protective factor studies reflect individual, familial, social-environmental levels of suicidality and prevention, including interdependency between the different levels. Far fewer protective factor studies have been conducted compared to risk studies, but we can still learn from what is currently available. Overall, it appears that social connectedness, religion and spirituality, and a youth’s ability to stick with and work through problem-solving strategies are associated with decreased suicidality. Additionally, some evidence indicates that the absence of sexual contact may protect against suicidality in sexual minority youth. This early evidence suggests that strengths-based and asset-building approaches to suicide prevention may be useful for protecting against adolescent suicidality, or mitigating other suicidal risk factors.

**Overview of Suicide Prevention Program Findings**

Trends in public health suicide data have indicated ongoing research and examination of suicide prevention strategies are necessary. The previous sections framed the landscape of adolescent suicide and were crucial in laying the groundwork for a review of the most current
and common prevention strategies. Here, I will discuss the effectiveness of various prevention programs and practices to develop a thoughtful critique of additional knowledge required to continue moving the field forward.

Within the past decade, numerous systematic suicide prevention literature reviews have been conducted in order to examine the types of prevention activities being implemented, the effectiveness of prevention activities and programs, and the methodological rigor of prevention research and program evaluation (Cusimano & Sameem, 2011; Dumesnil & Verger, 2009; Fountoulakis, Gonda, & Rihmer, 2011; Goldsmith et al., 2002; Gould et al., 2003; Mann et al., 2005; Robinson et al., 2013; Stone & Crosby, 2014; Szumilas & Kutcher, 2009; Szumilas & Kutcher, 2011). These reviews were pivotal in providing a concise understanding of the vast research on this topic. Additionally, the range of content in the reviews reflects the expansive nature of suicide prevention and various types of activities that are included under the umbrella of prevention.

Evans, Hawton, and Rodham (2004) referred to these different types of prevention activities as primary, secondary, and tertiary prevention strategies based on who is affected and at what stage in potential suicidality; however, most of the suicide prevention literature is actually structured around a mental health intervention framework developed by Mrazek and Haggerty (1994). Silverman and Maris then applied their framework to suicide prevention (1995), and it has been used within public health approaches to target different populations (Hendin et al., 2005; Kalafat, 2003; Miller et al., 2009; Sugai, 2007; Walker et al., 1996). The rest of this section will be organized according to these suicide prevention strategy categories, as defined in Table 2.
Table 2

Levels of Prevention Strategies (Robinson et al., 2013)

<table>
<thead>
<tr>
<th>Prevention Category</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal</td>
<td>Targets whole populations with the aim of reducing risk factors or enhancing protective factors</td>
</tr>
<tr>
<td>Selective</td>
<td>Targets subgroups that are not showing signs of suicidal behavior but display risk factors for potential suicidality</td>
</tr>
<tr>
<td>Indicated</td>
<td>Targets individuals who are already displaying suicidal thoughts or behaviors</td>
</tr>
</tbody>
</table>

Universal Strategies

Prevention strategies that target entire populations include public awareness campaigns and curriculum-based programming. In a review of public awareness campaign literature that addressed depression and suicide among all ages, Dumesnil and Verger (2009) found that many of the campaigns lacked strong theoretical foundations, rigorous research designs, and validated instruments. Moreover, impact on rates of suicide often were not measured or were limited in their measurement due to low base rate issues consistent with what other researchers have noted (Fountoulakis et al., 2011; Stone & Crosby, 2014). These issues may explain why research on public awareness strategies has shown varied results regarding attitudes toward people with mental illness, help-seeking behaviors, and impact on suicidal behaviors. However, based on some of the positive impacts associated with this type of prevention strategy, Dumesnil and Verger (2009) suggested future efforts implement several strategies simultaneously, ensure repeated exposure to campaigns, and develop local strategies that can be targeted toward specific populations.
One of the universal strategies that comprises much of the adolescent suicide prevention literature is curriculum-based programming, which targets the whole youth population. These programs are commonly implemented in schools and the curricula are typically delivered within health education classes (Miller et al., 2009); however, the impact of these types of programs on behaviors that are believed to reduce suicidality are mixed (Burns & Patton, 2000; Cusimano & Sameem, 2011; Goldsmith et al., 2002; Gould et al., 2003; Miller et al., 2009; Robinson et al., 2013). One example of this is in the widely used prevention program, Signs of Suicide (SOS). The goal of SOS is to reduce suicidal behavior by raising awareness of suicide and related issues followed by brief screening of depression and other related risk factors. Youth are taught how to look for the signs of suicidality in themselves and others, and are instructed on the Acknowledge-Care-Tell model (Aseltine, 2003; Aseltine & DeMartino, 2004; Aseltine et al., 2007). Results of several studies, including three randomized controlled trials (RCT), showed a statistically significant increase in student knowledge of depression and suicide and decrease in self-reported suicide attempts, but both had a moderate effect size (Aseltine et al., 2007; Aseltine & DeMartino, 2004; Schilling, Lawless, Buchanan, & Aseltine, 2014). Compared to earlier studies of SOS which resulted in a statistically significant increase in attitudes towards depression and suicide, the most recent RCT study did not have the same result (Schilling et al., 2014). Also, none of the intervention studies have shown evidence of positive impact on help-seeking behaviors nor a statistically significant decrease in suicidal ideation (Aseltine, 2003; Aseltine & DeMartino, 2004; Aseltine et al., 2007; Schilling et al., 2014).

SOS is just one example of the mixed results in universal curriculum approaches, as authors of several literature reviews and meta-analyses have noted these issues. In earlier years, authors of these reviews reported limited evidence for the efficacy of universal curriculum-based
prevention programs regarding impact on knowledge, attitudes, and help-seeking behavior (Burns & Patton, 2000; Goldsmith et al., 2002; Gould et al., 2003). Perhaps this early finding contributed to a greater focus on measuring these outcomes in future programs and studies because, years later, these results persisted as others compared additional studies of universal prevention programs. In more recent reviews, authors have also found that across universal programs, there were generally positive effects in knowledge gained and changes in attitude, but only moderate effects on help-seeking behavior and attitudes and some reduction in self-reported suicide attempts and suicidal ideation (Cusimano & Sameem, 2011; Robinson et al., 2013). Other previous studies have even shown a negative effect of suicide prevention education programs (Overholser et al., 1989; Shaffer et al., 1991; Shaffer & Gould, 2000).

A previous critique of these universal curriculum-based approaches is that they have lacked innovation (Burns & Patton, 2000), need to be culturally tailored (Kral et al., 2009; Kral, Idlout, Minore, Dyck, & Kirmayer, 2011; LaFromboise & Howard-Pitney, 1995), and should focus on psychological well-being that protects against suicidality (Burns & Patton, 2000; Robinson et al., 2013). A recent promising prevention program that aims to do this is the Surviving the Teens® program, which is delivered universally to all high school students, but also targets the help-seeking behaviors of at-risk youth (King, Strunk, & Sorter, 2011; Strunk, Sorter, Ossege, & King, 2014). The program does this by using the self-efficacy model of social cognitive theory (Bandura, 1998) and addressing key suicidal risk and protective factors—connectedness, substance use, and coping skills—combined with help-seeking behaviors (King et al., 2011; Strunk et al., 2014). In a preliminary study of Surviving the Teens®, King et al. (2011) found participants were significantly more likely to tell an adult if they or a friend were suicidal at immediate posttest and 3-month follow-up. There was also a statistically significant
increase at immediate posttest in participant intent to talk and listen to a friend or help a suicidal friend see a counselor or other adult for help, as well as a statistically significant decrease in youth who reported a suicide attempt and making a suicide plan. In a second study using data collected from the original youth participants identified as emotionally troubled, there was a statistically significant increase at immediate posttest and 3-month follow-up in the number of youth who reported intent to reach out for help for emotional health issues (Strunk et al., 2014). However, the statistically significant increase in intent to seek help when suicidal from pretest to immediate posttest was not sustained at 3-month follow-up. Strunk et al. (2014) noted that additional study with a larger and more diverse sample, as well as a RCT study, is needed to examine the full impact and generalizability of these findings.

Another novel classroom behavior management program that has taken a long-range view of preventing risk factors that contribute to suicide and other social-emotional issues is the Good Behavior Game (Kellam et al., 2011). GBG was developed by Barrish, Saunders, and Wolfe (1969) and is grounded in life course/social field theory, which posits that mastery of social tasks in each developmental stage contributes to mastery in subsequent stages. Therefore, in short, the premise is that this connectedness with others promotes psychological well-being and coping skills that serve as a protective antecedent in the prevention of future suicidality (Wilcox et al., 2008). GBG is typically provided in first- and second-grade classrooms and several recent longitudinal RCT studies have examined its impact on young adult social-emotional outcomes, including suicide ideation and attempts. Results of these studies provide evidence that (a) GBG effectively reduces lifetime drug abuse/dependence disorders, tobacco use, and aggressive and disruptive behaviors, especially in males (Kellam et al., 2008; Kellam et al., 2014); (b) youth involved with GBG have lower incidence of suicidality through childhood.
to young adulthood (Wilcox et al., 2008); and (c) caregiver suicidal ideation has a strong association with youth/young adult suicidality (Wilcox et al., 2008).

Selective Strategies

Selective suicide prevention strategies aim to get at the factors that may put youth at risk of potential suicidality and, therefore, target specific groups. These include activities such as, gatekeeper training, physician training, screening programs, and peer support programs; which may be implemented separately or in combination with each other. Sometimes they are even combined with universal programs; for example, SOS involves curriculum-based programming with whole youth populations, but also includes a screening component to be implemented by school personnel (Aseltine, 2003; Aseltine & DeMartino, 2004; Aseltine et al., 2007).

Gatekeeper training is very common and may be perceived as an easier strategy for schools to implement because training school staff to identify suicide warning signs seems more manageable than delivery of student curriculum and potential negative parental response (Hayden & Lauer, 2000). In some of the first federal funding after the passing of the GLSMA, Goldston et al. (2010) found that most programs implemented gatekeeper training combined with screening programs to identify youth at risk of suicide. Some of the more recent and most utilized programs have included Question-Persuade-Refer (QPR; Quinnett, 1995, 2007) and Applied Suicide Intervention Skills Training (ASIST; Lang, Ramsey, Tanney, & Kinzel, 2007). Studies of QPR, which are more plentiful than ASIST, have indicated overall gains in knowledge and an increase in teachers’ active engagement in prevention practices with students (Cross et al., 2011; Reis & Cornell, 2008; Wyman et al., 2008). However, Tompkins, Witt, and Abraibesh (2010) also found that results were mediated by age, professional role, prior training, and recent contact with a suicidal youth. Overall, gatekeeper trainings have showed increases in self-
reported knowledge about suicide, improving attitudes and comfort discussing the topic, and improvements in practices; however, additional research is needed in order to examine how the help provided by gatekeepers impacts youth suicide-related outcomes (Robinson et al., 2013).

The review findings presented by Robinson and colleagues (2013) include two peer gatekeeper programs that train youth to be supports for other youth. These selective activities are receiving special attention here because of the novelty of involving youth in the implementation of prevention activities and the potential improvements from other peer programs that were previously found by Gould et al. (2003) to be ineffective or inconclusive. These programs include Peer Gatekeeper Training (PGT) Program and Sources of Strength Suicide Program. In an initial study, PGT has shown significant gains in student knowledge and skills for helping peers, and significant improvement in attitudes toward suicide intervention (Stuart, Waalen, & Haelstromm, 2003). Sources of Strength used an experimental design and showed significant improvements in peer leaders’ adaptive coping strategies, connectedness to adults, school engagement, and likelihood of referring a suicidal friend to an adult (Wyman et al., 2010). There was an overall impact on school-wide student positive perceptions of adult support and the acceptability of seeking help from adults.

As mentioned before, gatekeeper training often also includes a suicide screening component that promotes the early identification of adolescents who are at risk. However, screening may or may not occur in combination with gatekeeper training. Although schools have indicated that they perceive the implementation of screening more difficult than curriculum or gatekeeper training (Hayden & Lauer, 2000), many screening tools are available (Miller et al., 2009) and studies have indicated that asking students about suicide does not cause distress
(Gould et al., 2005) and that it may actually show them that the school cares about their well-being (Mazza, 2006).

Sensitivity of suicide screens has been assessed and found to have many fewer false-negatives than false-positives (Gould et al., 2003). In one study assessing the Columbia Suicide Screen, researchers found that the instrument was more accurate at identifying youth with a mental health issue or suicidal risk than assessments conducted by school professionals alone (Scott et al., 2009). Although some researchers believe that some level of false-positives is acceptable if it still results in identifying potentially at-risk youth (Kalafat, 2003; Gutierrez & Osman, 2008), others argue that screening sensitivity ensures program success (Hallfors et al., 2006; Peña & Caine, 2006). This is partly because although psychiatric disorders pose a risk for suicidality and early research suggested that increased referrals to mental health treatment may have helped to reduce suicidal thoughts and behavior, actual utilization of mental health services has been limited (Hendin et al., 2005). Schools, or even other systems, who commit to suicide screening must also commit to policies and practices that ensure appropriate follow-up assessment and intervention (Gutierrez & Osman, 2008; Miller, 2014).

One way to make sure this happens in addition to services provided within the mental health system, is through pediatric and general practitioner screening, diagnosing, and use of medication. Training physicians to better understand childhood depression and to properly administer depression medication has been on the rise and, across the general population, has been found to be amongst the more effective prevention strategies because it targets one of the biggest suicide risk factors (Mann et al., 2005). However, as suggested by Gould et al. (2003), physician training should be conducted repeatedly to avoid losing gains made during and immediately after initial training.
Suicide screening in pediatric and general practitioner offices has expanded over time, but less emphasis has been placed on selective screening in emergency departments (ED; Doshi, Boudreaux, Wang, Pelletier, & Camargo, 2005). Youth who present to the ED due to suicidal thoughts and behaviors has increased, especially among 15 to 19 year olds (Ting, Sullivan, Boudreaux, Miller, & Camargo, 2012), but many youth are not engaged in mental health services at the time of their ED visit (King, O’Mara, Hayward, & Cunningham, 2009; Shaffer et al., 1996). Youth who visit the ED for psychiatric reasons receive suicide screening, but there is evidence of a lack of screening with youth who visit the ED for non-psychiatric issues related to individual and familial suicide risk factors, such as abuse or substance use (King et al., 2009). Thus, great opportunity exists for widespread implementation of ED suicide screening on populations who are at an elevated risk for current or potential unidentified suicidality (King et al., 2009).

**Indicated Strategies**

At first glance, it may seem intervention strategies that target adolescents who have already exhibited suicidal thoughts and behaviors have no place in the prevention literature. Yet, often they are discussed as prevention interventions because these indicated strategies aim to minimize the risk of future suicide attempts in youth who have already had a serious attempt. As such, although there are many strategies that could comprise an entire chapter on their own, a cursory overview of the key activities discussed in the literature is presented in this section. Emergency/crisis interventions, inpatient care and hospitalization, and outpatient follow-up treatment are critical examples of indicated strategies, but are beyond the scope of this chapter.

Many prevention interventions aim to reduce the risk factors that contribute to suicidal thoughts and behaviors. Two current programs that have been rigorously tested and show
promising results are Counselors Care (C-CARE)/Coping and Support Training (CAST) and The Program of Intensive Psychotherapy for Depressed Adolescents With Suicidal Risk (IPT-A-IN). C-CARE/CAST focuses on youth who are at an elevated risk of suicide and dropping out of high school. The C-CARE computer-assisted assessment is followed by the CAST program, which is described by Randell, Eggert, and Pike (2001) as “a brief, peer-group, life skills training program”. An RCT study indicated C-CARE/CAST had a significant favorable change in attitudes toward suicide and suicide intervention, in addition to a significant reduction in suicide risk behaviors and depression (Randell, Eggert, & Pike, 2001). IPT-A-IN is a school-based program delivered by school counselors to students who screen positive for depression and suicidality (Tang, Jou, Ko, Huang, & Yen, 2009). An RCT study resulted in the IPT-A-IN showing significantly higher effects than the treatment-as-usual group on decreasing the severity of depression, suicidal ideation, anxiety, and feelings of hopelessness (Tang et al., 2009).

Programs that aim to prevent further suicidal behavior after inpatient care and hospitalization are discussed less frequently in the literature than programs using other prevention strategies. Researchers have suggested supports that aim to reduce risk factors and increase protective factors may have positive benefits to suicidal youth (Miller et al., 2009; Mazza & Reynolds, 2008), yet evidence for the effectiveness of this approach on prevention interventions is inconclusive. Multisystemic therapy is one indicated strategy that aims to address many of the individual, familial, and social-environmental risk factors that contribute to suicidal thoughts and behaviors (Henggeler et al., 2009). In a previous study, MST was found to be more effective than emergency hospitalization at reducing attempted suicides, but it was not associated with a decrease in suicidal ideation, feelings of hopelessness, or depression severity (Huey et al., 2004). The Youth Nominated Supported Team is another indicated program
intended to address risk factors associated with parental psychiatric disorder and other familial factors, and to develop youth connectedness with supportive adults as a protective factor against future suicidal ideation and behaviors (King, Kramer, & Preuss, 2000). Results of a RCT study showed this prevention intervention had moderate effects on suicidal ideation with female adolescents, but no overall intervention effects across genders suicidal ideation or attempts (King et al., 2006).

Two other adolescent indicated strategies are worth noting due to their prevalence within suicide prevention literature, common usage within the field, or as an example of attempts to reach out using means that are associated with youth culture. Means restriction is a strategy that has been promoted in the risk, prevalence, and prevention literature. In the United States this has primarily focused on limiting suicidal adolescent access to firearms (Brent et al., 1988, 1991, 1993c, 1999; Brent & Bridge, 2003; Kellermann et al., 1992; Mann et al., 2005), with some researchers suggesting that the strategy is more likely to work if it is coupled with parent education and removal of lethal methods as opposed to broad-based national strategies (Gould et al., 2003). Additional study of the long-term effects of means restriction on reduction in the suicide rate, as well as potential confounding factors, is needed (Mann et al., 2005). Crisis hotlines are also promoted; however, in a review of community-based prevention programs, Gould et al. (2003) found limited evidence of the effectiveness of telephone hotlines among suicidal youth. This may be due to the inability of hotlines to assure some of the best practices identified by more targeted prevention strategies, such as direct linkage to a mental health provider.
Key Implementation and Methodological Issues

Variations in evidence across suicide prevention strategies may be a result of ineffective programs, but it may also be a result of poor implementation strategies, policies and procedures that insufficiently address adolescent suicidality, and inadequate methodologies and research designs. This is especially evident in the school-based prevention literature. For example, in a review of 13 school-based suicide prevention studies, Miller, Eckert, and Mazza (2009) observed insufficient details about program implementation and cost, in addition to a lack of statistically significant outcomes. Although limitations in journal article length or description of program implementation may contribute to this paucity of information, schools may also be ill-equipped to deal with classroom-based suicide curricula and protocols for dealing with suicidal students (Burns & Patton, 2000). In a survey of 163 school districts in the State of Washington, Hayden and Lauer (2000) found that very few had suicide-related policies and procedures in place. Furthermore, most had difficulty incorporating them into their operating budgets in order to promote more district-wide prevention programming and intervention strategies. Part of this may be a general lack of information about the cost effectiveness of these types of programs (Burns & Patton, 2000; Goldsmith et al., 2002; Miller et al., 2009; Wei, Kutcher, & LeBlanc, 2015) so that schools can fully understand resources needed for implementation and what benefits can be gained as a result of programming.

In a smaller study of school-based suicide prevention, Crepeau-Hobson (2013) also found a lack of policies and procedures in place for dealing with suicidal youth and that the suicide prevention curriculum delivered to students did not demonstrate evidence of reaching the most at-risk students. Inadequate attention to the well-known risk factors associated with adolescent suicide have been raised by others looking at school-based prevention programming (Cusimano & Sameem, 2011; Miller et al., 2009), and also by those reviewing prevention strategies in
healthcare settings (Gould et al., 2003). One such example includes the range of familial factors that contribute to adolescent suicidality. As for schools, Cusimano and Sameem (2011) have specifically suggested that prevention curricula be expanded to include family and home environments. As for healthcare settings, outpatient follow-up treatment non-compliance has been associated with the presence of parental psychological disorders and family dysfunction (King, Hovey, Brand, Wilson, & Ghaziuddin, 1997). Thus, this could also make the case for extending prevention to family and home environments within selected and indicated strategies.

Some of the key issues in measuring the effectiveness of prevention strategies overlap with efforts to improve national surveillance efforts, such as low base rates of suicide and accuracy of youth self-reports of suicide ideation and attempts (Fountoulakis et al., 2011; Stone & Crosby, 2014). The localized nature of program implementation also means results have often been based on small sample sizes or differences in sample sizes amongst different programs, which makes them difficult to compare (Cusimano & Sameem, 2011). Furthermore, the multifaceted nature of prevention programs makes it difficult to know “which components produce the desired outcome” (Mann et al., 2005; p. 2070).

Other research design issues have included a lack of demographic and socioeconomic sample diversity (Cusimano & Sameem, 2011; Joe & Kaplan, 2001; Strunk et al., 2014), lack of randomization (Cusimano & Sameem, 2011; Wei et al., 2015), and a lack of sustained effects (Wei et al., 2015). The Surviving the Teens® and GBG studies presented above are just two examples of more recent attempts within the field have to address some of these issues through longitudinal study designs (Kellam et al., 2008; Kellam et al., 2014; King et al., 2011; Strunk et al., 2014; Wilcox et al., 2008) and use of experimental research designs (Kellam et al., 2008; Kellam et al., 2014; Wilcox et al., 2008). And yet others have advocated that the field even look
beyond traditional quantitative methods to include other methodologies, such as mixed and participatory methods, that provide a more holistic understanding for the development of prevention strategies and programs as well as their effects (Kral et al., 2009; Kral, Links, & Bergmans, 2012; Miller et al., 2009; White, 2014). LaFromboise and Howard-Pitney’s (1995) study with American Indian youth is a strong example of use of mixed methods using a culturally tailored approach. Additionally, the work of Michael Kral and colleagues within Inuit communities provides examples of how participatory approaches and mixed methods bring multiple culturally-centered perspectives that can enhance relevance and rigor of data collection and examination of suicide prevention efforts (Kral et al., 2009; Kral et al., 2012; Kral et al., 2011).

**Implications for Future Research**

Substantial advances have been made in understanding risk factors that contribute to suicide, as well as some attempts at examining protective factors that may enhance prevention. Yet, adolescent suicides have increased in recent years and the field continues to struggle with strategies that provide definitive evidence of the impact on youth suicide-related outcomes. Some of these issues are rooted in methodological conundrums associated with an overall low rate of adolescent suicides, measures that accurately determine attempts and suicidal intent, and rigorous studies that compare youth over time. Another issue is limited program designs that improve knowledge and attitudes about the subject, but need further evidence of impact on youth help-seeking behaviors and consistency in youth reporting of suicidal thoughts and behaviors. Additionally, feasibility of program implementation and sustainability in real-world settings remains a problem.
Previous research has indicated a combination of universal, selective, and indicated strategies that build system capacity and are sustained over time may be more likely to effectively reduce suicidal thoughts and behaviors (Miller et al., 2009). Mann et al. (2005) specifically identified the most promising prevention strategies as physician training on diagnosing depression and antidepressant usage, gatekeeper training, and means restriction. A case has also been made for increased screening of high-risk youth during ED visits (King et al., 2009). However, these strategies must involve both adolescents and parents, and include long-term follow-up practices that promote utilization and engagement in treatment services (Gould et al., 2003; Miller et al., 2009). Universal programs may be an effective supplement to these promising selective and indicated strategies if they (a) address suicide risk factors and increase protective factors, and (b) develop adolescent and parent problem-solving, coping, and help-seeking behaviors that promote treatment utilization (Gould et al., 2003; Miller et al., 2009). On the other hand, these strategies may be more likely if adolescents and parents do not perceive a stigma with receiving services, understand the benefits of the services and experience positive outcomes, and further develop coping, problem-solving, and help-seeking skills within the treatment setting.

These recommendations suggest that further development of comprehensive prevention strategies versus one-time programs are warranted. They must involve multiple systems working together to address individual, familial, and social-environmental factors associated with suicide. Nock and colleagues (2013) have reported that the majority of adolescents who have struggled with suicidal thoughts or an attempt have received some sort of treatment, although it may not always have been from a mental health professional. This may mean that even if a youth has reportedly received treatment, the treatment may not be effective or may not be delivered by
professionals best equipped to deal with it. Thus, trainings and programs delivered in schools may be more impactful if they are delivered in direct connection with effective treatment practices in healthcare and mental health treatment settings. The same may be true for healthcare and mental health, which may not only benefit from school-based identification of at-risk youth, but also delivery of programs and practices that promote the cognitive and behavioral treatment goals developed with depressed and suicidal adolescents.

The promotion of collaboration between different systems that serve adolescents is not new to suicide prevention, as it is a cornerstone of the National Strategy for Suicide Prevention. However, based on the current literature presented in this chapter, I argue that a disconnection still exists and continues to impact the development of innovative research, programs, and practices. First, there is a need for improved linkage between schools, healthcare, and mental health systems. This requires collaboration around the screening, identification, treatment, and follow-up of suicidal and at-risk youth so that youth receive support from every major system in which they are involved and across the spectrum of suicide prevention. Additionally, targeted collaboration among these systems may result in more effective strategies that encourage communication about the topic of suicide so youth feel more comfortable reaching out for help when they are struggling with depression or suicidal thoughts. Strengthening communication may also have an impact on help-seeking behaviors that foster treatment service engagement and utilization.

Empowering youth to take these steps may, in turn, continue to help them build problem-solving and coping skills that are considered to protect against future suicide attempts. Although research has shown that suicide prevention efforts should address risk factors associated with adolescent suicide, there is a gap in research and practices that focus on youth protective factors.
In particular, strengths-based approaches that build protective factors at the individual, familial, and social-environmental levels are limited. New and innovative research methods that represent the contextualized lives of youth and simultaneously empower them to confront a public health issue that has a drastic impact on their own peer population are needed.

As suggested by others, participatory research models can offer a new perspective rarely offered in the literature to help advance the science of suicide prevention (Kral et al., 2009; Kral et al., 2012; Miller et al., 2009; White, 2014). Participatory approaches are being used more frequently in public health research to increase accessibility to hard-to-reach populations and the collection of data that is more relevant to the population. Youth participatory action research (YPAR) is one such approach that may provide new insights that have yet to be discovered in the traditional quantitative and experimental designs that dominate suicide prevention research. YPAR could be particularly useful in addressing adolescent suicides, as the field has struggled to effectively produce improvements in adolescent help-seeking behaviors, and treatment engagement and utilization, as a means to reduce suicides and attempts.
Chapter 3: Theoretical Frameworks

The previous chapter highlighted a number of individual, familial, and social-environmental risk and protective factors that influence suicidal thoughts and behaviors. Suicide prevention strategies that can withstand the complexity of these multi-layered and interconnected factors are necessary; however, the existing continuum of universal, selective, and indicated prevention interventions has shown mixed results. Furthermore, due to oft-cited methodological and implementation issues, the field of suicide prevention is at a critical juncture where innovative research, programs, and practices are needed. Researchers have called for an expansion of dominant research paradigms and conventional collaboration practices to include individuals affected by suicide, interdisciplinary service systems (e.g. schools, healthcare, and mental health), and academic and clinical researchers in order to develop contextualized prevention strategies that are more relevant to populations affected by high suicide rates (Kral et al., 2009; Kral et al., 2012; Miller et al., 2009; Wexler & Gone, 2012; White, 2014).

Social ecological theory is a useful framework for addressing the range of factors that influence suicidal thoughts and behaviors, plus the multiple contexts in which suicide prevention strategies should be implemented. Positive youth development (PYD) complements and embraces elements of social ecological theory and can benefit adolescent suicide prevention research. The aims of this chapter are to: (1) discuss the major tenets of social ecological theory and PYD, (2) discuss how social ecological theory and PYD intersect, and (3) examine the relevance of the two frameworks in suicide prevention research and YPAR.

Social Ecological Theory

Social ecological theory has been an important framework for viewing complex health and social problems holistically as opposed to only being driven by personal traits and behaviors
from which individuals act on their own accord (Stokols, 1996). Looking to expand research related to human development, Urie Bronfenbrenner (1979) posited that individuals influence, and are influenced by, their environment; similar to how biological organisms are influenced by other organisms and the surrounding environment. Although Kurt Lewin originally theorized the relationship between individuals and their environment (1935, 1936), Bronfenbrenner is often credited with expanding social ecological theory and its application in human development research (Lounsbury & Mitchell, 2009). Broadly, social ecological theory assumes that personal characteristics of individuals engage with multiple environments, such as immediate human relationships and physical environments in which people live and operate on a daily basis (e.g. family, home, school, work), as well as larger societal environments that support economic and political structures, cultural rules and norms, and the effect of historical events and time (Bronfenbrenner, 1979; Bronfenbrenner & Ceci, 1994). This interaction between the individual and these environments is the crux of the social ecological perspective.

The ecology of human development involves the scientific study of progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded (Bronfenbrenner, 1979, p. 21).

**Social Ecological Systems**

A major tenet of the social ecological perspective is that each of the multiple environmental layers represent a different “system”, and the systems constantly interact with individuals and each other so that neither is operating independently of the other. This
complicated interdependence can be understood in the system-level definitions originally provided by Bronfenbrenner (1979) and expanded upon by Bronfenbrenner and Ceci (1994).

1. **Microsystem:** a pattern of activities, roles, and interpersonal relations experienced by the individual in a setting where there is day-to-day interaction.

2. **Mesosystem:** interrelations among two or more microsystem settings in which the individual actively participates.

3. **Exosystem:** settings where the individual may or may not actively participate, but that affect, or are affected by, the individual.

4. **Macrosystem:** cultural rules and norms, including ideological and other belief systems, present within each of the lower-order system levels.

5. **Chronosystem:** historical events and transitions—for example, war, marriage, retirement—that occur within the individual or environments over time.

Figure 1 is a common visual depiction of an individual’s placement within these ecological systems and well as the nesting of systems within one another. The boundaries between the individual and each system are considered malleable as each has an influence on the others. Bronfenbrenner (1979) especially noted that each individual’s perspective on these environments and their interpretation of experiences within them is a key mechanism of the influence between person and environment.
The previous sections provided a brief overview of the assumptions associated with social ecological theory but, over time, Bronfenbrenner and colleagues were interested in how to translate those assumptions into more precise research designs and effective social policies and programs (Bronfenbrenner & Morris, 1998; Lerner, 2005). They also aimed to refine the operationalization of the individual person aspect of the theory to not only include biological characteristics, but also psychological functioning and behavior (Bronfenbrenner & Morris, 1998; Lerner, 2005). Bronfenbrenner and Morris (1998) developed the “bioecological” Process-Person-Context-Time (PPCT) Model to aid in the application of social ecological theory in these endeavors. Key elements of social ecological theory are visible throughout descriptions of the PPCT Model.
Process is deemed a core component of the PPCT Model and involves a central principle of social ecological theory; the interaction of the individual with environmental Context in which they live. This interaction serves as a proximal process that catalyzes the biopsychosocial development of the individual Person. However, the person is not simply a passive recipient of environmental context effects. The proximal process is considered to be bidirectional in nature, which means that the person is also capable of affecting the process over Time and based on their own experiences within dynamic and evolving environmental contexts. According to Bronfenbrenner and Morris (1998), the movement and interaction between components of the PPCT model rely on the following:

Three types of Person characteristics are distinguished as most influential in shaping the course of future development through their capacity to affect the direction and power of proximal processes through the life course. The first are dispositions that can set proximal processes in motion in a particular developmental domain and continue to sustain their operation. Next are bioecological resources of ability, experience, knowledge, and skill required for the effective functioning of proximal processes at a given stage of development. Finally, there are demand characteristics that invite or discourage reactions from the social environment of a kind that can foster or disrupt the operation of proximal processes. The differentiation of these three forms lead to their combination in patterns of Person structure that can further account for differences in the direction and power of resultant proximal processes and their developmental effects (p. 995).

Social Ecological Perspective in Public Health

Social ecological theory has been increasingly used in public health and is viewed as a valuable framework for addressing (a) complex public health problems, (b) holistic determinants
of health versus a strict focus on individualism, and (c) health disparities (McLaren & Hawe, 2005). It is also considered a useful lens for developing environmental interventions that promote individual behavior changes, for examining the change process, and ensuring program sustainability (McLeroy, Bibeau, Steckler, & Glanz, 1988). Many disciplines have adapted aspects of the framework for application in their field (McLaren & Hawe, 2005) and the inherently interdisciplinary foundations of the approach are beneficial to public health efforts so they incorporate the science and best practices of medical, epidemiological, and social-behavioral disciplines (Stokols, 1996). Recognition of this perspective is apparent in the recent call by the National Institutes for Health and Centers for Disease Control and Prevention for biomedical research to be linked with social ecological systems approaches (Lounsbury & Mitchell, 2009).

The multidisciplinary nature of the social ecological perspective has fostered implementation of individual, institutional, community, and public policy prevention intervention public health approaches because they are deemed necessary for achieving positive health outcomes (Neri, Stringer, Spadaro, Ballman, & Grunbaum, 2015). The advantage of using multilevel approaches is that they acknowledge and target broader societal contexts that impact health, yet also allow for measurement of individual outcomes (Schensul & Trickett, 2009; Trickett, 2009). Thus, not only do prevention intervention approaches grounded in social ecological theory account for and address the complexity of health issues affecting individuals and communities, but they necessitate utilization of novel and multifaceted methods of research and evaluation that can tackle multilevel issues (Schensul & Trickett, 2009; Trickett, 2009).
Positive Youth Development

Adolescence is a time of rapid transition in brain development that requires a multidisciplinary translational approach (Dahl, 2004; Spear & Silveri, 2016) and an emphasis on preventive interventions before permanent changes in brain development are formed (Andersen, 2016). Historically, research and programs related to adolescent mental health have focused on adolescent developmental processes as challenges, pathologies, and problems to be managed by adults; however, in recent decades there has been a shift toward focusing on youth strengths and abilities for overcoming challenges (Damon, 2004). Positive youth development (PYD) has emerged as a framework for viewing youth as resources who are capable of developing their own individual competencies as well as contributing to society (Damon, 2004; Roth & Brooks-Gunn 2003a, 2003b). Damon (2004) writes:

While the positive youth development approach recognizes the existence of adversities and developmental challenges that may affect children in various ways, it resists conceiving of the developmental process mainly as an effort to overcome deficits and risk. Instead, it begins with a vision of a fully able child eager to explore the world, gain competence, and acquire the capacity to contribute importantly to the world (p. 15).

The PYD orientation has not only developed as a theoretical framework used in research, but it has been used in the widespread implementation of youth development programs by community organizations (Benson, Scales, Hamilton, & Sesma, 2006; Eccles & Gootman, 2002; Lerner, 2005). Furthermore, the implementation of the framework within community-based organizations has provided a significant contribution to the current understanding of the PYD orientation (Pittman, Irby, Tolman, Yohalem, & Ferber, 2011; London et al., 2003; Roth & Brooks-Gunn, 2003a, b; Lerner, 2004). This includes evidence of positive impact on youth
outcomes, the value of caring adult-adolescent relationships, and the significance of long-term engagement of youth throughout adolescence (Roth, Brooks-Gunn, Murray, & Foster, 1998).

**Theoretical Foundations**

In a comprehensive PYD book, Silbereisen & Lerner (2007) discussed the emergence of the framework from *developmental systems theories* (Ford & Lerner, 1992; Gottlieb, 1997). They described the ways in which these theories view human developmental processes as malleable across time and in ability to change due to biological maturation and environmental influences, including cultural and historical factors. Moreover, the interaction between these individual and ecological influences is based in *relational metatheory*, which aims to integrate various aspects of the human experience and development as opposed to viewing them dichotomously (Silbereisen & Lerner, 2007; Lerner & Overton, 2008). This means that biological attributes of individuals and the environments surrounding the individual, including immediate personal relationships, do not operate as separate factors in human development; it is the convergence of the individual and broader societal ecologies that shapes a person’s development, and in turn, the person’s perceived efficacy in managing and shaping their environment. Lerner and colleagues (2003) referred to these mutually beneficial relations as *adaptive developmental regulation*, but note that this process can be challenging during the adolescent stage of development until a cumulative effect can be established over time.

The interaction among individual attributes and ecological contexts, and the resulting systematic change from the interactive process, is referred to as ‘plasticity’ (Gottlieb, 1997). Plasticity is a fundamental principle of the PYD perspective and, similar to the social ecological framework, is considered to be a bidirectional process where individuals and environments have the ability to positively or negatively influence one another (Brandtstädter, 1998; Silbereisen &
Lerner, 2007). Furthermore, plasticity within individual development, and among individuals and their ecologies, is viewed as a strength and opportunity in human development rather than as a liability. Regarding the role of plasticity in PYD, Lerner and Overton (2008) state:

Capitalizing on the strength inherent in all individuals because of the potential plasticity of their structural and functional attributes, the developmental scientist, in the service of increasing the probability of positive development, is interested in identifying how best to align the strengths of people with the resources for positive development present in their contexts—as both individual and context change (p. 247).

The Five Cs Plus One

A primary aim of PYD is to capitalize on the potential of youth; however, it is also necessary to translate this theoretical position to measurable outcomes and indicators. The “Five Cs” were developed as constructs of PYD theoretical foundations, which made for easier adaptation of PYD practices in community-based organizations and for research on outcomes as a result of the PYD orientation to human development (Lerner, Fisher, & Weinberg, 2000; Lerner, 2004; Roth & Brooks-Gunn, 2003b; Silbereisen & Lerner, 2007). Initial empirical studies have indicated that the Five Cs is a well-fitted model in early (Phelps et al., 2009) and middle adolescence (Bowers et al., 2010).

Although much of the literature on PYD discusses the “Five Cs”, a sixth C—Contribution—has been more recently hypothesized and viewed as a secondary construct that takes into account the manifestation of the other 5 Cs across time (Lerner, 2004; Silbereisen & Lerner, 2007). I am including this sixth C here because of its salience to YPAR, which will be discussed in more detail later in this chapter. Each of the six Cs are listed and defined in Table 3.
### Table 3

**Six Cs of Positive Youth Development**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>Positive view of one’s actions in domain specific areas: social, academic, cognitive, and vocational.</td>
</tr>
<tr>
<td>Confidence</td>
<td>An internal sense of overall positive self-worth and self-efficacy; one’s global self-regard, as opposed to domain specific beliefs.</td>
</tr>
<tr>
<td>Connection</td>
<td>Positive bonds with people and institutions that are reflected in bidirectional exchanges between the individual and peers, family, school, and community in which both parties contribute to the relationship.</td>
</tr>
<tr>
<td>Character</td>
<td>Respect for societal and cultural roles, possession of standards for correct behaviors, a sense of right or wrong (morality), and integrity.</td>
</tr>
<tr>
<td>Caring and compassion</td>
<td>A sense of sympathy and empathy for others.</td>
</tr>
<tr>
<td>Contribution*</td>
<td>Mutually reinforcing contributions to self and to family, community, and the institutions of civil society; manifestation of the other Cs across time.</td>
</tr>
</tbody>
</table>

*Based on Lerner (2004), Roth & Brooks-Gunn (2003b), and *Lerner et al. (2005); Silbereisen & Lerner (2007).*

### Developmental Assets

The alignment of individual and environmental strengths in the interest of promoting positive youth development was the impetus for the formation of the Developmental Assets model. Peter Benson and colleagues at the Search Institute in Minnesota first proposed the asset construct in 1990, then later refined it, to move positive youth development from theory to practice and to highlight specific contextual factors that facilitate youth development (Benson, 1990, 1997, 2002, 2003; Benson, Leffert, Scales, & Blyth, 2012; Benson, Scales, & Syvertsen,
The 40 assets included in the framework are aligned with PYD’s theoretical foundations to include internal (individual) and external (ecological) assets. Externally, these assets include: positive social supports, community empowerment of youth, healthy boundaries and expectations, and activities that promote youth constructive use of time (Benson et al., 2011). Internal assets include: a commitment to learning, a variety of social competencies, and positive identity formation (Benson et al., 2011).

Damon (2004) claimed the PYD orientation and developmental assets model goes further in promoting positive youth outcomes than vulnerability and resiliency perspectives because the latter constructs simply focus on youth responses to unfavorable circumstances. Conversely, he argued, PYD and developmental assets emphasize youth as intentional agents (Brandtstädtter, 1998, 1999) in adaptive self-regulation with the potential to grow from unfavorable circumstances and cumulatively build strengths through continuous individual-ecological relational experiences (Benson, 2007). As noted previously, this notion of a cumulative effect of strength-building, in both the personal and environmental contexts, is a cornerstone of PYD developmental assets and positive feelings of agency and self-efficacy (Benson et al., 2006). Furthermore, multiple studies have shown evidence for the additive indicators of asset-building strategies (Benson et al., 2011).

**PYD Perspective in Public Health**

Like many other disciplines, public health, health promotion, and prevention sciences have embraced PYD as a theoretical framework for research, program implementation, policy development, and even professional identity (Benson et al., 2006). PYD challenges traditional medical models, which historically have viewed health as the absence of disease, to think more
holistically about the person within their environment and their capacity for health promoting behaviors. In an overview of the framework, Benson and colleagues (2006) offered a description of the philosophical shift advanced by PYD approaches:

A number of scholars argue that the definition of developmental success most deeply entrenched in public policy and practice conceives of health as the absence of disease or pathology. In recent decades, the dominant framework driving federal, state, and local interventions with youth has been that of risk behaviors, including alcohol use, tobacco use, other drug use, nonmarital pregnancy, suicide, antisocial behavior, violence, and school dropout (Benson, 1997; Hein, 2003; National Research Council & Institute of Medicine [NRCIM], 2002; Takanishi, 1993). While positive youth development advocates readily accept that reductions in these health-compromising behaviors are important markers of developmental success, there is simultaneously a growing interest in defining “the other side of the coin”—that is, the attributes, skills, competencies, and potentials needed to succeed in the spheres of work, family, and civic life (p. 895).

There has been evidence of increasing application of PYD in public health resulting in positive outcomes. An early review of 25 PYD universal and selective program evaluations by Catalano and colleagues (2002) found significant improvements in alcohol and substance use, school misbehavior, aggressive behavior and violence, truancy, high-risk sexual behavior, and tobacco use. Additional recent study examples include a focus on adolescent substance use and violence (see Bonell et al., 2016 for review), mental health promotion (Parchment, Jones, Del-Villar, Small, & McKay, 2016), substance use and mental health for indigenous youth (see Antonio & Chung-Do, 2015 for review), aggression and violence (see Fagan & Catalano, 2015 for a review), and adolescent sexual and reproductive health (Gavin, Catalano, David-Ferdon,
similar to the limited number of empirical studies that examine protective factors in youth suicide, few studies address adolescent suicide in the United States from a PYD perspective. Those who have implemented and studied PYD-oriented prevention interventions have called for additional studies using this contextualized strengths-based approach (Allen, Mohatt, Fok, Henry, & Burkett, 2014; Catalano et al., 2002; Tingey et al., 2016; Wexler, Gubrium, Griffin, & DiFulvio, 2013; Wexler et al., 2015). The lack of PYD in adolescent suicide research offers the chance to answer this call. The advantage of this perspective in adolescent suicide prevention can be summed up in an oft-cited quote from Pittman and Fleming (1991) where they aim to reframe prevention science thinking when using a PYD perspective: “What is needed is a massive conceptual shift—from thinking that youth problems are merely the principal barrier to youth development to thinking that youth development serves as the most effective strategy for the prevention of youth problems” (p. 3).

**Integrating Social Ecological and Positive Youth Development Frameworks**

PYD is rooted in developmental systems theory which embraces the hallmarks of the systems perspective that is embedded in social ecological theory. Leaders in PYD have noted the influential work of Bronfenbrenner and the social ecological framework on the field’s philosophy of human development in an environmental context (Benson et al., 2006; Catalano et al., 2002; Lerner et al., 2005; Lerner & Overton, 2008). Similarities between the two frameworks are easily identifiable. First, both frameworks recognize the interconnectedness of individuals, their immediate personal relationships and environments, and broader societal contexts. Second, each framework is predicated on the interactions and processes that occur between individuals and their environments, including relationships with other individuals in those environments. In particular, these frameworks stress that the interactions are bidirectional with each having the
potential to impact the other. Third, the essential principles of both frameworks have been taken up by a number of disciplines related to public health. The interdisciplinary benefits of these approaches are apparent in a growing emphasis on the integration of developmental and social-ecological theory with models from public health, epidemiology, social work, sociology and developmental psychopathology in conceptualizing, designing and implementing preventive interventions (DHHS, 1998).

I contend that PYD supplements the explanatory nature of social ecological theory by providing a practical framework in which to apply core person-environment principles. Furthermore, PYD enhances the foundation of social ecological theory by focusing on the person’s strengths and capabilities through specific constructs that can be targeted in prevention interventions. And yet, having a comprehensive understanding of the social ecological perspective also aids in the effective implementation of PYD so that individual and community contexts and strengths are simultaneously targeted as outcomes and viewed as proximal processes that influence each other over time.

A study conducted by Atkiss, Moyer, Desai, and Roland (2011) provides an example of how these two perspectives have been integrated to address adolescent health issues, primarily pregnancy prevention, and food and nutrition education. Their study explored the efficacy of integrating the developmental assets model of PYD and the social ecological model in a Youth Health Action Board (YHAB). Structured qualitative interviews were conducted to understand YHAB member perspectives of the effect of their participation in YHAB on themselves and their community. Findings from interviews indicated that youth development was supported through protective factors such as (a) a commitment to learning demonstrated by academic motivation and school engagement; (b) positive values regarding personal responsibility for the care of their
community; (c) social competency, such as making new friends and conflict resolution; and (d) a positive identity, which was defined as a sense of control over oneself, in addition to self-efficacy in developing life goals and making healthy decisions. The study was limited in its assessment of other impacts as a result of the YHAB model, such as improvement in environmental assets or longitudinal effects on individual assets. The authors noted that additional study is needed for understanding the full effect of the integrated model, but also stressed future studies need to take into account the unique contextual factors present in different settings.

In another study, Christens and Peterson (2012) sought to expand on evidence of the mutually influential nature of social ecological and PYD models. Using items from multiple measures, they surveyed 629 high school students to examine whether:

- sociopolitical control, a key indicator of psychological empowerment, would arise from the same ecological support systems as other positive developmental indicators, and would mediate the impact of these ecological supports on, more proximally, the attainment of developmental assets and, more distally, the avoidance of mental distress and risky/problem behaviors (p. 626).

Results of their study validated previous research indicating that supportive ecological settings, such as family cohesion and social supports, are associated with individual well-being. Furthermore, Christens and Peterson (2012) were able to show that youth who experienced these supports also reported greater sociopolitical control and higher levels of self-esteem. They concluded empowerment, as measured through sociopolitical control, is a vital component of positive youth development. Furthermore, they noted the association between empowerment, supportive ecological settings, and positive developmental outcomes which, when viewed
cumulatively, provide a developmental cascade (Masten & Cicchetti, 2010) that promotes personal involvement and responsibility for the care of their community.

The two studies highlighted above demonstrated the interrelatedness of individuals and communities as identified in an integrated social ecological and PYD perspective. They emphasized the reciprocity between individuals and environments, as well as the processes that catalyze ongoing human development. They also exemplify how the addition of PYD to the social ecological framework helps to distill key constructs thought to promote positive influences between youth and their environments: youth agency, self-esteem, self-efficacy, and psychological empowerment. These constructs echo those described by the six Cs of PYD—competence, confidence, connection, character, caring and compassion, and contribution. They also align with findings that suggest youth empowerment in community health promotion is developed through youth-adult transactional processes that actualize youth potential by building self-esteem, confidence, and competence, and raising consciousness (Cargo, Grams, Ottozon, Ward, & Green, 2003). Figure 2 displays the constructs identified above as part of the integrated social ecological/PYD framework that I proposed for the present study.
Paradigmatic Assumptions

To understand the potential contributions of the social ecological and PYD perspectives in adolescent suicide research, it is necessary to first examine the philosophical underpinnings of the frameworks. As described in the previous sections of this chapter, social ecological theory and PYD assert two fundamental propositions: (1) people and environments continuously interact with and influence each other, and (2) person-environment experiences accumulated over time affect individual human development and functioning. At a basic level, these two propositions imply a paradigmatic assumption that the world and the individuals living in it are dynamic versus static; that the possibility for change is always imminent because a shift in one
can stimulate a shift in others. Additionally, it suggests the reality of one individual is not necessarily the same for another individual, even if their ecological contexts are the same. Furthermore, aside from potential power structures that prohibit it, individuals are inherently capable of shaping that reality and how they operate within it.

The continuous interplay between individuals, behavior, and environments described in social ecological and PYD frameworks is aligned with the constructivist philosophical worldview. The core ontological belief of constructivism is that people create meaning from interactions with others and the social world, which results in multiple realities based on each person’s unique situation and interpretation of social constructions (Hammersly, 2012; Neuman, 2011). Constructivist researchers view their role as helping to stimulate the deep exploration of “lived experience” and hidden meanings from the participant’s perspective and believe this can occur through direct interaction with the participant (Ponteretto, 2005). This means the research is more exploratory in nature and encourages the interpretation of complex perspectives in rich detail (Creswell, 2013). As such, a hypothesis with a narrow focus is not required prior to the start of the research, although study goals, a conceptual framework, and research questions are still needed to guide the deep exploration of the phenomenon under study (Maxwell, 2013).

Qualitative methodologies are often associated with the constructivist paradigm, but constructivist researchers are not beholden to only qualitative methods, nor to only constructivist worldviews. The critical-ideological paradigm accounts for the social environmental contexts associated with individual experiences, but it also broadens this basic belief to facilitate transformation of social inequities present in those contexts (Neuman, 2011; Ponteretto, 2005). Within this paradigm, research is conducted as a means to emancipate and empower marginalized populations so they are able to dismantle oppressive power structures (Ponteretto,
Individuals are engaged not only as research participants, but may also participate as co-researchers to foster the egalitarian and democratic principles of the critical-ideological perspective (Tolman & Brydon-Miller, 2001). Application of the critical-ideological paradigm is especially exemplified in participatory and action research approaches (Tolman & Brydon-Miller, 2001) where a variety of research methodologies may be used based on best-fit for understanding the issue and generating practical outcomes (Bradbury & Reason, 2008).

The interaction between participant and research promoted in constructivism, and practiced at an action-oriented level through critical-ideologicalism, is a marked departure from the positivist and postpositivist worldviews that have traditionally dominated medical sciences and psychology compared to other social sciences (Ponteretto, 2005). In essence, positivist ontology is grounded in a single reality and that the nature of this reality is most accurately examined through objective, empirical research methods (Ponteretto, 2005). It was originally developed as a means to remove religious doctrine as the only method for understanding the natural world and to build a value-free scientific enterprise for understanding the single “truth” of reality (Hammersley, 2012; Neuman, 2011).

My review of current adolescent suicide prevention research indicates the positivist perspective has held a primary position in the literature; however, this perspective is not sufficiently “moving the needle” in the prevention of adolescent suicides. Prevention strategies developed and measured within these philosophical frameworks continue to lack a holistic approach that resonates with the lived experience of youth. More importantly, these approaches have focused on solving the problem of suicidality within fixed environments and have underestimated youth potential to act with agency and to have influence on these environments
as a mechanism for generating supportive systems that serve as protective factors to reduce suicidal thoughts and behaviors.

**Implications for Adolescent Suicide Research**

The integrated social ecological/PYD perspective is supported by a critical-ideological paradigm with a strong constructivist foundation, which necessitates the use of innovative methods of research that are participatory and action-oriented, as well as provide a deeper understanding of youth behavior as more than a problem or deficit. This perspective can add value to existing positivist-based literature by engaging youth in suicide prevention research that extends beyond their involvement as a research participant or informant for describing youth perspectives on the reasons for suicide or experiences in a program being tested. It provides an opportunity to empower youth who are directly affected by this serious health issue to contribute to their own community and directly do something about it, an approach not typically seen within suicide prevention research. In addition, this approach may enhance our understanding of protective factors in youth suicide to expose novel program, policy, and research approaches, which has generally lacked within suicide prevention research.

Although not specific to adolescent suicide, Benson (2003) offers a poignant discussion of the consequences associated with an overreliance on positivist and deficit-based paradigms and how the lack of personal responsibility for the health and well-being of larger social environments, may be contributing to neutral or negative individual- and community-level outcomes.

In [the deficit-reduction] paradigm, research and practice are steered to naming, counting, and reducing the incidence of environmental risks (e.g., family violence, poverty, family disintegration) and health-compromising behaviors (e.g., substance use, adolescent
pregnancy, interpersonal violence, school dropout). This paradigm, it has been argued, dominates the strategies chosen to enhance child and adolescent health and has historically driven resource allocation in the favor of federal and foundation initiatives (Benson, 1997). The point here is not that deficit-reduction as a way of thinking and mobilizing action is misguided. But as a dominating paradigm, it may unintentionally enhance both the over-professionalization of care and civic disengagement. These processes may well be symbiotic. That is, civic disengagement and professionalized forms of addressing child and adolescent health may feed each other (p. 24).

He goes on to say:

...a culture dominated by deficit and risk thinking, by pathology and its symptoms. This shapes our research, our policy, our practice. It fuels the creation of elaborate and expensive service and program delivery infrastructures, creates a dependence on professional experts, encourages an ethos of fear, and by consequence, derogates, ignores and interferes with the natural and inherent capacity of communities to be community (p. 25).

Relevance of Youth Participatory Action Research

To avoid the pitfalls described by Benson (2003), multifaceted research methods are needed to understand and address the complexities of adolescent suicide and to develop comprehensive strategies for preventing it. I recommend the use of YPAR as an approach for implementing the core principles of the integrated social ecological/PYD framework in suicide prevention research. YPAR involves youth in the examination of issues that affect them so they can take leadership in finding solutions for those issues (Cammarota & Fine, 2008; London et al., 2003). YPAR is a form of participatory action research (PAR) and community-based
participatory research (CBPR) approaches (Kral & Allen, 2016), which have similar philosophical foundations and are becoming more intertwined as the fields evolve (Wallerstein & Duran, 2008). In short, these participatory approaches are defined by their commitment to build on the strengths in a community and equitably involve community members in all phases of the research process in order to design and conduct research that is relevant to the community and helps eliminate health and social disparities (Israel, Eng, Schulz, & Parker, 2013). In recent years, participatory approaches have been gaining ground in public health and are regarded for their usefulness in transforming research findings on complex health and social problems into actionable strategies for social change (Ahmed & Palermo, 2010; Israel et al., 2010; Minkler & Wallerstein, 2008; National Institutes of Health [NIH], 2011; Viswanathan et al., 2004).

YPAR’s contribution to participatory research approaches is its unique focus on youth as a marginalized population. In particular, YPAR aims to empower youth and believes in their capacity and agency to critically analyze ecological contexts, conduct research collectively, and to challenge systems that keep them from reaching their full potential (Cammarota & Fine, 2008). Cammarota and Fine (2008) note that:

Through participatory action research, youth learn how to study problems and find solutions to them. More importantly, they study problems and derive solutions to obstacles preventing their own well-being and progress. Understanding how to overcome these obstacles becomes critical knowledge for the discovery of one’s efficacy to produce personal as well as social change (p. 6).

The YPAR aims described above match those I identified in an integrated social ecological/PYD theoretical framework. The use of the YPAR approach in adolescent suicide prevention allows for the operationalization of key social ecological and PYD principles in a
real-world setting. Furthermore, except for a limited number of studies, youth voice has been primarily excluded in suicide prevention research and when it is present it is often as participants in a research study. Researchers in suicide research have noted the need for additional perspectives in recent years and point to participatory approaches as a means to simultaneously consider and address the unique contexts in which people live and to empower individuals to affect those contexts as a means for their own health outcomes, which can then impact the broader community-level outcomes (Kral et al., 2009; Kral et al., 2012; Miller et al., 2009; Wexler & Gone, 2012; White, 2014). Therefore, a YPAR approach grounded in a social ecological/PYD framework will help to fill a current gap in the adolescent suicide prevention literature. I assert this robust design takes into account the full range of risk and protective factors associated with suicide, fill the need for multilevel approaches in suicide prevention, and contribute the lived experience of suicide through the voice of youth.

**Conclusion**

Research has shown a multitude of individual, familial, and social ecological factors influence adolescent suicidal thoughts and behaviors. Great strides have been made in adolescent suicide prevention research, policies, and programs; however, evidence on the efficacy of these approaches has been mixed. As the field of public health moves to include social ecological perspectives that recognize the influence of individual to broader societal and historical contexts, there is also a need for wider implementation of the PYD perspective on issues that affect youth. An advantage of PYD is the focus on the strengths and potential of youth, and the aim to catalyze that potential to help in their own development as an individual while simultaneously contributing to the well-being of society. Therefore, an integrated social ecological/PYD framework will help to critically observe and examine the vast complexities of suicidality, but
will also empower youth to take direct action on those issues. In this chapter, I have proposed the use of YPAR as an approach for operationalizing these frameworks because of its focus on youth empowerment, efficacy, agency, and capacity for action. In particular, YPAR can contribute fresh and youth-driven perspectives to the adolescent suicide prevention literature. Further discussion YPAR applications in adolescent suicide prevention research is discussed in the next chapter.
Chapter 4: Research Methodology

YPAR engages youth in the examination of issues that affect them so they can take leadership in finding solutions for those issues (Cammarota & Fine, 2008; London et al., 2003). I used this change-oriented approach in the present study because of the potential positive impact on both individual youth development and the social contexts in which they interact as a means to prevent suicide. In this chapter I present a thorough overview of the YPAR approach and discuss how it can contribute to adolescent suicide prevention research. I also discuss how mixed methods research that combines quantitative, qualitative, and arts-based methods can be used to understand the impact of YPAR on youth development and experiences engaging in research for social change. The last portion of the chapter is devoted to the current study and provides details about: (1) the study design; (2) the study context and sampling procedures; (3) data collection, analysis, and integration; and (4) procedures for ensuring research quality.

YPAR and Adolescent Suicide Prevention

Youth Participatory Action Research (YPAR) is a specific type of collaborative research that engages young people in the examination of the world around them. Like other participatory approaches, YPAR is rooted critical theoretical frameworks that encourage people to analyze their social contexts, identify social justices, and challenge injustices that impede their development (Cammarota & Fine, 2008; Foster-Fishman, Law, Lichty, & Aoun, 2010; Rodriguez & Brown, 2009) and ability to become what Paulo Freire (1993) calls “fully human”. YPAR is intended to develop more than just research skills for youth; it is a pedagogy for youth to acquire knowledge about their social contexts so they can take action and, more importantly, believe in their own power to enact change (Cammarota & Fine, 2008).
YPAR is a form of participatory action research, which has developed from a number of theoretical and practical traditions, including pragmatic, problem-solving traditions at one end of the continuum and critical, emancipatory traditions at the other end (Wallerstein & Duran, 2008). As such, participatory action research spans a variety of academic disciplines and fields (Brydon-Miller, Greenwood, & Maguire, 2003)—education, healthcare, environmental health, and community development are just a few examples—and has been implemented using different frameworks and names (Israel et al., 2013; Wallerstein & Duran, 2008). Some of these include participatory action research, community-based participatory research, and practitioner action research (Ahmed & Palermo, 2010; Dick, 2015; Kral & Allen, 2016; Wallerstein & Duran, 2008). Although names may vary according to discipline or theoretical tradition, the major tenets of equitable power-sharing, shared decision-making, and co-generation of knowledge for social action are present across the frameworks and becoming more intertwined as the fields evolve (Minkler & Wallerstein, 2008; Roman Isler & Corbie-Smith, 2012; Wallerstein & Duran, 2008). Given these similarities, hereinafter I will refer to these approaches generally as PAR. To fully examine the potential of YPAR in adolescent suicide prevention, first it is necessary to understand the fundamental principles of PAR.

**Key Principles of Participatory Action Research**

Participatory action research is an approach or orientation to research that focuses on the well-being of individuals and communities through the use of participatory and democratic practices that promote social change (Burns, 2007; Reason & Bradbury, 2001; Reason, 2003). The approach integrates theory, practice, and action in iterative cycles by incorporating reflection and examination of the action’s impact as a dynamic system of knowledge generation (Brydon-Miller et al., 2003; Burns, 2007; Dick, 2015; Reason & Bradbury, 2001). Unlike positivist
approaches that purport scientific inquiry is only possible through objective and value-free methods driven by academicians, PAR embraces the belief that humans develop in a world that is socially constructed and, therefore, knowledge should be collectively and equitably constructed among all individuals (Brydon-Miller et al., 2003). More specifically, PAR is firmly planted in a philosophical stance that assumes the synergy between academic and experiential knowledge leads to a more rigorous understanding of a social problem and the ability to actively and effectively address the problem (Balazs & Morello-Frosch, 2013; Brydon-Miller et al., 2003; Wallerstein & Duran, 2008).

In recent years, participatory approaches have been gaining ground in public health and are regarded for their usefulness in transforming research findings on complex health and social problems into actionable strategies for change (Ahmed & Palermo, 2010; Israel et al., 2010; Minkler & Wallerstein, 2008; NIH, 2011; Viswanathan et al., 2004). The key principles of PAR outlined and described in the following sections are based on the work of Israel and colleagues (2008, 2013) because they specifically apply to PAR within the field of public health. The discussion of these principles provides a useful foundation for considering the contributions of YPAR to adolescent suicide prevention, an issue being studied and addressed in a variety of public health-related disciplines. The nine PAR principles:

1. acknowledge community as a unit of identity;
2. build on community strengths and resources;
3. facilitate collaborative and equitable partnerships in all phases of research;
4. foster co-learning and capacity building among partners;
5. integrate research and action for mutual benefit;
6. focus on local contexts for improved health and ecological perspectives;
7. involve systems development using a cyclical and iterative process;
8. use broad and inclusive dissemination strategies; and
9. focus on process and commitment to sustainability.

Community as a unit of identity. This refers to the sense of belonging individuals have with others based on common values, norms, interests, or other socially created domains. It does not specifically refer to geographic locations; however, it may also apply to those settings depending on personal identification and the focus of a particular study. In the case of YPAR, being a “youth” is a unit of identity because they share a specific stage of development and involvement in broader social contexts, such as schools and family life.

Community strengths and resources. PAR approaches value and seek out the strengths inherent within the identified community in order to build upon them to address members’ health concerns. This may include skills, assets, and resources that are contributed by individuals, networks, and organizations. The strengths-based approach does not ignore the challenges encountered by the community, but instead acknowledges those challenges and the community’s capacity to address them rather than viewing them merely as deficits.

Collaborative and equitable partnerships. As a cornerstone of PAR, equitable partnerships intentionally focus on involving community members in all phases of the research process, including applying the findings to address the identified health concern. Furthermore, community members have shared decision-making power over the research and application of the findings in their community. This is an important aspect of PAR because, historically, positivist approaches involved doing research on communities rather than doing research with communities and thereby perpetuated healthcare inequalities. PAR directly confronts these
inequalities through collaborative and equitable partnerships based on trust, empowerment, and mutual respect.

**Co-learning and capacity building.** The PAR approach acknowledges that all members of the research team bring skills and expertise that can benefit the scientific enterprise and translation of findings in the real world. Not only are existing skills and knowledge recognized as valuable contributions, but the co-generation of new knowledge on the identified issue is a primary aim of PAR as a means to conduct research that is more meaningful, relevant, and practical.

**Research and action for mutual benefit.** As indicated in the previous sections, one of the reasons researchers utilize PAR is to benefit science by incorporating the lived experience, access, and expertise of community members. However, PAR also needs to have a direct benefit on the community which requires dissemination and action beyond traditional means, such as academic books and journals. In PAR, research is pragmatic and intertwined with taking action through the implementation of interventions, policies, and practices. Ideally, partnerships engage in the process of research and action iteratively over time to test new strategies and continue addressing new problems as they emerge. Building the community’s capacity to engage in these cycles of research and action are a critical aim of PAR.

**Local contexts for improved health.** PAR is rooted in the social ecological framework and aims to address health concerns identified by the community. As such, it views these concerns in a broad context to consider individual, familial, organizational, and societal factors that may be having an impact. It is common for large PAR initiatives to be interdisciplinary because of the expansive view afforded by the social ecological perspective.
Cyclical and iterative process. PAR engages partners in all phases of the research process. Ideally, this includes assessment of community needs and problem identification which leads to intervention development and testing. Throughout these stages, all partners are involved in the research design, recruiting participants, data collection, data analysis and interpretation, dissemination, and the development of activities to take further action.

Broad and inclusive dissemination strategies. At its core, PAR is about conducting research to inform the collaborative development of practical solutions to concerns identified by the community. Research findings are shared with partners as well as other potential stakeholders using formats that are understandable, accessible, and useful to those audiences. Furthermore, partners should be involved in dissemination activities, such as being co-authors of publications and co-presenters at meetings and conferences.

Focus on process and commitment to sustainability. Equitable partnerships are central to PAR; therefore, establishing and maintaining trust among group members is an important aspect of the work. Compared to conventional methods of research that are driven by academicians and have previously disenfranchised communities, the multiple perspectives involved with PAR make group processes and functioning a critical component of the work (Wallerstein et al. 2008) and should be considered as intermediate outcomes for producing long-term research outcomes (Lindquist-Grantz & Vaughn, 2016). The cycles of research, reflection, and action in PAR can result in large-scale community-level outcomes taking a long time to achieve; therefore, sustaining the partnership and engagement in the process is crucial.

YPAR as a Unique Approach

YPAR as praxis. YPAR builds on the foundations of PAR to involve youth as the community of focus. Young people are viewed as experts and this “insider expertise” (Ozer,
2016, p. 266) is channeled not only to promote youth voice on issues, but also to build their capacity to take action and transform communities (Rodriguez & Brown, 2009). YPAR is more than an approach for simply involving youth in a research project; Cammarota and Fine (2008) describe it as being “explicitly pedagogical with implications for education and youth development” (p. 6). In addition to believing in the inherent strengths youth possess, a pivotal aim of YPAR is teaching youth how to critically examine issues that affect them, to empower them to believe in their ability to make a difference, and to develop skills that help them successfully address those issues (Cammarota & Fine, 2008; Rodriguez & Brown, 2009). As described by Fine et al. (2007), YPAR is more than an approach to conducting research, it is a praxis to develop “activist scholars of the next generation” (p. 806) as a means to improve the well-being of communities.

**YPAR to improve translational science.** A key proposition of YPAR is that youth who are developed as positive agents of change are likely to “contribute to creating health programs and services that can better meet the needs of young people while simultaneously expanding their knowledge and skills, therefore increasing their capacity to engage in more healthful decision making” (Suleiman et al., 2006, p. 126). This interaction between individuals and social contexts to affect community well-being is one of the most powerful aspects of PAR approaches. Researchers have argued that co-researcher models promoted through PAR improve the rigor, relevance, and reach of scientific inquiry, especially when community members are engaged in all phases of the research process—from conceptualization and design to data collection, analysis, interpretation, and dissemination (Balazs & Morello-Frosch, 2013; Rodriguez & Brown, 2009; Ozer, 2016; Vaughn, Jacquez, Lindquist-Grantz, Parsons, & Melink, 2016). This level of involvement is especially important in issues affecting youth because they have
traditionally played a marginal role in the scientific enterprise (Rodriguez & Brown, 2009; Langhout & Thomas, 2010). When research is conducted on youth rather than with youth, and involves topics that youth may be hesitant to discuss or have observed by an adult, data quality and validity may be compromised (Ozer, 2016). Additionally, there may be issues with the validity of data when youth perceptions of a given phenomenon are interpreted through an adult lens that does not resonate with the youth experience (Ozer, 2016). Furthermore, youth involvement in the dissemination of findings in and outside of academia present opportunities to reach a wide range of audiences who are able to utilize findings to affect change at a multiple levels (Mirra et al., 2016). Burns (2007) refers to this kind of multisystem change as “systemic action research” and argues that the cumulative nature of this approach is the most effective way to collectively impact outcomes related to complicated health and social issues.

Evidence of the potential impact of YPAR on scientific knowledge, as well as programs, policies, and practices has been described in the literature. For example, London and colleagues (2003) discussed how a variety of youth-led research projects collected data that would have been inaccessible to and misinterpreted by adult researchers, and how these data were used to (a) promote community dialogue; (b) enhance partnerships among youth and key organizational stakeholders; and (c) transform juvenile justice programs, funding, and city policies. In another example, Suleiman, Soleimanpour, and London (2006) used their YPAR experience in seven school-based health centers to link the processes of YPAR to benefits of engaging youth in health research and implications for adolescent health and related outcomes. The authors noted that the YPAR projects engaged stakeholders with opposing viewpoints in dialogue, and resulted in supportive relationships between youth and adult allies to create improvements in health center programming and evaluation activities. As a final example, in a comprehensive book on
processes and lessons learned from a 15 year YPAR endeavor in Los Angeles schools, Mirra, Garcia, and Morrell (2016) discussed how youth were able to serve as agents of change by using their research to involve others in community improvement. By extending the reach of their research, youth influenced the creation of new community education programs, professional development for teachers, equal education rights events, and advocacy to stop unjust punitive actions against students. Although these are only a few of the instances in which YPAR has been utilized, they exemplify the potential benefits of using this approach to address complex issues.

Using YPAR in Adolescent Suicide Prevention Research

YPAR has primarily been used by youth-focused community organizations and in school-based settings, but has addressed broad social issues, such as race and privilege, educational injustice, different types of violence, and access to quality healthcare (Fine et al., 2007). Despite youth involvement in research being successfully implemented with a variety of topics, few published examples have addressed issues related to mental health (Jacquez et al., 2012). One of the most prominent examples of using PAR in suicide research is the work of Michael Kral and colleagues (Kral, 2013; Kral et al., 2009; Kral et al., 2011; Kral et al., 2012). Kral and his academic and non-academic co-researchers have worked with Inuit youth to address the high rates of suicide in their community using a participatory approach focused on bringing culturally-centered perspectives to the forefront. They argue this approach has enabled them to collect and interpret data in a more culturally relevant manner and develop strategies that are tailored to the needs of the Inuit community so they are more effective than traditional one-size-fits-all medical models.

Other scholars have also noted that traditional methods of knowledge generation lack the contextualized perspective that is embraced in participatory methods and, therefore, solutions
have not typically considered the multiple individual and systemic realities in those communities. This has been especially noted in Indigenous communities in Canada and the United States where historical and sociopolitical realities influence youth suicide in ways that may not be present in other communities (Kirmayer, Simpson, & Cargo, 2003; Wexler et al., 2015; Wexler & Gone, 2012; Wexler et al., 2013). However, beyond these examples, youth have essentially been excluded from the development of suicide prevention programs and research (White, 2014; White et al., 2012). This is particularly problematic in an era where evidence-based programs are promoted in adolescent mental health, but methods for examining the effectiveness of those programs does not account for unique contextualized factors in local communities (Kirmayer, 2012). Furthermore, this positions youth as the passive recipients of expert knowledge rather than involving them as active agents in solving the adolescent suicide problem, which could result in more of the same mixed evidence for the effectiveness of prevention strategies (White, 2014; White et al., 2012).

Suicide can be a difficult topic to discuss, especially for youth, which is a population who may be hesitant to report concerns about themselves or friends to an adult or be reluctant to receive treatment. Even when prevention strategies have targeted youth suicide behaviors such as help-seeking or engagement in services, with only a few exceptions, results have not been overwhelmingly positive. Therefore, an additional approach to understanding and addressing adolescent suicide is needed. Implementing YPAR with an integrated social ecological/PYD framework fills a current gap in adolescent suicide prevention. It also incorporates youth perspectives beyond participation as a research subject by building their capacity to contribute to our understanding of adolescent suicide prevention within the local context and to provide another level of action to supplement formal services provided by community organizations and
hospitals. Furthermore, I assert the knowledge that is generated through the YPAR process could help to embed discussion of mental health and suicide prevention in youth culture so it builds a cumulative effect of youth being more likely to seek help when they have a concern.

**YPAR and Youth Development**

Scholars have made a case for increased youth involvement in research, and community and organizational development in recent years (Irby, Ferber, & Pittman, 2001; London et al., 2003; White, 2014). Regarding adolescent suicide prevention, YPAR provides an opportunity to understand suicidality and prevention strategies from a vantage point that previously has been limited; however, it is also necessary to understand how using the YPAR approach can be useful in addressing adolescent suicide prevention. This understanding could also lend itself to other adolescent public health topics in the future. In this section, I will provide an overview of what we currently know about the effects on YPAR-involved youth and implications for future research.

**What We Know About YPAR**

YPAR is becoming a more common approach to research in educational and community-based settings; however, Fine, Torre, Burns, and Payne (2007) suggest that it must embody four critical elements in order to avoid the potential for being too shallow. These elements include: “deep participation by youth in the fundamental design of the project; broad range of differences embodied by youth and adults; democratic practices in place and always in reflective check; and actions that are strategic” (p. 826). This means these research partnerships need to include shared decision-making between youth and adults, and provide youth with opportunities for social action while conducting the project as a means to keep them actively engaged (Cargo et al., 2003; Nichols, Anucha, Houwer, & Wood, 2013; Suleiman et al., 2006). Youth also need the
adults working with them to be allies in their process of discovery, help them to develop realistic
timeframes for their work, and prepare them for potential challenges throughout the process as a
means to develop concrete research skills (Suleiman et al., 2006). This involves the researcher
taking on multiple roles—such as facilitating, teaching, mentoring, and providing feedback—in
addition to creating a social climate that is respectful, encouraging, caring, and views the youth
as being a valuable member of the community (Cargo et al., 2003).

The above guidelines provide a description of the ideal conditions for using YPAR, yet
those who have used the approach know the work can be as challenging as it is rewarding. Some
of the documented challenges have included an overall lack of engagement among youth or the
academic partner, limited resources to support the work, and time constraints (Chen, Poland, &
Skinner, 2007). Partnerships may also experience challenges if they treat youth simply as
subjects to be investigated (Jacquez et al., 2012) or if they are heavily involved in the research
process but are overwhelmed with the project demands and concerned about disappointing their
partners (Chen et al., 2007). Although only briefly discussed here, these examples show the
careful balance that is needed when using a YPAR approach and that attention to processes
within the partnership are just as important as the research itself if youth development and long-
term research outcomes are going to be achieved.

Due to the many factors that must be considered when engaging community members as
partners in research, scholars are still trying to fully understand the impact of participatory
research approaches, including YPAR. Researchers who use these approaches continue to call
for studies that examine the actual processes associated with participatory methods and their
effect on outcomes (Brugge, et al., 2010; Flicker, 2008; Ozer & Douglas, 2015; Sandoval et al.,
2012; Wallerstein et al., 2008). For example, partnership processes such as relationship-building,
trust, communication, decision-making, capacity-building, and knowledge generation, are considered key components of participatory research approaches (Wallerstein et al., 2008; Roman Isler & Corbie-Smith, 2012); however, there is limited understanding of how these components impact long-term population-level outcomes or intermediate outcomes (Jagosh et al., 2015; Roman Isler & Corbie-Smith, 2012; Viswanathan et al., 2004). Furthermore, academicians have noted the need to address questions about the sustainability of positive effects as a result of participatory research approaches (Flicker, 2008), yet these approaches tend to be locally-based with limited or no access to a control group that allow for rigorous examination the full impact of the approach (Ozer & Douglas, 2013). With this said, recent research has supported PAR conceptual models that suggest key participatory processes serve as intermediate outcomes and that they have long-lasting benefits to the partnership and ultimately impact the well-being of the community (Jagosh et al., 2015; Lindquist-Grantz & Vaughn, 2016).

Within the context of YPAR, a long-term outcome is the change in societal inequalities or health disparities; however, youth development is the driver of this change and serves as an intermediate outcome that builds the foundation for positive community-wide impact that can take much longer to achieve (Berg, Coman, & Schensul, 2009; Suleiman et al., 2006). As I described previously, positive youth development as embodied in YPAR contains four key constructs, including: empowerment, self-esteem, self-efficacy, and action for social change (Cammarota & Fine, 2008; Cargo et al., 2003; Ozer & Douglas, 2013). While each of these constructs is supported by a number of elements, these are the primary goals, or intermediate outcomes, of YPAR within a broader social change agenda.

Existing studies on YPAR and youth development are showing some positive results, even if there are a limited number of studies. Collaborative processes and the capacity-building
principles of YPAR have resulted in youth reports of increased self-efficacy (Berg et al., 2009; Suleiman et al., 2006) and believing they have the capacity to affect change and improve their personal quality of life (Cargo et al., 2003; Flicker, 2008; Suleiman et al., 2006). Some of these personal benefits have included the ability to obtain housing and return to school or work (Flicker, 2008), and a reduction in 30-day marijuana use (Berg et al., 2009). In one of the few experimental studies of YPAR, there was a modestly significant difference between youth participating in a school-based YPAR class and those in a traditional “direct service youth development” class regarding participatory behavior, socio-political skills, and motivation to influence their schools and communities (Ozer & Douglas, 2013). However, the study found no significant effects for perceived control at school or self-esteem.

As YPAR becomes more widely used, it is necessary to understand its full impact, particularly in the area of youth development, in order to test the critical theoretical underpinnings of the approach. Many studies involving youth as research partners provide anecdotal evidence of youth development as a result of the participatory process, but few actually assess youth development in order to explain the full effect of their involvement, especially as it relates to the tenets of positive youth development theory (Vaughn, Wagner, & Jacquez, 2013). Additionally, because it can be difficult to discern YPAR’s impact on community-level outcomes, it is necessary to understand how individual development mediates long-term effects (Morrell, 2008). Although youth involvement in social change efforts has been promoted as a powerful approach, additional studies are needed to understand the process and impact on youth development when it is practiced in a variety of community and organizational contexts (Irby et al., 2001; London et al., 2003). This is especially true in adolescent suicide prevention research where participatory approaches are new and necessitate a rationale for their
usage. In Figure 3 I offer a visual depiction of how PYD is embedded within YPAR and their relationship to the social ecological model in order to guide further study of this approach.

Figure 3. YPAR approach within an integrated social ecological/PYD theoretical model.

YPAR and Youth Development: The Utility of Mixed Methods Research

As indicated in previous research, understanding a complex problem like adolescent suicide is no easy feat. I have argued for the use of YPAR to foster a deeper exploration of the topic from a youth perspective; however, the additional layer of understanding how the YPAR approach contributes to youth development to enhance the rigor, relevance, and reach of adolescent suicide prevention research further complicates this task. Thus, a methodology that can hold up to the multilayered aspects of participatory research is warranted.
I assert that mixed methods research that combines quantitative, qualitative, and arts-based methods is useful for studying the impact of the YPAR approach on youth development and experiences engaging in social change research, particularly related to adolescent suicide prevention. Each of these methodologies provides unique contributions to result in a holistic analysis of the YPAR approach from multiple perspectives. For instance, quantitative methods, which are generally linear, focus on observable, numerically measurable attitudes, behaviors, and traits based on pre-determined constructs and variables (Plano Clark & Creswell, 2015). Conversely, qualitative methods are more inductive, rely on the researcher as the instrument, and use a flexible structure that allows study ideas to emerge from interactions with individuals; thus, findings are often more descriptive and narrative than in quantitative methods (Maxwell, 2013). Furthermore, arts-based methods expand on qualitative methods to provide a different medium in which participants can more deeply communicate with the researcher the multiple meanings of their situation, perspective, experiences, and concerns (Barone, 2008; Coemans, Wang, Leysen, & Hannes, 2015). The work of Michael Eales is an example of arts-based research that has been used to study personal experiences and generational aspects of suicidality (Eales & Cutcher, 2015).

The methodological definitions highlighted above provide a concise orientation to the different methodologies that I deem to be valuable in the study of YPAR for adolescent suicide prevention. However, my primary aim in the following sections is to provide an overview of mixed methods research and rationales for using mixed methods to understand the use of the YPAR approach in the current study.
Overview of Mixed Methods Research

The pragmatic underpinnings of PAR align with those of mixed methods research, which I define as the integration of at least two methodologies—quantitative, qualitative, or arts-based—within all phases of a research study in order to provide a more comprehensive understanding of a research problem (Creswell & Plano Clark, 2007; Greene & Caracelli, 1997; Plano Clark & Ivankova, 2016). Like PAR, mixed methods research straddles paradigms of objectivity valued in quantitative methodologies and notions of social constructivism regarded in qualitative and arts-based methodologies, which is why it has been referred to as the third research paradigm (Creswell, 2015; Johnson & Onwuegbuzie, 2004). Although mixed methods research has been gaining ground within social and health science disciplines in recent years (Creswell, 2015), researchers continue to examine the application of integrated paradigms or perspectives in the field and how they may be applied to individual research studies (Shannon-Baker, 2016). At the very least, however, in “working the hyphen”¹ of these paradigms researchers acknowledge that a single methodology cannot fully capture the phenomena or solutions often addressed social behavioral research (Greene & Caracelli, 1997; Tashakkori & Teddlie, 1998). Therefore, the integration of methods that effectively measure and explain the complexities of these issues, including the environments in which they develop, are necessary as we advance scientific inquiry (Plano Clark & Ivankova, 2016; Hesse-Biber & Johnson, 2013) and put that knowledge into practice (Dick, 2015).

¹This phrase was used by Michelle Fine (1998) to describe the Self-Other hyphen in qualitative research. She used it to write about researchers interested in “unpacking the notions of scientific neutrality, universal truths, and researcher dispassion” (p. 131).
Rationale for Using Mixed Methods Research

Plano Clark and Ivankova (2016) have put forth a conceptual model for employing the social ecological perspective in mixed methods research. Through this model they posit that research occurs amongst dynamic relationships between individuals and various personal, interpersonal, and broader social contexts that influence, and are influenced by, the research process. They argue that the integration of multiple research methods allows for greater understanding of the nuances amongst individuals and these various environments so that solutions to problems are more comprehensive and relevant to the lived experience. This recognition of multiple influences on an identified research problem resonates with the social ecological perspective used in the present study.

The transformative approach to mixed methods research further extends this conceptualization to explicitly employ a critical theoretical lens to social behavioral problems (Mertens, 2007), which mimics the key YPAR principle of engaging youth in critical analysis of issues that affect them. Using the terminology of Rittel and Webber (1973), Mertens (2015) refers to problems “that involve multiple interacting systems, are replete with social and institutional uncertainties, and for which only imperfect knowledge about their nature and solutions” (p. 3) as wicked problems. She argues that mixed methods research is a more suitable methodology than a single methodology for addressing wicked problems because it can offer both the breadth of data offered in larger quantitative studies and the depth of understanding through qualitative data in order transform communities through action and social justice (Mertens, 2015).

Based on findings from my review of the literature, I contend that adolescent suicide is a wicked problem in the United States that has been largely limited by the use of a single methodology and the exclusion of youth in research and problem solving. There is a need for
greater use of mixed methods in suicidology, both as a means for understanding the complicated social ecological layers of suicidality and to evaluate collaborative and multidisciplinary prevention strategies (Kral et al., 2012). Furthermore, there is a natural synergy between participatory and mixed methods research because they are “inclusive of the different epistemological perspectives and skills that researchers and other stakeholders contribute to the study design process” (Plano Clark & Ivankova, 2016, p. 116). Models for incorporating mixed methods within collaborative partnerships have been used successfully, not only as a means to examine a specific health or social issue, but to examine transformative processes involved in participatory research (Lucero et al., 2016; Nastasi, Hitchcock, & Brown, 2010).

There are several advantages of utilizing mixed methods to examine the implementation of YPAR and how it impacts youth development. The major mixed methods research rationales outlined by Plano Clark and Ivankova (2016) provide a framework for understanding the advantages of integrating methods. The mixed methods rationales that apply to the current study include:

1. offsetting strengths and weaknesses;
2. triangulation;
3. complementarity; and
4. social justice.

I discuss the application of each of these rationales in the study of YPAR and youth development in the following sections.

**Offsetting strengths and weaknesses.** The integration of multiple methodologies enhances the rigor of conclusions as the strengths of one methodology can help to balance the weaknesses in another methodology and vice versa. For example, quantitative data can help to
provide generalizable results because of typically larger sample sizes, but qualitative data can provide more descriptive information about the phenomenon being studied. Furthermore, arts-based data can offer a creative way to generate self-consciousness, for the participants as well as the researcher (McNiff, 2004). In the study of YPAR and youth development, quantitative data may be useful for measuring the impact of the approach on youth development constructs, but qualitative and arts-based approaches may help to provide a descriptive understanding of youth experiences in YPAR and the implementation of participatory processes in an adolescent suicide prevention project. Due to the implementation of YPAR within a local context, sample size can be a potential concern in the collection of quantitative data; therefore, in this circumstance, qualitative and arts-based data may help to offset quantitative data limitations in studies of YPAR.

**Triangulation.** Triangulation of multiple perspectives was originally proposed by qualitative researchers as a means to develop more valid conclusions about a phenomenon (Denzin, 1978; Lincoln & Guba, 1985). Unlike qualitative research where different methods are used but employed under a single methodology, mixed methods involves the integration of methods within multiple methodologies to provide a comparison of results and identify potential discrepancies. Thus, the argument for triangulation in mixed methods is the ability to reach conclusions that are more accurate and credible; therefore, strengthening confidence in the research results. Triangulation in YPAR is pertinent because of the potential for diverse perspectives on the participatory process and effects on individual development. By triangulating results of quantitative youth development measures, qualitative understandings of YPAR implementation and group processes, and arts-based explorations of youth experiences, a more
valid examination of YPAR can be conducted and contribute to our understanding of the approach.

**Complementarity.** In mixed methods research, complementarity refers to the integration of multiple methodologies to provide a more complete understanding of the phenomenon being studied. It is about viewing the phenomenon from different angles not only to understand what is happening, but why and how it is happening. This is considered an important contribution of mixed methods research because it provides conclusions that are more meaningful and that can address issues more holistically. Complementarity in the study of YPAR is important due to the dynamic nature of the approach and the multiple layers involved in its implementation. Calls for further study of YPAR necessitate a complete understanding of its impact on youth development and experiences, particularly in relationship to adolescent suicide prevention in a community-based setting. This may provide a significant contribution to the field of adolescent suicide prevention, as well as YPAR.

**Social justice.** The social justice rationale is receiving increased attention in the field of mixed methods research and is particularly poignant for PAR approaches (Plano Clark & Ivankova, 2016; Ivankova, 2015). This rationale explicitly addresses critical theoretical perspectives and the application of real-world solutions that are contextualized and community-specific (Ivankova, 2015). Not surprisingly, this rationale is closely aligned with the study of YPAR and its effect on youth development. The theoretical and methodological positions presented in this chapter offer a full articulation of this rationale and its utility in adolescent suicide prevention research.
Implications for Research

Despite the benefits I have presented for using mixed methods to understand the impact of YPAR as a strategy for adolescent suicide prevention, there are challenges to conducting mixed methods research. Some of these challenges include the length of time needed for incorporating multiple methods in a single study, researcher skills in using multiple methodologies, and integration of the multiple methods, including the timing of integration and priority given to each method (Creswell & Plano Clark, 2011). Furthermore, mixed methods simply may not be appropriate for all research questions and problems, and should only be used if it fits the research questions or purpose (Creswell, 2015). With that said, mixed methods can be particularly useful in efforts that contain multiple stages, such as the development of interventions followed by evaluation of those interventions (Creswell, 2015; Ivankova, 2015).

A dominant theme throughout the rationales for using mixed methods research is the ability to obtain data that are higher quality and more accurately reflect different facets of complex phenomena. Advocates of mixed methods research have argued this is a strength of the methodology and that viewing it within a social ecological perspective further increases the impact on scientific rigor by considering the influences of multiple social systems, including cultural influences, in addition to individual factors (Plano Clark & Ivankova, 2016; Ivankova, 2015). These assertions within mixed methods research complement a prominent claim made by proponents of PAR approaches, that PAR promotes research that is more rigorous, relevant, and within the reach of key stakeholders. The synergy between mixed methods and PAR has the potential to create a scientific powerhouse for research designed to be contextualized and pragmatic, which may explain why leaders in both disciplines are calling for further study of their combined usage and application in the field (Creswell, 2016; Ivankova, 2015; Kral et al., 2012; Lucero et al., 2016).
Although the study of YPAR processes and impact on youth development are not intended to have an influence on the development of this joint methodology, it speaks to the inherent interaction between PAR and mixed methods and the benefits of using both to understand this multidimensional issue. Mixed methods can be used to understand the summative impact of YPAR on youth development, but it is also a practical tool for formative evaluation of YPAR processes. As such, the flexibility of the methodology is particularly useful for documenting and informing YPAR throughout all stages of implementation. The need for methods that can be sustained over long periods of time and understand individual impacts on key development constructs, as well as participant perspectives on experiences in participatory research, would be difficult for single methodologies to capture alone.

**Present Study**

In this study of youth development in YPAR, I used a concurrent mixed methods design that incorporated quantitative, qualitative, and arts-based methods. A concurrent design involves the implementation of multiple methods as separate strands with integration occurring after data from each strand is analyzed independently (Plano Clark & Ivankova, 2016). This allows each strand to validate the other in order “to produce a more comprehensive understanding of the research problem” (Plano Clark & Ivankova, 2016, p. 120). With each of the strands being completed simultaneously, a concurrent design is considered to be less time and cost intensive compared to sequential designs where one strand is informing the other (Creswell & Plano Clark, 2011; Morse & Niehaus, 2009).

Later in this section I discuss the specific methods of data collection and analysis conducted in the current mixed methods study, as well as how the findings from each method were merged to provide a complete understanding of youth development in YPAR for suicide
prevention. However, first, I discuss the context in which the study took place. YPAR, like other participatory research approaches, is tailored to the setting in which it is being implemented and takes into account the unique factors associated with those individuals and their community. Although the study focuses on youth development versus the details of YPAR implementation in this setting, it is important to have a cursory understanding the membership and participatory process as a foundation for understanding study findings. In addition to providing a description of the study context, I discuss my role in both the implementation of YPAR and as the lead investigator in this study.

**Study Context**

The Youth Council for Suicide Prevention (YCSP) was initiated in 2013 by Cincinnati Children’s Hospital Medical Center (CCHMC) to directly engage young people in suicide prevention efforts. Since its inception, approximately 65 high school students from around the Cincinnati, Ohio region have participated in the YCSP and have informed CCHMC Emergency Department screening protocols, developed youth outreach videos, and presented at local conferences and high schools. The present study was based on the cohort of youth involved with YCSP during the 2015-2016 year. This was the first year YPAR was implemented with the entire membership. In the previous year, YPAR had been implemented by another graduate student with a subcommittee of youth interested in working on a suicide-related research project; however, this was the first year all members were to take the lead in designing and conducting a research study (see Appendix A). Youth who were still involved with the other research project were given the option to participate in both projects, or to only continue with the first project. Only one of those youth continued to work on both projects throughout the year, the rest remained with their existing project.
Recruitment for YCSP in this cohort year was based on an application distributed via email in Spring 2015 to guidance counselors in local public and private schools asking them to share the application with students in their school. Based on reports from YCSP members and guidance counselors themselves, sharing of the application was done in a range of ways, from directly reaching out to specific youth who may be interested to posting the application on a school-wide electronic bulletin board. The application asked students to provide contact information, their grade level, a reference letter, and open-ended responses to questions asking for their opinions on the causes of youth suicide and solutions for addressing it. Interviews were conducted with applicants by the YCSP Coordinator, a part-time employee of CCHMC, and several existing YCSP members. The membership list at the start of the 2015-2016 cohort listed a total of 26 youth from 11 different schools, including: 5 private schools, 5 public schools, and 1 post-secondary school as the member chose to continue participation after high school graduation. Sixteen of the members were new to the council and the rest were continuing from the previous year. Membership applications indicated most have had a personal experience with suicide through family, friends, or their own suicidal thoughts.

YCSP cohort years generally follow academic calendars, with activities occurring late August-May. During this cohort year, members met twice monthly on Sundays, with the majority of meetings occurring in-person in CCHMC meeting rooms. Sunday meeting times were agreed upon by the members at the start of the year, as this day seemed to least conflict with other school and extracurricular activities. As project activities evolved, members communicated outside of the formal meeting structure using electronic mail and telephone texting. YCSP members were responsible for their own transportation to and from meetings; however, reimbursement for mileage or bus passes was made available to youth.
**Positionality: My Role in the Program and Research**

Participatory action research approaches require researchers to manage multiple perspectives and stakes within the research process; therefore, it is imperative for action researchers to articulate their position in the research enterprise as a means to validate the participatory process and to share power with others (Herr & Anderson, 2015). Herr and Anderson (2015) have put forth a continuum of positionality in action research that highlights variations of *insider* and *outsider* perspectives based on the type of action research being conducted. They note that the dynamic nature of this research approach, regardless of type, may cause the researcher to move fluidly throughout various insider/outsider positions.

I found this notion of fluid perspectives to be true throughout the implementation of this YPAR project. I joined the YCSP in August 2015 to facilitate the implementation of YPAR with the full membership, but this was not my first experience doing research related to mental health or working with youth. My nearly decade long career that involved multiple childhood mental health evaluation studies and having a family member who struggled with suicide meant that I already came to the project with my own understandings of this issue, as well as initial ideas of how a participatory research approach could benefit youth and the field. On one hand I saw myself as an insider because of my close relationship with the topic, but given the distance between my age and the youth members as well as my experience growing up outside of this geographic community, I was also clearly an outsider.

In our first meeting of the year, I aimed to be honest and authentic in articulating this tension. After conducting several activities to acquaint group members with each other during our first meeting, I presented the idea of conducting a qualitative interview research study about suicide to members to gauge their interest in the project. I stressed that at the time of the first meeting no details of the study had been decided, and that in order for it to be a truly youth-led
project, it would be their responsibility to determine their own research questions, target population, and recruitment methods. We also discussed how they would be responsible for data collection, analysis and interpretation, and dissemination of the findings.

In addition to discussing their involvement as youth co-researchers, I described that my role in the project was to provide a forum for them to discuss and make these decisions, and to help secure needed resources so they were able to complete the project. I also explicitly stated that I would simultaneously conduct a study of the project and that it would be used as part of my graduate dissertation; therefore, in that role, I would serve as the researcher and they as the participants. Finally, I shared with them my experiences working with mental health, research, and youth, as well as a story about one of my own family member who had struggled with depression, drug abuse, and suicidality. After the candid conversation, the members expressed interest in the project, as well as being a part of my dissertation, and we agreed that planning for their research project would begin at the next meeting.

Over the course of the year, the insider-outsider tension evolved alongside our co-researcher relationship. As we became a cohesive working group with clear research aims and goals, I became more of an insider that they relied on for helping to achieve their project goals. However, given my interest in studying their development as a result of the process in which I was responsible for facilitating I also had to manage an objective outsider perspective. This meant having clear distinctions between their project activities and activities that would contribute to the study presented here. This ongoing duality is present in the current study and is reflected in the sections and chapters that follow.
Research Ethics

Two measures for ensuring ethical conduct during the course of the YPAR project and the current study were completed. First, activities conducted with and by YCSP received a Non-Human Subjects Determination by the Cincinnati Children’s Hospital Medical Center IRB. This determination applies to any evaluation and assessment of the YCSP program, which includes the present study. To differentiate between activities conducted as part of this study and those that were completed for the youth’s interview research project, an information sheet was presented to YCSP members before conducting this study’s data collection activities (see Appendix B). YCSP members were also verbally informed that they could decline participation in any study activity at any time, and they were given an opportunity to ask questions about each data collection activity and how it would be used in the study.

Second, I facilitated a group structured ethical reflection activity with YCSP members during their second meeting to initiate group cohesion and the research project planning process. Brydon-Miller (2008) claims the principles of participatory action research warrant additional ethical considerations beyond the protections provided in institutional review board procedures. Structured ethical reflection is a process where individual researchers, or the researcher in collaboration with community partners, articulate “a set of values they believe should inform their work” (Brydon-Miller, Rector Aranda, & Stevens, 2015). The process is typically completed as a grid so that the identified values can be considered across all phases of the research process.

Due to the YCSP membership size, I modified the reflection process so that it would be more manageable and participatory. Members worked individually to write their own set of values on sticky notes then everyone posted them on the wall. They then worked as a group to combine their individual values into a set of group values that would serve as ground rules for
working together in partnership, as well as to guide the development and conduct of their research project. They grouped their values into the following categories:

1. courage, hope, and resilience;
2. honesty and justice;
3. open-mindedness, originality, freedom, and curiosity;
4. respect, equality, fairness, and trust;
5. self-confidence and conviction;
6. love, empathy, compassion, and kindness; and
7. leadership, commitment, responsibility, and determination.

We referred back to our shared ethics as a group throughout the YPAR process, as did I in conducting this study of youth development in YPAR. In addition to the group structured ethical reflection, I created my own grid to guide the present research study (see Table 4).

**Qualitative Method: Focus Group**

**Data collection.** A focus group was conducted near the end of the cohort year to obtain youth perspectives on their experience of participating in YPAR and how it impacted their capacity to contribute to suicide prevention. The focus group strand of this mixed methods study was highly prioritized and guided by a phenomenological research design to explore the essence of their experience (Moustakas, 1994) conducting suicide prevention research. Responsive interviewing techniques that help to obtain balanced perspectives, detailed information, and accurate documentation (Rubin & Rubin, 2012) were used by the principal investigator in the development of the focus group guide. The focus group guide included questions that would help to answer the study research questions, but additional follow-up questions were asked as ideas emerged amongst the participants (see Appendix C). To address the insider-outsider duality
described in the section on my positionality in this study, the focus group was facilitated by another University of Cincinnati graduate student so the youth felt comfortable being honest about their experience with YPAR and the project as it was facilitated by the investigator. The focus group was audio recorded and transcribed verbatim to assist with data analysis accuracy.

**Data analysis.** Staying true to design principles of phenomenology, focus group analysis concentrated on creating a group composite description of YCSP members’ experience conducting adolescent suicide prevention research within a YPAR approach. To obtain this description, first and second cycle descriptive coding was conducted using the verbatim focus group transcript. Then, thematic categories were developed to describe and thoroughly explain the YCSP experience and perceptions of YPAR as it was implemented in this setting.

**Arts-based Method: Paintings**

**Data collection.** As described previously, arts-based methods expand on qualitative methods to provide a different medium in which participants can more deeply communicate with the researcher the multiple meanings of their situation, perspective, experiences, and concerns (Barone, 2008; Coemans et al., 2015). In developing the focus of the YPAR project, YCSP youth researchers used painting as a medium to convey their personal theories about suicide and why it happens. Based on their enthusiasm for the method, I used painting at the end of the cohort year to explore the impact of the YPAR approach on youth development and perceived capacity for contributing to suicide prevention research. At the last meeting, I provided a broad overview of project activities that were completed during the year and prompts that were related to my study research questions to guide their painting (see Appendix C). These prompts were also used to write a brief narrative on the meaning of their painting.
Data analysis. Analysis of the arts-based method was initiated by the five youth who participated in the painting activity. After writing their painting narratives, each individual shared it with the other participants so the group could identify initial common themes amongst the paintings and narratives. Using phenomenological research design principles for analysis, the investigator conducted additional coding of the participant paintings and narratives to develop a final group composite description that answers the study research questions.

Quantitative Method: Youth Development Questionnaires

Data collection. Pretest-posttest measures supplemented the qualitative and arts-based data to look for change in youth development constructs amongst YCSP members participating in the YPAR project. The pretest was conducted before the YPAR project was initiated (September 2015) and the posttest was conducted at the end of the cohort year (May 2016). A demographic questionnaire developed by the investigator was also distributed at pretest to collect information such as age, length of YCSP involvement, and previous research experience. Only youth who completed a pretest were given a posttest so matched pairs could be used in analysis. Questionnaires were completed during the council meetings to produce the highest response rate possible, as the youth were difficult to reach outside of formal meeting times. Youth were linked from pretest to posttest using a unique identification number. Existing questionnaires, including those developed for other recent YPAR studies, were used and are described below (refer to Appendix C for full copies of the questionnaires).

Self-Esteem. The Self-Esteem Questionnaire (SEQ) consists of 42 items that assess self-esteem in middle and high school students based on a developmental-ecological perspective (DuBois, Bull, Sherman, & Roberts, 1998; DuBois, Felner, Brand, & Phillips, 1996). The measure yields scale scores for five different domains with alphas ranging from .76 to .85 (peer
relations = 8 items; school = 8 items; family = 8 items; body image = 4 items; and sports/athletics = 6 items), as well as a global self-esteem scale (DuBois, et al., 1996). Higher scores on the SEQ indicate higher levels of self-esteem. To accurately compute the overall and scale scores, 10 of the items on the instrument require reverse scoring prior to analysis.

Psychological Empowerment. The Psychological Empowerment Scale (PES) was developed to assess four core conceptual areas: General socio-political skills (8 items; \( \alpha = 0.81 \)), motivation to influence one’s school or community (4 items; \( \alpha = 0.80 \)), participatory behavior (8 items; \( \alpha = 0.83 \)), and perceived control (6 items; \( \alpha = 0.80 \)) (Ozer & Schotland, 2011). All four scales showed positive correlations with each other (ranged from .59 to .66) and other measures of youth development, such as self-esteem (Ozer & Douglas, 2013).

Research and Action Self-Efficacy. The Research and Action Self-Efficacy (RASE) measure consists of 16 items (\( \alpha = 0.96 \)) that assess student self-perception of skills relevant to research and advocacy (Ozer & Schotland, 2011). This instrument was used to measure youth agency and self-efficacy constructs.

Data analysis. Descriptive statistics were used based on data collected from the demographic questionnaire in order to understand the characteristics of the subjects participating in the YPAR project. Additionally, measures of central tendency and descriptive statistics were used to compare results of the pretest and posttest questionnaires based on matched pairs. Significance testing was not conducted to do the small sample size after matched pairs.

Integration of Methods

An essential component of mixed methods research is how the methods are merged together and at what point in the research process. It is not enough to simply employ multiple methods parallel to one another; they must be integrated in the study in order to maximize the
full potential of the mixed methods approach and obtain a comprehensive understanding of the research problem (Creswell & Plano Clark, 2011; Plano Clark & Ivankova, 2016). As such, mixed methods scholars have advocated for increased descriptions of integration in studies and procedural diagrams that depict the integration, including the priority given to each of the methods used (Plano Clark & Ivankova, 2016). In a concurrent mixed methods design, as was used in this study, the merging of methods occurs after each method is collected and analyzed separately (Creswell & Plano Clark, 2011; Plano Clark & Ivankova, 2016). In sections above, I described how each of the methods used in this study were collected and then analyzed; however, a key aspect of this study is how I combined the analyses to conduct a high quality study. Figure 4 depicts the integration of the methods used in this study, with the quantitative and arts-based strands given greater priority than the quantitative strand. Mixed methods rationales that supported the study are included in the diagram.

**Additional Research Validity**

The rationales of triangulation, complementarity, and offsetting of strengths and weaknesses of different methods are built into the mixed methods research approach, which assist with analyses and conclusions that are valid. However, given multitude of layers within the YPAR project, including my ongoing relationship with the participants, I needed to incorporate additional validity checks into this study. In addition to being clear on my positionality, ethical considerations used in the study, and rationales for using mixed methods, Maxwell (2013) has suggested two other validity checks that were applicable to the study: *member checking* and *rich description*. Thematic analysis of the qualitative and arts-based strands of this study were transformed into detailed descriptions to allow “readers to make decisions regarding transferability” (Maxwell, 2013, p. 252) of the study to other settings. These descriptions were
then shared with the YCSP members who participated in those data collection activities to assure credibility of the findings. Additionally, overall integrated findings and interpretations from the mixed methods study were shared with YCSP members to further assure accuracy of perceptions and credibility of narrative themes.

Figure 4. Concurrent mixed methods design: QUAL + ARTS + quan.
## Table 4

### Investigator’s Structured Ethical Reflection

<table>
<thead>
<tr>
<th>Values</th>
<th>Gaining Entrée/ Gatekeepers/ Networking</th>
<th>Constructing Research Question</th>
<th>Planning Project/Study</th>
<th>Recruiting Participants</th>
<th>Collecting Data</th>
<th>Analyzing Data</th>
<th>Member/Peer Checking</th>
<th>Going Public (Presentation &amp; Publication)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authenticity</td>
<td>Am I being my true self and allowing others to be their true self?</td>
<td>Do the research questions reflect the true curiosity and values of me and others?</td>
<td>Does the study design remain true to questions and values of me and others?</td>
<td>Am I presenting my true self to others and making room for their true selves?</td>
<td>Am I comfortably interacting with participants during data collection?</td>
<td>Does the analysis method extract the participant’s true self and perspective?</td>
<td>Does analysis reflect participant values and perspectives?</td>
<td>Does the body of work present participant truths to others?</td>
</tr>
<tr>
<td>Common Sense</td>
<td>Am I thinking and behaving in a reasonable way?</td>
<td>How do the research questions make sense and have meaning for others?</td>
<td>Does the study design make sense for the research questions and have value for others?</td>
<td>Have the appropriate participants been recruited for the study?</td>
<td>Do the measures/questions align with the research questions and have value for others?</td>
<td>How can analysis be done in a timely fashion?</td>
<td>Do the findings have meaning in the real world?</td>
<td>How can the findings be used in the real world?</td>
</tr>
<tr>
<td>Communication</td>
<td>Am I clearly describing the reasons for and applicability of the research?</td>
<td>Are the research questions clearly articulated so others understand it?</td>
<td>Are plans for the study clear to me and others?</td>
<td>Am I clearly describing the purpose of the study to participants?</td>
<td>Do the questions promote open communication between researcher and participants?</td>
<td>Are study findings clearly communicated?</td>
<td>Do the findings clearly articulate participants’ perspectives?</td>
<td>What is best way to clearly communicate study findings with intended audience?</td>
</tr>
<tr>
<td>Democracy</td>
<td>Am I contributing to equal governance and participation in the partnership?</td>
<td>Do the research questions reflect equality for those involved or affected?</td>
<td>Have I designed the study with equality for those involved and affected by the issue?</td>
<td>Have power differentials been diminished between researcher and participants?</td>
<td>Do the questions promote equality between researcher and participants?</td>
<td>Have I avoided bias and reflected participant agency?</td>
<td>Have I given adequate time and guidance for full participation in member checking?</td>
<td>Who is impacted by the research and have findings been shared with them?</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Am I opening myself up to the ideas of others or where the relationship needs to go?</td>
<td>Am I open to reconstructing the research questions based on the ideas of others?</td>
<td>Am I open to study redesign based on changes in my thinking or ideas of others?</td>
<td>Am I willing to adjust study recruitment based on participant availability?</td>
<td>Am I prepared to probe or seek clarification when necessary?</td>
<td>Am I prepared for unexpected themes or findings?</td>
<td>Who would be an appropriate alternative if participants are not available?</td>
<td>Can the findings be presented in conventional and creative ways?</td>
</tr>
<tr>
<td>Values</td>
<td>Gaining Entrée/Gatekeepers/Networking</td>
<td>Constructing Research Question</td>
<td>Planning Project/Study</td>
<td>Recruiting Participants</td>
<td>Collecting Data</td>
<td>Analyzing Data</td>
<td>Member/Peer Checking</td>
<td>Going Public (Presentation &amp; Publication)</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------</td>
<td>--------------------------------</td>
<td>------------------------</td>
<td>--------------------------</td>
<td>----------------</td>
<td>---------------</td>
<td>---------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Honesty</td>
<td>Am I being open and up front with others and myself?</td>
<td>Is the research question true to the needs of all who are involved and affected?</td>
<td>Does the study design reflect the needs of those who are involved and affected?</td>
<td>How can I encourage honesty with responses and ensure confidentiality?</td>
<td>Do the questions and interactions encourage honest responses from participants?</td>
<td>Does the analysis capture participants' true perspectives?</td>
<td>Do findings accurately represent participant perspectives?</td>
<td>Have I honestly presented participant perspectives?</td>
</tr>
<tr>
<td>Mutual Respect</td>
<td>Am I attending to and accepting of the experiences and perspectives of others?</td>
<td>Does the question allow sharing of experiences and perspectives of others?</td>
<td>How does the study encourage others to share their own perspectives?</td>
<td>What is the best way to establish mutual respect with participants?</td>
<td>Do my interactions during data collection convey mutual respect?</td>
<td>Is the analysis respectful of participant experiences and perspectives?</td>
<td>Is the analysis free of bias and accurate?</td>
<td>Have I been mindful of participant experiences and perspectives?</td>
</tr>
</tbody>
</table>
Participants

In addition to the membership description provided in a previous section, of the 26 YCSP members, 18 completed a short profile questionnaire at the start of the cohort year, which is presented in Table 5. At the end of the questionnaire, participants were asked whether they had ever conducted a research project before. Six (33%) of the 18 youth said they had never conducted a research project before, eight (45%) had previously conducted a research project but it was outside of the YCSP, and four (22%) had conducted a research project through YCSP.

Table 5

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 years old</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>16 years old</td>
<td>10</td>
<td>55.6</td>
</tr>
<tr>
<td>17 years old</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>18 years old</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td><strong>Current Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10th grade</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>11th grade</td>
<td>10</td>
<td>55.6</td>
</tr>
<tr>
<td>12th grade</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td><strong>YCSP Membership</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st year</td>
<td>8</td>
<td>44.4</td>
</tr>
<tr>
<td>2nd year</td>
<td>10</td>
<td>55.6</td>
</tr>
<tr>
<td>3rd year</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Race and gender identity were purposefully left off the profile questionnaire to assist with group development goals at the start of the year.

Youth participate in the YCSP in addition to their other school and extracurricular obligations. As a community-based YPAR project, attendance was firmly encouraged; however, it was never mandated and youth participation outside of the formal meeting structure was an ongoing challenge. As a result, attendance fluctuated from meeting to meeting even with additional outreach prior to data collection time points. Participants in the present research study were based on those who were in attendance at the time of data collection for each method. Five
of the 26 YCSP members who started in the cohort year participated in every data collection activity—pretest and posttest questionnaires, focus group, and painting. Although this was not necessarily sought out nor expected due to attrition over the course of the year, the same five youth participated in all three data collection activities and it is their voices that are represented in this study.
Chapter 5: Findings

The findings presented in this chapter are based on the integrated analysis of the three methods used in this study: questionnaires, focus group, and paintings with written narratives. This chapter is organized into three major sections according to study’s research questions on (1) YPAR’s impact on youth development as implemented in this project, (2) the youth experience in YPAR for suicide prevention, and (3) youth capacity to contribute to suicide prevention as a result of YPAR. First, results of the questionnaires are presented to provide a baseline quantitative examination of changes in youth self-reports of their development from the beginning of the year to the end. Then, findings from the focus group and paintings are presented to provide a more detailed and rich understanding of youth development results. Additional findings from the focus group and paintings are then used to further explore youth conceptualizations of their development, experience, and potential to influence social change as a result of being fully engaged in all of the phases of research.

Research Question 1: Individual Youth Development

As discussed in a previous chapter, the individual youth development constructs examined in this study of YPAR are self-esteem, psychological empowerment, and youth agency and self-efficacy. The sections that follow discuss the results of quantitative self-report measures, as well as qualitative descriptions of what aspects of these constructs affected youth.

Perceptions of Self

Each of the following sections first presents the results of the three developmental assessment instruments used in this study. Results are based on the five youth who completed the instruments at both pretest and posttest in order to produce matched pairs for comparison of descriptive statistics. Significance testing was not possible due to the study’s sample size.
Following the presentation of results, focus group and/or painting findings related to self-esteem, psychological empowerment, and self-efficacy and agency are discussed. It should be noted that YCSP members were not specifically asked to comment on these youth development constructs in the focus group conversation or painting narratives, as I was interested in seeing if, and how, they would naturally address these aspects of development on their own. As a result, the depth of qualitative descriptions varies across constructs.

Quantifying self-esteem. Results of the SEQ showed an increase in mean composite self-esteem scores from pretest (M = 113.80, SD = 15.12) to posttest (M = 120.20, SD = 11.54), which indicated change in the desired direction. In addition, the range between the minimum and maximum composite scores decreased by 10 points at posttest, and the standard deviation was lower. This suggested less variance in overall self-esteem among youth at the end of the year compared to the beginning of the year. Closer analysis of subscale scores showed the greatest gains were made with self-esteem related to peers (+2.60), sports and athletics (+2.20), and global self-assessment (+2.00). School had nearly the same level of improvement (+1.80); however, self-esteem related to family and body image scores decreased over time (-1.80 and -0.40, respectively). Table 6 compares the results of the pretest to posttest scores.

Table 6

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
</tr>
<tr>
<td>Total SEQ</td>
<td>93</td>
<td>133</td>
</tr>
<tr>
<td>Subscale scores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer relations</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>School</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td>Family</td>
<td>17</td>
<td>30</td>
</tr>
<tr>
<td>Body image</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Sports/athletics</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Global self-assessment</td>
<td>14</td>
<td>29</td>
</tr>
</tbody>
</table>
Table 7 displays the results of a comparison of individual youth scores from pretest to posttest. An increase in scores is generally desirable except in cases where youth obtain a high score at pretest and maintain a high score at posttest. However, none of the five youths’ SEQ scores were so high at pretest that they did not have room to improve at posttest. More youth scores increased in self-esteem related to sports/athletics (80%) and school (60%) scales than in other subscale categories. As seen in the mean scores, self-esteem related to body image actually decreased from the beginning to the end of the project period.

Table 7

*Changes in Individual SEQ Scores from Pretest to Posttest (n = 5)*

<table>
<thead>
<tr>
<th></th>
<th>Decreased</th>
<th>Stayed Same</th>
<th>Increased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total SEQ</td>
<td>2 (40.0)</td>
<td>0 (0.0)</td>
<td>3 (60.0)</td>
</tr>
<tr>
<td><strong>Subscale scores</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer relations</td>
<td>2 (40.0)</td>
<td>1 (20.0)</td>
<td>2 (40.0)</td>
</tr>
<tr>
<td>School</td>
<td>2 (40.0)</td>
<td>0 (0.0)</td>
<td>3 (60.0)</td>
</tr>
<tr>
<td>Family</td>
<td>2 (40.0)</td>
<td>2 (40.0)</td>
<td>1 (20.0)</td>
</tr>
<tr>
<td>Body image</td>
<td>3 (60.0)</td>
<td>1 (20.0)</td>
<td>1 (20.0)</td>
</tr>
<tr>
<td>Sports/athletics</td>
<td>1 (20.0)</td>
<td>0 (0.0)</td>
<td>4 (80.0)</td>
</tr>
<tr>
<td>Global self-assessment</td>
<td>2 (40.0)</td>
<td>1 (20.0)</td>
<td>2 (40.0)</td>
</tr>
</tbody>
</table>

**Describing self-esteem.** During the focus group, the youth discussed self-esteem in relationship to their research project and how that transferred into other aspects of their life. For instance, they attributed their involvement in the project to improvements in their perceived ability to work with others in YCSP to design the project, as well as the ability to work in other group settings. This was particularly represented with the word “confidence”. In regard to the YCSP research project, one youth stated:

For me, confidence. I didn’t think I would be able to do an interview. Or, I wasn’t super comfortable with it. But, going through all the preparation and everything, and being a part of a group and having to voice my opinions and stuff; that really helped.
Thinking about the applicability to other group settings, one youth specifically noted, “I think I’ve just learned so much about speaking in groups, sharing ideas, morphing opinions with others. Things like that. And being more confident in the processes of doing so.” Another youth pointed out a similar self-observation, “I’m like that too. In group settings like this, I’m a lot more comfortable now with speaking and voicing my own opinions.”

Confidence was also presented by the youth as something that was obtained through the process of conducting interviews for their research project. They even connected it to other beneficial impacts, such as improved data quality and expanding perceptions others or of the issue at hand. In making suggestions to other youth who participate in research, one YCSP member noted, “Don’t be nervous or afraid to ask different questions or something like that, or to go off script a little bit to find out more because you never know what you’re going to find.”

Some of this confidence was also attributed to the fact that the target population of their research project was peers. The youth were not sure if they would have had, or developed, as much confidence through the interview process itself if it was done with adults. For example, “I think it’s just important to keep in mind that this is a study on people our age, which is kind of assuring in a sense. Like the interviews came so natural, it was like a conversation.” Another youth stated:

I feel like if I had done the interview with an adult I probably would have wanted [YPAR facilitators] there with me just because I would feel more confident with it. But, because it was a peer I was able to see them as my equal and have a normal conversation with them.

**Quantifying psychological empowerment.** PES mean composite scores increased from pretest ($M = 71.40$, $SD = 8.39$) to posttest ($M = 77.00$, $SD = 4.74$) and the standard deviation
decreased. In addition, there was a notable decrease over time in the range between minimum and maximum composite scores. While the significance of the change could not be determined, like the SEQ, an increase in scores indicated movement in the desired direction. This increase was represented in three of the subscale mean scores: sociopolitical skills—general (+2.60), perceived control (+2.20), and participatory behavior (+1.40). There was, however, a slight decrease in motivation to influence mean subscale scores (-0.60). Table 8 displays a comparison of pretest and posttest results.

Table 8

Descriptive Statistics for PES Composite Scores and Subscale Scores (n = 5)

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th></th>
<th></th>
<th>Posttest</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
<td>M</td>
<td>SD</td>
<td>Minimum</td>
<td>Maximum</td>
</tr>
<tr>
<td>Total PES</td>
<td>60</td>
<td>80</td>
<td>71.40</td>
<td>8.39</td>
<td>71</td>
<td>83</td>
</tr>
<tr>
<td>Subscale scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociopolitical skills--general</td>
<td>18</td>
<td>27</td>
<td>21.80</td>
<td>3.35</td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>Motivation to influence</td>
<td>12</td>
<td>16</td>
<td>14.00</td>
<td>1.58</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Participatory behavior</td>
<td>17</td>
<td>24</td>
<td>20.20</td>
<td>2.59</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td>Perceived control</td>
<td>12</td>
<td>18</td>
<td>15.40</td>
<td>2.41</td>
<td>16</td>
<td>20</td>
</tr>
</tbody>
</table>

Analysis of changes in individual composite and subscale scores further indicated a notable improvement in youth reports of psychological empowerment. Three of the five youth had an overall increase in the PES composite score, whereas two stayed the same. Increased individual youth subscale scores were found for perceived control (100%), sociopolitical skills (80%), and participatory behavior (60%). However, three of five (60%) motivation to influence scores decreased from the beginning of the cohort year to the end. Changes in individual PES scores are presented in Table 9.
Table 9

Changes in Individual PES Scores from Pretest to Posttest (n = 5)

<table>
<thead>
<tr>
<th>Subscale scores</th>
<th>Decreased</th>
<th>Stayed Same</th>
<th>Increased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PES</td>
<td>0 (0.0)</td>
<td>2 (40.0)</td>
<td>3 (60.0)</td>
</tr>
<tr>
<td>Sociopolitical skills--general</td>
<td>1 (20.0)</td>
<td>0 (0.0)</td>
<td>4 (80.0)</td>
</tr>
<tr>
<td>Motivation to influence</td>
<td>3 (60.0)</td>
<td>1 (20.0)</td>
<td>1 (20.0)</td>
</tr>
<tr>
<td>Participatory behavior</td>
<td>1 (20.0)</td>
<td>1 (20.0)</td>
<td>3 (60.0)</td>
</tr>
<tr>
<td>Perceived control</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>5 (100.0)</td>
</tr>
</tbody>
</table>

**Describing psychological empowerment.** Youth in this study repeatedly noted various ways in which their involvement in YPAR helped them to personally grow. Related to psychological empowerment, one youth described this as, “It’s a good way to not only bring data to the public, but also it’s a good way for yourself to grow and learn and get different perspectives about the issue from all over.” However, they also demonstrated a growing understanding of their unique position as young people to address issues that affect youth. As a result they did not want to simply relish in their own sense of being empowered, they expressed an interest in extending empowerment to other youth. As stated by one of the youth, “…I would want people to realize that if you think there’s an issue around a subject, or anything, you’re most likely not the only one who sees that…you can get people together and really find solutions to these problems.”

An important point that is represented in the previous quote is how quickly the youth go from expressing feelings of empowerment to turning it into direct action that benefits their peers. In analyzing the focus group, it was difficult to separate their conceptualizations about empowerment compared to the other youth development constructs self-efficacy and agency. When the topic of how they felt empowered to do the research and to address adolescent suicide was raised amongst members of the group, they did not linger on the topic and moved towards addressing it head on and with the confidence that they had previously noted as a key aspect of
their development. The following comment demonstrates the overlap between empowerment, self-esteem, youth agency, and self-efficacy for youth participating in this YPAR project:

…you can tell school administrators and people that they don’t necessarily have to be scared of the topic [suicide]. If something does happen at their school they can’t just brush it under the rug. They can bring it up and talk about it because that’s what the kids need.

**Quantifying youth agency and self-efficacy.** Only composite scores are available for the RASE questionnaire with an increase in scores or maintenance of high scores being the most desirable result. Results of youth responses in this YPAR study showed a slight decrease in mean RASE composite scores with similar standard deviations from pretest (M = 52.50, SD = 5.64) to posttest (M = 51.40, SD = 5.86). However, the range between minimum and maximum scores also decreased over time (Table 10). Analysis of individual changes in RASE scores from pretest to posttest showed that three of the five youths’ score increased, whereas the scores of two youth decreased (Table 11).

Table 10

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>42</td>
<td>63</td>
<td>52.50</td>
<td>5.64</td>
</tr>
<tr>
<td>Posttest</td>
<td>47</td>
<td>60</td>
<td>51.40</td>
<td>5.86</td>
</tr>
</tbody>
</table>

Table 11

<table>
<thead>
<tr>
<th></th>
<th>Decreased</th>
<th>Stayed Same</th>
<th>Increased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall score</td>
<td>2 (40.0)</td>
<td>0 (0.0)</td>
<td>3 (60.0)</td>
</tr>
</tbody>
</table>

**Describing youth agency and self-efficacy.** During the cohort year included in this study, the YPAR process focused on research design, recruitment, data collection, and initial
analysis. Due to time limitations, comprehensive data analysis and interpretation, and data dissemination were put on hold until the following cohort year. However, in the focus group, youth were clearly thinking ahead to how they could take action based on their research findings. As discussed in the psychological empowerment section, youth were quick to discuss moving into an action phase. Notably, they appeared to be most excited about those next steps by saying they hope “to continue to make an impact” and “take what we learned…and put together a decent presentation”.

This finding is consistent with the reasons many youth have given for joining the council. As described by one youth in the focus group, “I really just enjoy making an impact on the community and this is such a significant issue right now. I think it’s been very interesting.” And another stated, “I just got an application from school…I liked the idea of trying to do stuff like this because it relates to everybody on a personal level.” And while this finding is generally positive because it conveys a commitment to civic engagement, in the current study, it is difficult to discern how much of the YPAR process contributed to the youths’ perceptions of their capacity to create social change and how much of that was already present and prompted their interest in volunteering for the YCSP in the first place.

**Skill Acquisition Contributed to Individual Development**

Although it was challenging to discern youth perspectives on their own agency and self-efficacy as a result of this YPAR project, it is readily apparent that youth felt they benefitted from participation in ways that were not measured by the quantitative questionnaires. One of the most concrete benefits was learning the scientific method and how to conduct a rigorous research project. When asked during the focus group about the ways in which their participation in YPAR affected them outside of YCSP, one youth remarked:
The whole learning how to do a proper research project. Preparing for it then actually carrying it out because I am going to be doing something like this for a capstone project in the summer. So, it’s helped a lot with that.

In fact, that youth’s painting focused on a toolbox because “during this year I have been given many tools concerning research” (Figure 5). In describing the contents of the toolbox, she wrote:

The ruler is for measuring the amount of time we have to carry out the project. We had to set goals which included ruling out unnecessary questions for the interviews. Meanwhile, I also learned how to balance types of questions and the demographics of participants, which explains the balance. The hammer and nails are to show that I learned how to build a research project.

*Figure 5. “I have been given many tools...”, Renae, age 16.*

In her description of these tools, she goes beyond a simple recognition or understanding of the steps of the research process itself. She conveys an understanding of how the steps in the research process provide a framework, but within that framework there are a number of decisions to be made and there is a need to think critically before making those decisions. As such, it is not
about just knowing what the tools are used for, but how to properly use them to maximize their effectiveness. This requires hands-on use of the tools, as opposed to learning by watching someone else use them.

As mentioned in the section on self-esteem, youth felt their involvement in YPAR gave them more confidence in group settings. A skill in which they had more confidence was “how to formulate an opinion” and “voicing my own opinions”. They observed the communication that was needed to make group decisions about the design of their own research project, and to actually recruit and conduct the interviews, contributed to their development of this skill. They also considered how their increased comfort with opinion formation and sharing benefitted them in other areas of their life. For instance, one youth remarked how increased confidence with her own opinions affected her academically, “…being part of a group and having to voice my opinions and stuff; that really helped. And now my public speaking class is a breeze.”

The topic of opinions was also connected to how the youth viewed the collaborative process and their ability to participate in that process. By being able to form and share their opinions, they felt more prepared to play a key role in groups. They saw this as extending beyond discussing opinions to include playing a facilitation role and “morphing opinions” in a group setting. This then translated into the belief that they could help to facilitate the formation and achievement of shared group goals. One youth voiced how she has been affected by this particular aspect of her development:

It’s also just helped me be able to take charge in a group because before I could take charge, but I also could really just be in the background…but now I’m a lot more comfortable leading the group and being like ‘so we need this done by this time’ and set goals for us. And being able to do a project on time or do it very well.
This same youth later commented, “I know this is going to help; working with people who have very different opinions from me and their lives are very different from me. And, being able to set goals for each other.”

**Contributions of Development on Future Goals**

As described in the previous section, youth in this study were able to connect their experience in YPAR to the development of tangible skills that they consider to be useful for themselves and others. During the focus group, youth thought their development over the course of the YPAR year would also positively contribute to their future aspirations. Youth suggested they were now more prepared for college entrance and job interviews. In one of the painting narratives, a youth wrote:

Through all of our work I have developed skills of group discussions as well as interview and research skills. I know these skills will translate into other areas of my life as I begin my journey into the adult world.

The youth in this study also indicated an interest in helping others. For some that meant working in more effective collaborations, whereas others saw themselves in fields that aim to help others. Although no one indicated that they had altered their current career choice as a result of their involvement in the YPAR project, they did suggest a stronger conviction for helping and working with others because of it. According to one youth:

I like the idea of helping patients and learning more about them and getting to know them. I’m not going to be a psychologist, I want to be trying to go into molecular and cellular biology, but I’ll still be helping people go on with their lives and improving.

This increased sense of motivation to make a difference in the world appeared to be beneficial to the youth who participated in YPAR. Furthermore, they saw this individual internal motivation
as a means to contribute to the greater good of society. As such, they saw their involvement in this YPAR project as an important contributor to this internal motivation, which was best described by one youth as, “In a way, this has given me determination to keep going.”

**Research Question 2: Perspectives on the YPAR Experience**

In the last section, I presented the youth development questionnaire results and discussed changes in youth development as it was described by the young people who participated in YPAR for suicide prevention. This section focuses on youth perspectives related to their experience in YPAR and what they learned about that co-researcher process, including aspects that were beneficial and those that were challenging. The findings presented here are based on the focus group and paintings.

**The Power of Perception**

An aspect of YPAR that was not captured in the quantitative questionnaires or in the discussion of tangible skills, but was certainly seen as having an important impact on the youth participating in this study, was a shift in their perception. This shift was not only observed by the youth on the issue of suicide as a result of their research on the topic, but also their awareness of other people’s life experiences and viewpoints both within and outside of the YCSP. They indicated that the process of developing a study in a team setting, as well as interviewing youth from all over the region, exposed them to new ideas and experiences that were not a part of their day-to-day life. Simply stated, “With this [project] I’ve talked to kids from all over Cincinnati and from all backgrounds, and so it’s kind of eye opening to understand how other people look at it and how it affects them…”.

There were additional remarks that the experience was “eye opening” and the youth indicated that they were appreciative to have experienced a shift in their awareness. They
especially talked about it in the context of their own personal development. As such, the youth seemed to view it as a soft skill that was capable of influencing or prompting some of the more tangible positive changes in youth development that were previously discussed. As one youth stated, “It’s expanded my perception of the whole issue. I’ve been able to now see different viewpoints.” One youth was particularly moved by this aspect of his development and wrote about it in his painting (Figure 6). He was also keenly aware how his expanded perception of others contributed to his development as an individual. In his painting narrative he wrote:

My painting represents what I feel like my mind has unlocked this past year with help from this council. As seen in my painting, I feel like I have unlocked a world of possibilities and they seem endless. This past year has deepened my understanding of other people and situations I may not otherwise be comfortable with.

Figure 6. “I have unlocked a world of possibilities...”, Connor, age 17.

Learning Through Challenges

When asked how they would describe the YPAR year, youth in this study said, “I’d say successful” and “yeah, definitely successful.” However, that does not mean the implementation
of YPAR for suicide prevention was not without its challenges. As has been noted in the literature, the practice of participatory research can be messy and challenging. Therefore, it is necessary to also explore the aspects of the approach that are the most difficult, and to understand how to overcome obstacles. The challenges studied and presented here are based on the perspectives of the five youth who participated in the focus group; they do not include my own observations or experience of the YPAR process. These challenges were identified by the youth early in the focus group discussion.

**Engagement.** One of the first challenges acknowledged by the youth was related to engagement in the project. According to the youth represented in this study, engagement did not appear to be a lack of commitment to the issue nor to the research project itself, but was more of an issue with personal schedules and other obligations. Referring to participation in the YCSP meetings, one youth stated, “…attendance has kind of been an issue throughout the year.” Perhaps this is partly due to the community-based nature of this project and the fact that they were volunteering to participate in addition to their school and extracurricular activities, as one youth offered, “…also just scheduling because we’re all so busy. Especially during the spring when we have all these tests to study for and sports and jobs and stuff. It’s hard to get a good amount of people together.” Although the youth identified attendance as an engagement issue, they were not prompted nor offered on their own accord solutions for how to address it.

In addition to their own attendance at YCSP meetings where the YPAR project was implemented, the youth in this study discussed the difficulty of maintaining engagement with their peers who were interview participants. They observed that initial interest in doing an interview was high; however, scheduling and getting their peers to follow through on completing the interview was a challenge. They stated, “…some people just cancel the interviews because
they can’t do it” and “…a lot of people just drop interviews at the last minute.” It seemed this challenge was a surprise to the youth and one they had not anticipated at the start of their research project; however, they found that being flexible and using various means for completing the interviews was helpful. For example, “…sometimes we’d have to use the phone if they couldn’t come in to do it or anything like that.”

**Decision-making.** As discussed earlier, merging different opinions in the group setting provided an important learning opportunity for the youth; however, this was due in part to the difficulty of doing it. When asked about the challenges they experienced over the course of the year, they stressed it was challenging to make space for everyone’s opinions but that taking adequate time to discuss ideas was useful. Their comments further indicated that when they initiated their project they had not anticipated this aspect of the research design to be as complicated as it was, but that they continued to value the input of everyone and aimed to reach consensus. One youth summarized their struggle with decision-making:

…it’s not necessarily a matter of getting into arguments about differing opinions, but just morphing everyone’s ideas into one. It’s kind of been, not complicated but, a bit of a challenge I’d say. And especially when coming up with the interview questions, just putting all of the ideas together. I mean, it’s hard to take what everyone is thinking. However, in regard to their shared value of involving everyone, “…if someone says something we try to incorporate it the best we can.”

**The Process is Long, but the Payoff is Worth It**

Another aspect of the YPAR experience that was a surprise to the youth was how long it took to design and prepare for their project. This issue was initially raised in the focus group as a challenge, but over the course of the conversation, they deemed it to be a necessary part of their
work together. For this reason, it is presented here as a separate section so the multiple components of this finding can be discussed in more detail, including the aspects that made the long preparation period worth the effort.

**Preparation is key.** Throughout the focus group, the youth repeatedly mentioned the length of time it took to prepare their project and to figure out the “logistical stuff” needed to successfully conduct their project. They expressed feeling frustrated with the slow pace of preparation at times and referred to it as a “long process”, but they also acknowledged that it was a necessary side effect of the group decision-making process and their desire to reach consensus. As one youth put it, “Sometimes getting our ideas out, that has been challenging because we sometimes don’t know exactly where we want to go and stuff like that. And so, we have to talk about it and all get on the same page.” When pressed further about the details of what was involved in the long preparation process, the youth conveyed an understanding of how the time spent preparing led to their success in developing and implementing the project. Upon reflection, they saw the value of spending time on details because it contributed to their overall design and prepared them for the actual interviews. As one youth stated, “Yeah, there’s a lot of preparation. And going into it I didn’t think we would really need a full half-year to prepare an interview, but we really did. Once I started, I realized all of it really helped.”

In regard to the aspects of preparation they found contributed most to the long process and their success, first they talked about key aspects of research design and methods of data collection, including identification of their target population, and the development of research questions and an interview guide. According to one youth, “The first half of the year we met a lot and came up with a plan of what we wanted to ask and what we were trying to figure out. So, we spent a lot of meetings drafting a research guide.” Another youth added, “And we came up with
three main categories of things we wanted to find through the research and then developed questions based on that. So that was a long process as well.”

Second, the youth talked about what they referred to as “logistics”, which they considered to include details related to recruitment, scheduling interviews, determining the location of interviews, and how they wanted to structure their interview teams. Considering the length of time devoted to how they were going to implement these aspects of their project, this may explain their surprise when engagement faltered and they had to decide on alternate means of outreach and data collection. In giving the timeline of how the planning process transpired, a youth said, “and then in the middle of the year we started getting to more logistical stuff, like who are we going to interview, how are we going to get in contact with them and how are we going to do everything.”

Third, aside from planning and decisions around the development of their project, youth in the focus group identified training they had received that best prepared them for conducting the interviews. For example, they were trained on how to conduct semi-structured individual interviews and how to probe participants for additional information when necessary. They also indicated an activity involving “mock interviews” was helpful in preparing them for the actual interviews. Furthermore, they found the materials and training on safety protocols related to suicidality, abuse and neglect, and homicidal ideation to be extremely helpful and put them at ease as novice researchers. When discussing this aspect of their training a youth said, “And what to do in case of emergency and stuff like that, so that made me feel better too.” When considering advice to future YPAR groups, another youth stated, “I think you definitely need to know the safety protocol. And I’m not saying that anything would ever happen, but it’s something you need to make sure you always know.”
Overall, aside from initial frustration with the length of time spent planning, youth expressed satisfaction with the process and felt they were adequately prepared for their project to be successful. In hindsight, they seemed appreciative of the time spent planning and for some it even alleviating concerns they had before going into the interviews. When specifically asked if there was anything else they needed to be successful, the youth agreed that they were pleased with the process and felt satisfied they received enough resources to complete their work. For future groups looking to embark on their own YPAR process they stressed, “It’s a long process. You have to be patient and not try to rush anything. And try to be as prepared as possible.”

A goal-oriented process. When the youth in the focus group spoke of the long preparation process needed for their research project, it seemed to be in stark comparison to activities they had developed in previous YCSP cohort years, such as developing social media pages and a video. They referred to those activities as “being pretty general” and focused on spreading awareness and resources; however, when thinking about their research project that spanned the entire cohort year, they agreed, “But, this year there’s more of a mission and analyzing what we find.” There appeared to be a sense of pride and satisfaction amongst the youth in having a shared goal to catalyze the YCSP membership. Some of the youth even tied their own personal development to the shared group goal, “Just really being part of a team and having a goal we were able to reach really helped. And that helps me with school and stuff…” After being asked to compare this YPAR year to other YCSP years, a returning member described it as, “This year is a little bit more organized and stuff like that. So, we have more of an idea of where we want to go with everything.”

The youth in this study identified a key aspect of having a shared goal; it needs to be tangible and attainable. One of them plainly noted, “We also had a goal that we were able to
achieve.” While they did not explicitly identify this as being connected to youth engagement or commitment to YPAR, their comments suggested that without having a shared goal and being supported by the adult co-researcher in their achievement of that goal, they may not have continued participating in the YPAR project, or the YCSP in general. However, just identifying a tangible goal that they could focus on was not itself inherently positive; it appeared that having responsibilities that allowed them to act on the goal is what made it valuable to the youth. Someone summarized this point by saying, “We actually got to do stuff. Like, we had to go do it. We didn’t just sit and talk about it forever and not get the time to do it.”

Having a shared attainable goal and being guided by a clear purpose was important to the youth in this study; however, it is necessary to highlight that this not only included having a clear purpose for their research project, but also being able to use their research findings as a framework to propel the group forward with future suicide prevention activities. They took a long-range view and saw the research project as one component of a longer-term planning process. Consequently, they viewed their research goal as one part of being better prepared to address their overall mission related to adolescent suicide prevention. In comparison to previous YCSP years, a youth described it as, “We did a lot more preparation and stuff like that for the research project. And, we know the direction we want to go in from it.”

**Multi-directional transfer of knowledge.** Youth in this study deemed their project successful because of the knowledge they gained about suicide from their interviews with peers. However, it is notable that a great deal of learning had to take place to even get to the point of developing an increased understanding of adolescent suicide as described by their peers in the interviews. This learning was fluid in nature and occurred at multiple levels similar to the different systems espoused by social ecological theory.
At the individual level, conversations that took place during the planning process helped the youth to formulate their own personal positions and share them with other YCSP members. As indicated in the previous section about opinions, many of the youth initially found this to be challenging or intimidating, but by sticking with the process, they were able to develop an understanding of their own positions in order to share them with others. By sharing their own opinions in a safe space, the YCSP members were able to generate a common understanding amongst themselves which they could then use to determine what else they wanted to learn from others. Thus, through that process, the acquisition of knowledge moved from the individual level to the immediate peer group level. It also provided an initial measure of validation for the youth as they were able to have their own feelings affirmed by others working on the project. From there, they were then prepared to examine how others thought about suicide. A youth summarized this as, “…we evaluated ourselves, like what our opinions and stuff was [sic]. And we wanted to see if other people have those same thoughts.”

As the YCSP members moved from identifying their own understandings of adolescent suicide and what else they wanted to understand as a result of conducting interviews, knowledge generation moved from the immediate YCSP peer group to the larger peer group. Two constructs were identified as contributing to the generation of knowledge at this level—validation (in the emotional, not research sense) and expansion. More specifically, the YCSP youths’ understanding of adolescent suicide was strengthened at this level by (a) having the initial thoughts of the YCSP members be validated by interviewees; (b) seeing similar responses amongst interviewees, which contributed to their perceived validity of research findings; and (c) expanding their understanding of suicide by being exposed to additional viewpoints beyond the
YCSP membership. Feelings of validation were represented in an exchange between the focus group facilitator and one of the youth:

Youth: …[a few of us] analyzed some of the interviews and took notes on them. And so, we found the prevailing message we saw in each and things that kept recurring through each of the interviews.

Facilitator: You’re smiling when you say that. So, did that make you feel good that there were themes coming out of it?

Youth: Yeah, it was interesting. And seeing that a lot of people felt the same way and had similar responses. Very similar responses.

Expansion of knowledge about suicide was described a couple of different ways by youth. One focused on an expanded understanding as a result of hearing firsthand multiple perspectives, “You kind of get a better idea of the happenings around Cincinnati since a lot of these kids are from schools that you normally wouldn’t have contact with or areas that you normally wouldn’t be in.” Another youth described this expansion as having a better understanding of the extent to which youth are concerned about the topic of suicide:

We don’t really talk about suicide in school, but it is obviously a very prevalent topic in everyone’s minds. And, I didn’t realize until after doing the interview how much people want to talk about it, but don’t really know the course of action to take.

Regardless of what prompted their expanded knowledge, concluding the year with a feeling that their understanding of the topic was enhanced by the research project resulted in positive feelings toward YCSP and research in general. Some of their remarks included: “I really like it!” and “…then this year again [YCSP] was a lot more fun, we got a project together, got to interview other people. It was good. I liked it.”
Although the youth conveyed an overall positive experience engaging in YPAR for suicide prevention, they acknowledged that there was still room for more research. It seemed that the knowledge obtained as a result of their expanded understanding of the topic made them consider how much was still left to know. For example, they expressed interest in understanding how adults may respond to the same questions or exploring more about what contributes to different perspectives about why suicide happens and what can be done to address it. This aspect of knowledge building was represented in one of the youth’s paintings (Figure 7). In her description she wrote:

This is a painting of the night sky filled with stars. This to me is a metaphor for suicide. The dark sky represents everything that we don’t know about it. The stars represent what we do know. Although there are a lot of stars, there is still so much that we can learn.

*Figure 7. “...there is still so much that we can learn”, Brooke, age 17.*

This sense of having more to learn transcended beyond the YCSP members participating in YPAR. During the focus group, the youth observed that many of their peers were interested in learning more about suicide and, more importantly, this interest in learning more stemmed
directly from conversations the youth had with potential interviewees about the research project and YCSP in general. It seemed as though openly talking about the issue of suicide created a ripple effect which garnered additional interest in expanding knowledge about the subject. And, this was before findings from their research project were even shared. Youth in the focus group were surprised that they were able to influence their peers just by asking them to participate in their research study and not having to wait to spark interest until the analysis phase was complete. Thus, the youth served as a conduit for transferring awareness and permission to their peers for seeking knowledge about the subject. One of the youth remarked:

I know, personally in my school, just trying to go out and tell people about it and asking them for interviews [got a lot of people’s attention]. Even just asking them got them to actually go up and research it. And that was kind of cool to think that not only are they getting interested in this council, but they are interested in the facts and statistics. And they’re really bringing up suicide in my own school.

**Research Question 3: Youth Contributions to Suicide Prevention**

Participatory research approaches not only aim to understand the research topic at hand, but also to build the capacity of community co-researchers to continue engaging in research and solutions to problems that affect them. Given the dearth of stakeholder involvement in suicide prevention research, especially that of youth stakeholders, it is necessary to understand how YPAR builds their capacity to contribute to suicide prevention. The focus group and paintings were used to obtain youth perspectives on how their involvement in the year-long YPAR process influenced their capacity and the potential impacts on prevention efforts. Findings from the two methods of data collection are presented in the following sections.
Awareness of Improved Research Quality

Two aspects of research quality that were raised in this study were: (1) relevance of data to the target population, and (2) improvements in the ability for research findings to reach intended audiences. Each of these are described in more detail below.

**Enhanced Relevance of Data.** During the focus group discussion, the five youth identified a key aspect of participatory research that has been discussed by scholars; the ability for community stakeholders engaged as co-researchers to obtain data that is more relevant to the community of study. These youth indicated they were well aware of their unique position to obtain data that more accurately reflected the perspectives of their peers, especially in comparison to what could be obtained by an adult academic researcher. They noted that other youth were likely to feel more comfortable with them and judged less negatively; therefore, they are more likely to be honest about their true feelings on the subject and talk about the nuances of their position. A youth pointed out:

…we can get a lot more personal and actual data than, you know, if we were a group of adults talking to teenagers. That might present obstacles because teens they’d be interviewing might be scared or worried about what they say.

Another youth added: “We’re just trying to make a change for the better and we’re not trying to destroy their morals or principles, or make them feel bad about the way they live their lives or whatever.” Based on this conversation, it appeared that youth felt they were able to make an exceptionally positive contribution to suicide prevention in regard to the relevance of their data and the ability to provide new understandings not present in the adolescent suicide literature.

**Enhanced Translation of Research Findings.** Another aspect of research quality discussed in participatory research circles, is the ability for findings to be interpreted more accurately as a result of community stakeholder involvement. Additionally, their involvement is
expected to improve access and appeal to the target population and related audiences, as well as the ability for the research findings to have utility in real-world settings. The five youth in this study were especially excited about moving from the research phase of their project to dissemination of findings. In addition, they were well aware of how their insider position within the school setting was both a personal and broader social group opportunity. According to one youth:

I feel like so many people are aware that there’s a stigma around suicide and even mental illness as a whole. And it’s interesting that we’re addressing that. I think that’s such a unique thing to do. I mean, not everyone has that opportunity.

Based on the enthusiasm of their peers at the mere mention of the project, they were hopeful about taking their findings out to schools and engaging youth in additional conversations about the topic. They especially wanted the dissemination process to help validate the feelings and ideas of other youth, and to initiate additional action by other students and school administrators. Thus, they were viewing the dissemination phase as more than a simple reporting of what they did, they saw it as an opportunity to expand action on the issue beyond what was being done by the YCSP members. And, more importantly, they expressed confidence in their ability to implement this phase of the project based on what they had learned during the YPAR year. When thinking about what they hope to accomplish in disseminating their findings, a youth said:

…to show teens in general how we know how you’re thinking about it and what you want to be done. And, here are ways this can be done. And, we can also give it to school administrators to see if they can make a difference as well.
Out of the Darkness: Bridging the Personal and Societal

The colors and descriptions provided in the youths’ paintings spoke to the power of visual arts as a way for individuals to express their thoughts. Notably, three of the youth explicitly depicted a transition from darkness to light in which they connected their personal position within the work being done by the council to the effect they aim to have on larger social systems. Although each of these youth addressed an overall theme of personal-societal connectedness as a result of their engagement with YPAR, the different distinctions they each made are worth exploring in more detail.

As mentioned previously, one youth contrasted darkness and light as a description of how YPAR helped her to see that although they learned a great deal about youth perspectives in their interviews, additional knowledge about suicide is still needed. Later in her writing, she went on to also describe the darkness as a metaphor for a lack of knowledge or understanding of suicide amongst the general public; however, she used the stars to represent YCSP members or “the people who are trying to decrease the stigma around suicide.” The description provides evidence of the youth’s sense of ownership over the knowledge she has obtained and a responsibility to educate others as a means to address suicide. Therefore, she demonstrates the basic notion of youth serving as a conduit for knowledge transfer, or providing a bridge from personal experience and understanding to increased understanding at the societal level.

This was further exemplified in the painting and narrative of another youth who advanced the basic notion of personal-societal connectedness beyond being translators for education and awareness to viewing youth in a more active role as agents of change (Figure 8). Although this youth also described the darkness as a representation of society, it pertained more to the social milieu and specifically the lives of young people. Furthermore, she viewed YCSP members as having the capacity to influence that milieu and how young people respond to the world around
them; thus, indicating a belief that youth involvement in suicide prevention efforts can have a drastic effect on the resilience of young people. In the first paragraph of her narrative she provided strong language to make this point and drew a distinct connection between the personal aspect of YPAR involvement and society:

My painting represents our influence as a council and on each other and the community. I began with a bland, gray-black-white background to represent the “pollution” within society and the minds of our generation. Then, colors expand from the lower left corner and spread into tiny, colorful dots around the gray. This is supposed to represent our influence as a council. We aim to spread a variety of beliefs, outlooks, and general hope and optimism around society, and particularly to those our age.

*Figure 8.* “...our influence as a council”, Margot, age 17.

The third youth who used the darkness to light metaphor spoke strongly of the personal aspects of depression as represented by the darkness, but also the potential for people to move toward lightness, thus “symbolizing life and evolution”. She also indicated that the individuals who engaged in YPAR not only sought to benefit their personal knowledge or fulfillment, but
also to have an overall positive effect on adolescent suicide. Thus, in her narrative she described moving out of the darkness and into the light at both the personal level and at the societal level, and that this is a mission-driven proposition. In regard to the personal-societal connection, she seemed to expand on the notion of youth influence to view it as an intermediary to the long-term goal of ending suicide. These aspects of the connection are evident in this passage of her narrative and the painting displayed in Figure 9:

The idea is what the suicide prevention council represents. If the dark is the depression, and that man represents all of humanity, we see our mission complete. There is a goal to stop the suicidal attempts on a large scale, and this painting reminds me of what the bigger goal is. We want to see everyone on the top, in the color.

*Figure 9. “…symbolizing life and evolution”, Amanda, age 17.*

**Summary and Conclusions**

Overall, the youth in this study reported positive feelings about their YPAR experience and how it contributed to their own personal development and ability to contribute to adolescent suicide prevention in a meaningful way. The desire to have a positive impact on adolescents in
the region motivated youth in this study to initially participate in YCSP and to continue with their research project even though the work was challenging at times. Some of the challenges identified in this study included maintaining consistent engagement amongst YCSP members throughout the project period and working through group decision-making processes. The youth specifically highlighted the long period of time it took to make decisions and to design their project; however, they ultimately deemed the long process to be valuable and a key learning that they were only able to understand in hindsight.

Being driven by a mission and having a clear goal to guide their research project and future work together eased the frustration with the long planning process. In addition, the youth valued the acquisition of concrete skills they could apply academically and in their future life goals. They also identified how the collaborative YPAR process was already proving to be personally valuable as they worked on group projects in school and prepared for adulthood. Another aspect of YPAR that the youth appreciated and thought positively affected their development, was a shift in perspective. This included enhancing their understanding of adolescent suicide and its contributing factors, as well as better awareness of others’ viewpoints and different life experiences.

The findings summarized in previous sections were important for understanding the implementation of YPAR in this particular context. However, the merging of multiple data collection methods contributed to a robust understanding of YPAR applicability and generated a comprehensive, but nuanced, description of the ways in which individual youth development is situated within the YPAR experience and the potential effect this has on suicide prevention efforts. As such, I have synthesized the findings from my three research questions into overarching study themes. The following sections provide an overview of these three central
themes in light of the findings previously described. Then, in my final chapter, I discuss these themes in the context of existing literature and discuss the implications for YPAR and adolescent suicide prevention.

**The Central Role of Opinions**

The word “opinion” was brought up frequently by the youth in this study, but they discussed the word in multiple ways. While on the surface opinions were somewhat viewed as something you possess—as in, you do or do not have them—the youth also talked about opinions as a dynamic process that spanned various aspects of their research project. They identified the formation of their own personal opinions as an important contributor to their individual growth and as a necessary step in the YPAR collaborative process. However, this formation was also closely linked with opinion sharing, where having a space in which they could explore similar and different viewpoints allowed them to individually further develop and refine their opinions. An important point, however, is that having the opportunity to engage in those discussions was not enough. It was the sense of validation they received from their peers during those conversations, even when viewpoints differed, that helped them form their own opinions and feel compelled to continue sharing. As a result of this iterative cycle of opinion formation-sharing-validation, the youth felt unified in their research goals and overall mission as a council.

This opinion cycle also extended to the youths’ research project and interactions with peers in the interview process. It was important to the study youth to feel aligned within their immediate social group, the YCSP, but not to the extent that they were not open to alternate perspectives offered by their interviewees. In fact, the study youth seemed to be energized by hearing the perspectives of their larger community peer group. Even when they were faced with life experiences and viewpoints in the interviews that differed from their own, the youth were
able to refine their individual and group opinions regarding adolescent suicide while simultaneously feeling like their opinions were validated in the research process. This suggests the youth were able to balance multiple perspectives simultaneously, which may have contributed their belief that they are uniquely situated and capable of taking action on adolescent suicide and are able to have an influence on their peers. Hence, this suggests that the opinion cycle was an important contributor to youth development across all four constructs. It also underscores the potential for YPAR to concurrently focus on individual development while maintaining a broader societal outlook.

**Expanding Notions of Confidence**

Confidence is a key concept in positive youth development and is represented in all four youth development constructs in some way, such as confidence in perceptions of self or confidence in ability to take action. The word “confidence” itself was raised numerous times by the youth in this study and, like opinions, seemed to hold a central position in these youths’ perception of their YPAR experience, development, and capacity for action. Furthermore, much of the youth’s confidence seemed to be related to the opinion formation-sharing-validation cycle described in the previous section. Youth reported feeling more confident in their individual selves, as well as their shared group work, as a result of the opinion cycle they experienced within YCSP and with their larger peer community.

Regarding the YPAR process itself, the validation youth felt when they shared opinions amongst each other built their confidence to continue forming and sharing their personal opinions with other YCSP members. In turn, this gave them an overall positive experience with group communication and decision-making even though the process was long and difficult at times. However, most notable, was the belief that this aspect of their development was
benefitting them outside of YPAR. Their increased confidence was helping them to participate and take leadership in other group settings, to feel more comfortable with academic settings and activities that required them to speak out, and to apply their research skills to other topics and school assignments. Furthermore, they connected their increased confidence to the development of soft skills that would be useful to them as they continue academic and career pursuits. This included skills such as interpersonal communication, collaboration, critical analysis, and project planning and management. By experiencing these unexpected benefits they felt more engaged with the work and it fostered their ongoing involvement in YPAR.

Increased confidence also bolstered the youth’s trust in their capacity to influence peers and to have an impact on adolescent suicide. Some of this was a result of the confidence they felt they had personally attained in the YPAR planning process, but it was also confidence attained through their interviews with peers. Learning about different viewpoints and seeing that other youth were also interested in addressing suicide, further empowered the youth in this study and made them feel more confident that they can make a difference. It also prompted them to think about how they could reflect that sense of empowerment back out to their peers, not only in regard to suicide but with other issues affecting young people. Meaning, they were more assured in their ability to help other youth feel empowered and have a sense of confidence in their own capacity to affect social change.

**Moving Toward Collective Efficacy**

“Opinion is the medium between knowledge and ignorance” (Plato, n.d.). The experiences shared by youth in this YPAR study suggest that self-esteem, empowerment, self-efficacy, and capacity for action were first facilitated at the individual level through the opinion formation-sharing-validation cycle. As individual youth became more confident in their ability to
engage in this cyclical process with others, the YCSP group became more cohesive in their shared goals and aims. Once the YCSP members agreed on their shared goals, and had cooperatively developed their research design, recruitment protocol, and data collection instrument, they initiated their interviews with peers.

As discussed previously, the actual process of data collection seemed to place the YCSP members into a second cycle of opinion formation-sharing-validation. Witnessing the positive reactions of peers to their study and the work of YCSP in general, as well as being validated by the perspectives shared by their peers, moved the youth from feeling like they simply had an opinion to thinking about themselves as purveyors of knowledge. By this I mean, they understood that they were obtaining new knowledge through the interview process but they also had a strong interest in pushing that knowledge back out to their peers and encouraging them to do the same. This seemed to be a critical juncture for the youth participating in this YPAR project. Once they felt like they were co-generating knowledge with peers, a sense of collective efficacy emerged.

Getting to this stage of the YPAR experience appeared to solidify the youth’s confidence in their capacity to contribute to suicide prevention by having an influence others. It may also explain why the youth thought the experience provided them with a concrete skill set that would be useful to them as they prepare for adulthood. Although the present study did not aim to measure the YCSP youth’s perceptions of collective efficacy this was the way they most often talked about confidence in their capacity to affect change. When they discussed educating others about adolescent suicide, reducing stigma associated with mental health, and having an influence on others, they most often talked about it in terms of “us” and “we”. While the youth did not lose sight of their personal role in YPAR and what they were able to take away from the experience,
they seemed to position their own self-esteem, empowerment, efficacy, and capacity for action, within the group identity and experience. They saw themselves working collaboratively to further build the self-esteem, psychological empowerment, self-efficacy, and capacity for change within their larger peer group. Consequently, not only were they looking to share the knowledge they had gained about suicide, but they were also interested in sharing the constructs of youth development with peers as a means for generating further action. It indicates the youth shifted their perspective on capacity from the start of the YPAR year to the end—from focusing on themselves as individuals hoping to make a difference to viewing themselves as part of a collective capable of having the power to affect others.
Chapter 6: Discussion, Implications, and Conclusions

Adolescent suicide rates are rising after years of steady decline and the evidence for existing prevention strategies suggests a lack of comprehensive approaches that effectively develop youth coping, problem-solving, and help-seeking skills, as well as promote treatment utilization and engagement. Additionally, few studies have focused on factors that protect youth from suicidality while simultaneously addressing a wide range of risk factors that contribute to adolescent suicide. Aside from being involved as study participants, youth have essentially been left out of research on the subject and in the development of suicide prevention programs.

The present study examined the application of YPAR with adolescents volunteering with YCSP, a community-based youth council that assists a local, but nationally-renowned pediatric hospital with suicide prevention. Given the novelty and complexity of using a participatory research approach with youth to address adolescent suicide, I was interested in studying the ways in which engaging youth in this manner would affect them as individuals, and how this may potentially transfer to broader societal impacts. I based this on the social ecological perspective which asserts individuals are capable of influencing social environments, while also recognizing that, in turn, individuals can also be influenced by those environments. To account for the lack of adolescent suicide research that has addressed youth protective factors and utilized strengths-based approaches outside of treatment settings, I integrated positive youth development (PYD) with social ecological theory. By doing so, it provided a comprehensive framework for studying the multiple levels of change and influence that may be possible within the YPAR approach. In this chapter I discuss (1) how the central study themes enhance an understanding of the YPAR approach within an integrated social ecological/PYD model, (2) limitations of this study, and (3) implications and recommendations for adolescent suicide prevention and other issues related to youth.
Situating YPAR within an Integrated Social Ecological/PYD Model

The four youth development constructs of self-esteem, psychological empowerment, research self-efficacy, and capacity for action examined in this study provided an important conceptual basis for understanding the potential impacts of YPAR. Although youth in this study reported mostly positive gains in their development via quantitative measures, the focus group discussion and paintings combined with narratives provided the most critical insights into the aspects of these constructs that mattered to the youth participating in this study. Interestingly, although what they discussed or wrote about was related to the four youth development constructs, their descriptions typically spanned more than one construct at a time. Plus, they offered perspectives that were more nuanced and complex than what was offered in the questionnaires. Perhaps this is because their development was inextricably intertwined with their overall YPAR experience and capacity-building; it may have been difficult to talk about their own development without discussing how they operated as a group. Thus, in the previous chapter I proposed three central themes that synthesized youth development, experience, and capacity-building findings as a means to improve adolescent suicide prevention efforts. These central themes included: (1) a cycle of opinion formation-sharing-validation, (2) the development of individual and group confidence, and (3) the development of collective efficacy. Here, I discuss each of these themes in the context of existing literature and how they work together in the social ecological/PYD model that guided this study. In addition, I present a detailed version of the model for future YPAR implementation based on what was learned in this research study.

A Developmental Cascade

Separately, social ecological theory and PYD have gained prominence in public health because they view individuals within an environmental context and acknowledge individuals
may be impacted by their environments (Benson et al., 2006; McLaren & Hawe, 2005; Stokols, 1996). More importantly, the two theories also emphasize that individuals are capable of having an influence on public health within those environments. With that said, a limited number of public health studies have integrated the two theories to address issues affecting young people. However, similar to the findings in the current study, the two previous public health studies that did integrate the two theories found a connection between positive effects on individual youth and a commitment to caring for their communities (Atkiss et al., 2011; Christens & Peterson, 2012). These two studies underscored the potential for youth development to be effected in a variety of positive ways when they were supported by their social environments. Thus, both the social environment and different aspects of development served as protective factors for an individual youth so the youth was then capable of being civically engaged. Although these two studies did not examine how individual changes in youth development in turn impacted the community, a review of PYD programs has indicated positive effects on community-level outcomes (Catalano et al., 2002). Therefore, it is believed that as youth engage in strengthening their community or a specific issue that affects them, individual youth protective factors are transferred to, or become, community protective factors. Masten and Cicchetti (2010) have referred to this cumulative and iterative building of individual and community strengths as a developmental cascade.

The concept of a developmental cascade was evident in the current study of YPAR for suicide prevention; therefore, I am using it in this chapter to provide a framework for understanding how the central findings in this study fit together. The opinion formation-sharing-validation cycle that developed during the YPAR planning process was a key influence on individual perceptions self-esteem, psychological empowerment, self-efficacy, and perception of
capacity for action, which the youth described globally as increased confidence. The individual effect on confidence then contributed to confidence as a group and feelings of collective efficacy even when confronted with typical group communication and decision-making challenges. As a result of these individual and group developmental advances, youth were confident in their transition out to their peer group to gain additional knowledge and to it that as a means to grow their circle of influence. Feeling confident that they had grown their circle of influence, the youth believed in their overall capacity as young people to make a collective impact on suicide. The cumulative effect of moving from individual to immediate peer group to larger peer group provided a developmental cascade that built the youths’ capacity to actively engage in suicide prevention research. The next section describes in more detail how the developmental cascade was built in the current YPAR study based on the central themes of the findings.

**Building the Developmental Cascade**

The identification of individual and community strengths, iterative processes, mutually beneficial research, and youth capacity-building that I have discussed so far are not new to YPAR. In fact, they are among several additional principles associated with participatory research approaches (Israel et al., 2013; Minkler & Wallerstein, 2008; Reason & Bradbury, 2001). However, the findings in this study help advance our understanding of transformative processes that may serve as intermediaries for sustainable community-level outcomes. Further study of the pathways between process and outcomes has been identified by leaders in the various fields of participatory research (Brugge, et al., 2010; Flicker, 2008; Ozer & Douglas, 2015; Sandoval et al., 2012; Wallerstein et al., 2008). Therefore, if YPAR is expected to be more than a basic curriculum for teaching youth the scientific method, and is considered praxis for youth development and social transformation (Cammarota & Fine, 2008; Rodriguez & Brown, 2008),
2009), then it is important to identify the processes and turning points that are important to youth.

**The Opinion Cycle.** The findings in this study suggest that a fluid and iterative cycle of opinion formation-sharing-validation is an important developmental process within YPAR. However, it is important to state that this process is not simply about allowing youth to vent about their personal observations in hopes of getting others to agree with them. Rather, it should be considered a necessary step in helping youth to position themselves as an individual in the context of multiple environments and to learn how to use newly obtained knowledge to navigate and influence those environments in an ongoing manner.

The opinion cycle identified in this study is similar to the process of experiential learning developed by Kolb (1984). Based on the early work of John Dewey, Kurt Lewin, and Jean Piaget, Kolb’s model of experiential learning stresses an iterative cycle of concrete experiences, observation and reflection, formation of abstract concepts, and testing concepts in new situations (Kolb, 1984, 2015). Like social ecological theory and PYD, experiential learning theory is predicated on transactions between the individual and their environment and, more specifically, Kolb describes learning as the “process whereby knowledge is created through the transformation of experience” (1984, p. 38). Experiential learning has become highly regarded for its applicability in real-world settings and is mostly considered be an effective pedagogical method (Gosen & Washbush, 2004; Kolb, 2015).

In light of the pedagogical and transformative underpinnings of YPAR, the opinion cycle identified in the current study shows how experiential learning theory can be applied in YPAR as a developmental process that is a foundation for individual- and group-level changes. Other studies have used and discussed the importance of different learning theories in the
implementation of YPAR (Berg et al., 2009; London et al., 2003; Mirra et al., 2016; Morrell, 2008), but they have not addressed in great detail how the learning process unfolds. The opinion cycle is an explicit articulation of what needs to occur for youth to critically analyze ecological contexts and to process the information they take in when engaging in YPAR. In addition, it highlights the process of critical analysis and knowledge acquisition in YPAR is not a solo venture, but one that must be taken in partnership with others, with all three aspects of the cycle requiring the input of more than a single person. The current study indicates the interdependent nature of the opinion cycle positions it as a foundational process that occurs at different stages within YPAR implementation and that it strengthens individual confidence which, in turn, serves as a short-term influence on the development of group confidence, group cohesion, and collective efficacy. The function of the opinion cycle is discussed in further detail in the following sections.

**The Intersection of Confidence and Group Cohesion.** Confidence was a general term used by the youth to convey individual improvements that spanned all four youth development constructs examined in this study—self-esteem, psychological empowerment, self-efficacy, and capacity for action. This finding is not entirely surprising in itself, as confidence is a key construct in PYD theory (Lerner, 2004; Silbereisen & Lerner, 2007) and has been identified as a vital component in actualizing youth potential to engage in community health promotion (Cargo et al., 2003). However, this study highlights how changes in confidence at the individual level are intertwined with changes in confidence at the group level, and this has important implications for youth perceptions of their capacity to be change agents.

The opinion formation-sharing-validation cycle described in the previous section played a critical role in the development of youth confidence. The first cycle of opinion formation-
sharing-validation occurred amongst members of the YCSP as they were designing their research study and, according to the youth, this had a positive effect on individual confidence and comfort engaging with other members of YCSP. As a result, the group was able to forge a shared identity and group cohesion emerged as a critical component of their work together and advanced the research planning process. Furthermore, it prepared youth to move beyond the interactions within the immediate YCSP peer group to interaction with their larger peer group through the research study. This meant they were interacting with peers at their own schools as well as those from around the local region. Doing this in concert with other YCSP members further confirmed their trust in working together as a group and the ability to take action together.

Group cohesion is an important milestone in group development because it means individuals are transitioning from a sole focus on the group’s primary task, which in this case is adolescent suicide prevention, to contributing to the maintenance of the group (Elwyn, Greenhalgh, & Macfarlane, 2001). Furthermore, in Tuckman’s theory of group development (1965) this stage is referred to as “norming” and it indicates group members are moving from a focus on individual agendas and the desire to mold the group to suit their own needs to concentrating on the shared, primary aims of the group. Group cohesion can be a powerful tool for keeping youth engaged in the participatory research process, achieving individual youth development outcomes, and facilitating the achievement of positive health outcomes (Suleiman et al., 2006). One successful example is a project by Berg and colleagues (2009) where youth were engaged in drug and sexual risk prevention based on a model that aimed to affect change at individual, group, and community levels. The pathways between these levels were seen as “interactive and iterative” (p. 346), and were an intentional part of their YPAR design. In an evaluation of the project, Berg and colleagues found that activities where youth engaged in
difficult but critical discussions with each other had a positive effect on individual youth attitudes, opinions, and behaviors.

The findings from the current study indicate group cohesion may be a key developmental goal in YPAR. The formation of a shared vision and group cohesion in this YPAR project was the driver for expanding out from the immediate peer group to the larger peer group social environment; however, in terms of social ecological theory, this developmental goal sits within the microsystem of the YCSP and their YPAR project. It was important for the youth in this study to develop a feeling of connectedness amongst themselves within the YPAR project in order to move beyond their immediate group into the larger public sphere. While this may appear to be a minute detail of group process, it may function as an important intermediate outcome and should be examined in future YPAR studies.

The Intersection of Group Cohesion and Collective Efficacy. Getting to the data collection stage of the YPAR research project was important to the youth in the present study. The act of conducting the interviews provided a tangible source of motivation for continuing to engage in the YPAR project and it allowed them to engage in a second cycle of opinion formation-sharing-validation with their larger peer group. This second cycle was also noteworthy because it prompted the YPAR youth to feel like they were truly advancing knowledge about suicide for themselves as well as for others. As such, it served as an important short-term influence on their overall positive feelings of being able to work as a group to affect change for young people. More specifically, it influenced the youths’ feelings of collective efficacy and a belief in their capacity to contribute to suicide prevention.

Collective efficacy is one of three forms of human agency identified within social-cognitive theory and has been described by Bandura (2000, p. 75) as:
People do not live their lives in individual autonomy. Indeed, many of the outcomes they seek are achievable only through interdependent efforts. Hence, they have to work together to secure what they cannot accomplish on their own. Social cognitive theory extends the conception of human agency to collective agency. People’s shared beliefs in their collective power to produce desired results are a key ingredient of collective agency. A group’s attainments are the product not only of shared knowledge and skills of its different members, but also of the interactive, coordinative, and synergistic dynamics of their transactions…Therefore, perceived collective efficacy is not simply the sum of the efficacy beliefs of individual members. Rather, it is an emergent group-level property. This definition of collective efficacy situates individuals in relationship with others as a means to create change. Although the present study was not intentionally designed to study collective efficacy, other researchers engaged with YPAR have included collective efficacy as part of their model and as a study measure. For example, the study by Berg et al. (2009) found a significant increase in collective efficacy, but these increases were associated with times when the youth were engaged in a specific task, such as the action phase of their project or active reflection on their impact as a group. When the group was meeting less regularly or engaged in the long process of project planning, youth were less likely to feel a sense of collective efficacy. This finding was consistent with another study where YPAR was used with young mothers, aged 16-24 years old, as a means to develop their leadership and civic engagement capacity (Levac, 2013). In this study, collective efficacy reportedly peaked at the time when the group was actively working together to develop their questions to use in interviews with other young parents. Although it was present at other times in the project, participants indicated it was less noticeable.
The findings from the current study are consistent with these previous studies in regard to when in the process youth experience collective efficacy. The act of collecting data and reflecting on what they were finding moved group members to think beyond the microsystem they had created within YCSP and promoted a positive perception of their capacity to be agents of change. Furthermore, once the youth reached this point of collective efficacy, the long and difficult planning process seemed to be worth the effort. Since the youth represented different schools in this YPAR project, this step was extremely important because it also helped to extend the youth beyond the microsystem of their own schools and families to encourage interaction between various microsystems. Additionally, several of their peers reported that the simple act of being interviewed made them feel as though they were also contributing to suicide prevention in their community. As such, collective efficacy operated at the mesosystem level and was comprised of youth from across the region. It also further developed youth confidence across the four developmental constructs and group cohesion because youth in the study felt like they were not alone in taking action in their community. This has important implications for using YPAR as a catalyst for far-reaching social change efforts.

**Viewing the YPAR Developmental Cascade**

The central themes from the current study provide evidence of the interaction between individual youth development, group development, and the multiple systemic environments in which they operate, as described in social ecological theory. It also indicates the importance of understanding this relationship with a PYD lens because of the attention to building individual and community strengths, as well as viewing youth as intentional agents of change. The interdependence of developmental processes and outcomes that resulted from the four key transformative processes I described in the preceding section are the crux of the YPAR
developmental cascade. Although this study did not include a longitudinal examination of how this cascade produced long-term impacts on adolescent suicide, it does provide insight into what might need to be included in a comprehensive YPAR model using the tenets of social ecological theory and PYD. The group aspects of the resulting model validate the logic model developed and tested by Berg et al. (2009), but it also provides details about what developmental goals may be necessary for producing short-term influences and encouraging transactions between the different system levels. To further understand where the YPAR components that arose from my study findings are situated within the integrated social ecological/PYD framework that guided this study, a detailed display of the model is provided in Figure 10.

Figure 10. Creating the YPAR developmental cascade.
Limitations

Although this study highlights the ways in which conducting research with youth can help build their own individual development while influencing changes in their peer group, there were challenges with the YPAR approach that should be noted. Furthermore, the challenges associated with the implementation of YPAR in this setting overlap with data collection limitations present in this study. In the following sections, I describe these two primary limitations to give context to the findings and to assist others looking to implement YPAR for suicide prevention or other youth-related topics.

YPAR in a Community-Based Setting

The biggest challenge associated with the implementation of YPAR in this study was ongoing youth engagement. The YCSP is a community-based program with youth volunteering to participate in addition to their regular academic and extracurricular activities. Moreover, youth are recruited from a range of schools from around the Greater Cincinnati region, so YCSP spans a large geographical area. As a result, attendance at meetings and following through on activities outside of the formal meeting structure was an ongoing challenge throughout the cohort year even though I worked with members to try different strategies for regular attendance. While the current study did not explore the reasons why there was a lack of engagement throughout the entire cohort year, youth briefly indicated within the focus group that sports, employment, and studying had an impact on engagement. Family obligations were also given as reasons when youth contacted facilitators to say they could not attend a meeting.

Intensity and length of time were also factors in the implementation of YPAR in this setting. The cohort year was approximately 9 months long and included bi-weekly weekend meetings because that was the only time youth were able to devote to the project. During the
meetings I focused on group dynamics and relationship-building, development of shared goals and aims, development of the research design, and data collection. Although I intended for the year to include data analysis and interpretation, dissemination, and development of a prevention action plan, there simply was not enough time and those activities had to be extended to the second year of the project. This was a lesson for me and the youth who participated in how long it takes to do a full action research cycle as a group and was consistent with others who have recommended YPAR be conducted as a two-year project cycle (Suleiman et al., 2006). With that said, adjustments to intensity and length of future YPAR programming may help to complete the full cycle in a shorter timeframe. For instance, many YPAR projects represented in the literature appear to be connected to schools or are implemented in an intensive manner where youth and the facilitator meet more frequently, such as daily within the classroom or as an intensive daily summer program.

Based on the challenges noted above, I assert that the community-based implementation of this YPAR poses unique challenges, but that the potential payoff for a broader social impact makes this type of setting worth considering. To do this, future implementations of YPAR in community-based settings should consider issues related to youth engagement and commitment to the work as infrastructure is developed. In addition, to maintain engagement as a priority, youth should be consulted before and during implementation about how to continue moving forward as a group. Additional study of youth engagement in YPAR, including how youth view their commitment and engagement to the YPAR work, and factors that promote or impede participation, are warranted. It would be especially useful to examine differences among school-based or other high-intensity models and community-based YPAR.
Data Limitations

The engagement challenges noted above also had an impact on the collection of data in this study. Youth who completed the posttest questionnaires and participated in the qualitative and arts-based strands of this study were among the group of youth who participated most regularly in the YPAR project throughout the year. They were not specifically selected based on their rates of attendance, but since data collection occurred during YCSP meetings, my sample was dependent on their attendance. The most dramatic evidence of YCSP attrition over the course of the cohort year was the completion of pretest-posttest questionnaires. Due to the low completion rate I was unable to conduct significance testing of quantitative data as intended. Although the qualitative and arts-based strands were always considered to have greater priority in this mixed methods study, the quantitative strand was further limited by the lack of youth who completed the measures at both pretest and posttest. Despite this limitation, the quantitative data helped to show the direction of individual youth development over time to supplement key findings about how youth development occurs and youth perceptions of that effect on others.

Implications and Recommendations

The study findings and model I presented have important implications for YPAR, regardless of the study limitations. Here, I discuss the significance of this study in regard to using YPAR as a strategy for preventing adolescent suicide. Then, I discuss the implications of this research on YPAR in general.

YPAR for Adolescent Suicide Prevention

YPAR embedded in a social ecological/PYD framework has meaningful implications for suicide prevention efforts. One reason for using YPAR for suicide prevention was to address the need for prevention strategies that have a greater positive impact on youth suicidal thoughts and
behaviors. Youth involvement in the development of these prevention strategies was identified as a gap in the literature and as a possible way to ensure the strategies resonate more strongly with young people as a means to be more effective. Although this study did not measure long-term impacts on suicidality, the findings suggest youth see themselves as being capable of developing strategies that are more relevant to their peers. Furthermore, by taking leadership of the research process, they are confident in their collective ability to (a) obtain data that more fully reflect the thoughts of young people and (b) initiate community-level changes in partnership with their peers. This suggests that YPAR for suicide prevention could be useful in improving help-seeking behaviors, problem-solving, and treatment engagement and utilization as a means to reduce suicides and attempts.

Peer support models have become more common in healthcare (Pedersen & Hack, 2010; Wells et al., 2008), mental health, and related fields such as child welfare and juvenile justice (Ansell & Insley, 2013). These models use laypersons with a similar lived experience as a client or patient to offer support and help them navigate complex systems of care, particularly when that person may be apprehensive about service systems (SAMHSA, 2006). Peer support models have shown positive results in regard to mental health service utilization (Kelly et al., 2014), goal achievement (Butman, 2009), and fostering hope that mental health recovery is possible (Repper & Carter, 2011). In recent years, many states have even started offering peer support specialist certifications as part of a comprehensive mental health system of care (Ansell & Insley, 2013). Like the findings in this study, individuals employed as the peer support have reported increased self-esteem and confidence (Solomon, 2004). YPAR for suicide prevention provides an opportunity to expand on these peer-to-peer relationships that have become more accepted in the health and mental health fields. This study indicates YPAR’s potential to influence broader
societal changes around the topic of suicide, as opposed to changes that focus on one individual at a time. In particular, the capacity building principles of YPAR and the developmental cascade that was identified in this study suggest YPAR may produce broader community-level impacts than those typically seen in peer support models.

The point above does not suggest that there is not a place for peer support models, but the current study highlights that the power of YPAR as a prevention strategy is its potential to simultaneously be universal, selective, and indicated in nature. However, this requires a major shift in thinking about how suicide prevention programming is delivered and funded. YPAR is not a one-time program that is implemented and studied linearly. To achieve the maximum benefit, it must be a long-term commitment and requires stewardship by adults who are adept at research methods and comfortable with innovative pedagogical methods. Entry-level program coordinators or novice teachers may struggle to implement YPAR and produce positive effects unless they are trained on how the individual and other system levels work together. Given the complexities of YPAR, as have been indicated with other PAR approaches, YPAR should be implemented with adequate supports in place, and in connection with other prevention and intervention strategies, such as gatekeeper training, peer supports, and ongoing treatment. For example, if YPAR for suicide prevention is implemented in a school setting, it would be useful for school personnel to receive gatekeeper training so they know who to contact if a student reaches out for help. Also, as indicated by the study youth’s conversation about increased confidence as a result of having emergency protocols in place, youth engaging in YPAR for suicide prevention should know what steps to take to connect peers to supportive adults who can connect them with community resources if they are suicidal or needing other emotional support.
YPAR for Other Youth-Related Issues

The transformative processes identified in this study provide a blueprint for how a developmental cascade may occur when implementing YPAR. In particular, it focuses on how to move from a focus on changes at the individual level to macro-level changes in societal institutions, attitudes, and norms. Although this study focused on the individual development, experience, and capacity of youth related to suicide prevention, the findings have the potential to strengthen the implementation of YPAR for other phenomenon affecting young people, such as obesity, substance use, health and educational disparities, and so on. The model previously presented in Figure 10 provides a framework for using YPAR across a range of research problems. Future studies that test the model’s applicability in a variety of settings and pertaining to a range of research topics would be beneficial.

Based on other studies that span a diversity of topics (Berg et al., 2009; Levac, 2013; Mirra et al., 2016; Morrell, 2008; Ozer & Douglas, 2013), the individual- and group-level changes experienced by youth in this YPAR project likely apply to other issues affecting adolescents. The current study is significant in its contribution to the implementation of YPAR as praxis because it identifies influential processes that affect individual thoughts and behaviors, as well as those that could have a positive influence at the community level for maximum and sustained impact. It also helped to identify where in the process perceptions of collective efficacy occur so that individual gains extend outward to other youth. Additional studies that examine the developmental cascade as it moves into societal level impacts and how that in turn influences individuals are warranted. These studies should include measuring collective efficacy at different stages of the developmental cascade to improve our understanding whether and how YPAR impacts issues affecting youth.
As seen with other PAR approaches, researchers partner with community members along a continuum of engagement; sometimes they are implemented as full co-researcher models and other times as community members providing minimal input on research primarily conducted by academics (NIH, 2011). However, researchers who strictly adhere to the principles of PAR are likely looking for more than advisory input on their research, they are looking to enter into a fully equitable and democratic process that produces solutions that are relevant to the community of focus (Brydon-Miller et al., 2003; Burns, 2007; Reason & Bradbury, 2001; Reason, 2003; Wallerstein & Duran, 2008). The implementation of YPAR with the YCSP aimed to achieve this highest level of community engagement with the target population being adolescents; therefore, the findings, interpretations, and YPAR model represent this comprehensive approach should be considered in future implementation and study of YPAR.

**Recommendations for Implementing YPAR**

The current study emphasizes that YPAR is a social change strategy that capitalizes on the inherent strengths of youth to further build youth and community protective factors through a developmental cascade. Although the current studied focused on the public health problem of adolescent suicide, the implications of the study findings extend beyond that single topic. The following list outlines key recommendations for using YPAR as a strategy for systematic change based on the findings from this study and existing literature.

1. Focus on individual and group development as protective factors:
   - self-esteem
   - psychological empowerment
   - self-efficacy
   - youth agency
   - group cohesion
   - collective efficacy

2. Use experiential learning processes to:
   - encourage youth opinion formation-sharing-validation at different stages
• develop a shared vision and goals
• build group cohesion and collective efficacy
• develop skills that benefit youth academically and in employment

3. Engage youth as leaders in all phases of the research process in order to:
   • obtain data that reflect the thoughts of young people
   • initiate community-level changes in partnership with peers

4. Consider the YPAR context (e.g. school-based or community-based):
   • intensity
   • length of project cycle
   • barriers to ongoing engagement, such as transportation or other activities

5. Consider additional supports YPAR youth need to conduct their study:
   • staff and leadership support
   • research training
   • emergency protocols

**Conclusions**

YPAR and other participatory research approaches challenge conventional notions of reality as being solely uncovered by objective researchers using only generalizable quantitative methods. If this were the case, we would be seeing more widespread positive effects on adolescent suicidality than what is currently represented in the literature. Although YPAR does not resolve all of the methodological and effectiveness issues present in adolescent suicide prevention, this study identified opportunities for broadening the scope of research and programming. It also revealed how expanding our paradigmatic and methodological assumptions may result in efforts that are more meaningful to youth, efficient, and impactful. More specifically, this study demonstrated that YPAR is capable of serving dual functions; it can be used as a framework for conducting youth-centered research and be considered a youth development program that may protect against future suicidality. This is done by developing youth as intentional agents of change for themselves and amongst their peers. The YPAR model
used in this study shows how innovative approaches that combine programming and research might work together to achieve lasting change.

YPAR provides an opportunity to move prevention science out of academia and clinical settings and into the real world. This study showed that youth who engaged in YPAR were able to consider critical research issues—such as rigor, relevance, and reach—without having engaged in graduate level coursework. Moreover, as they moved through the YPAR process they became profoundly aware of their unique position to influence other youth and produce rapid changes that may take adults much longer to achieve. They were also highly motivated to pass along their knowledge in order to continue the cycle of learning and change outside of their own peer group. These aspects of YPAR confirmed that science should not be bound to those who have advanced degrees and that our efforts can be strengthened by the active engagement of community members in the research enterprise. By describing and situating key developmental processes and outcomes within the YPAR model, as well as the point where youth develop a sense of collective efficacy, I have contributed to our understanding of what needs to occur in the implementation of YPAR for suicide prevention and other youth-related issues. While there is a place for traditional research approaches, collaborative approaches that equitably involve community members and build their capacity to address the issue beyond what can be accomplished in a single project are also necessary. They should be integrated into the fabric of scientific inquiry and prevention science, and continue to be examined for their potential to improve health and well-being outcomes.
References


Ansell, D. I., & Insley, S. E. (2013). *Youth peer-to-peer support: A review of the literature.* Retrieved from Youth M.O.V.E National website:


http://search.proquest.com/docview/1787152385?accountid=2909


doi:10.2105/AJPH.94.3.446


doi:10.1186/1471-2458-7-161

Balazs C. L., & Morello-Frosch, R. (2013). The three Rs: How community-based participatory research strengthens the rigor, relevance, and reach of science. *Environmental Justice, 6*(1), 9-16. doi:10.1089/env.2012.0017


structure and measurement invariance. *Journal of Youth and Adolescence, 39*(7), 720-735. doi:10.1007/s10964-010-9530-9


doi:10.1177/0002764202250662


159


https://www.pathwaysrtc.pdx.edu/pdf/fpS0911.pdf


Accessed on July 1, 2016.


Covariations of adolescent weight-control, health-risk and health-promoting behaviors.


doi:http://dx.doi.org/10.5993/AJHB.27.1.1


http://dx.doi.org/10.5330/PSC.n.2010-11.386


195


Strunk, C. M., Sorter, M. T., Ossege, J., & King, K. A. (2014). Emotionally troubled teens’ help-seeking behaviors: An evaluation of Surviving the Teens® suicide prevention and


Appendix A: YCSP Interview Study

The primary aim of my dissertation study was to understand youth development, experience, and perceived capacity for action when engaging in YPAR for suicide prevention. However, because the research study that was conducted by the youth was the centerpiece of our work together and is intended to inform local programming, it is necessary to discuss the study methods, findings, and implications for adolescent suicide prevention. I offer this chapter as an appendix to my study of YPAR so that it can inform future suicide prevention efforts and implementation of YPAR.

Introduction to the Study

Starting in Fall 2015, I engaged the full YCSP membership in a series of activities to design a qualitative interview research project. The focus on an interview project was determined by YCSP facilitators prior to the start of the cohort year because another quantitative survey project was being continued from the previous year by a subset of members. In addition, qualitative research methods were selected to fill a gap in the adolescent suicide prevention literature in general, but also for their particular relevance to suicide prevention in the Cincinnati region, which is the setting for the research. The activities I conducted with the YCSP members were designed to get them to think critically about what was already known about adolescent suicide and suicide prevention, to identify gaps in the literature, and to reflect on their own lived experiences. The activities also prompted communication amongst members and group decisions about their project. Using their unique insider perspective, they identified a lack of conversation and communication around the topic of suicide to be a major barrier in the ability of young people to understand and make sense of the complex topic, and in their willingness to reach out for help.
Thus, the purpose of the YCSP project was to explore the ways in which the topic of suicide is perceived and addressed among youth in order to identify methods of communication that encourage conversations about suicide. The YCSP members determined that in this phase of their research they wanted to focus on youth as their target population, with hopes of reaching out to parents, school personnel, and other professionals who work in suicide-related fields (e.g. physicians, counselors) in a follow-up study. The three research questions that guided the study were collaboratively developed by the academic partner and youth researchers and included:

1. How do youth view suicide?
2. What are youth perceptions of why people address suicide the way that they do?
3. What are the key components of powerful and effective conversations about suicide?

**Methods**

**Participants**

Participants in this study included high school students within the Cincinnati region. Of the 17 youth who participated, 65% were female and 35% were male. Most of the participants identified themselves as White (82%) and one youth also identified as Hispanic (6%). The participants represented eight different high schools (three private and five public).

YCSP youth researchers were responsible for participant recruitment using a variety of methods including announcements to student groups with which they were affiliated, posting announcements on social media, and approaching peers within their own schools and social networks. Those who learned about the study via group announcements or social media were given a link to an electronic survey site where they could indicate their interest in participating, and provide demographic and contact information. Potential interviewees were also asked their preference about being interviewed by someone from their own school or a different school.
Individuals who provided their information electronically were contacted by the academic partners to arrange their interview. In cases where YCSP youth researchers directly approached peers in their own school or social networks, the youth researcher and interviewee scheduled the interview for a time and place that was mutually agreed upon. Prior to conducting the interview, an information sheet was read aloud informing participants about the project and their rights as a participant, including the option to decline the interview at any time. The information sheet is provided in Appendix B.

Data Collection

Qualitative data were collected by the YCSP youth researchers across a three month period using a semi-structured interview method. The academic and youth partners agreed that this method was particularly useful in this context so the youth researchers who were new to interviewing were able to focus on their study topic while maintaining flexibility for follow-up questions (Rubin & Rubin, 2012). The interview questions were co-designed amongst YCSP youth researchers with training and input provided by the academic partner (see Appendix C for a copy of the interview guide). Interviews were conducted in-person or via telephone depending on which format was more convenient for the participant. Interviews were audio-recorded and transcribed verbatim by the YCSP youth researchers.

Data Analysis

Stakeholders in participatory research should be able to understand and make use of key findings (Tandon, Kelly, & Mock, 2001). As with all other phases of the research process, YCSP youth researchers fully participated in the analysis of interview data. Due to time limitations in the 2015-2016 cohort year, data analysis was conducted during the 2016-2017 cohort year. This cohort included the youth who conducted interviews the previous year as well as youth who were
new to YCSP. In total, analysis was conducted by 14 youth researchers during two 2-hour meetings.

Interview data were analyzed using a participatory group thematic analysis that combined the group level assessment method of participatory analysis (Vaughn & Lohmueller, 2014; Vaughn, 2014) and the concept mapping method of sorting codes into similar idea categories (Kane & Trochim 2007) to facilitate first and second cycle coding of interview data (Miles, Huberman, & Saldaña, 2014). In the first cycle, the youth researchers and academic partner independently coded each interview using their own coding labels. To facilitate the coding process amongst this large group of youth and 17 interviews, the youth researchers were divided up into four small groups comprised of 3-4 people. Each individual within these small groups coded the same subset of 4-5 paper transcripts so that every subset had multiple coders. The academic partner coded all 17 transcribed interviews. Every individual was then instructed to transfer the codes from their own individual paper copies of transcripts to index cards, with one code per card.

In the second cycle, the small groups sorted the independent codes of their interview subsets into thematic categories and wrote them on large pieces of paper to display in the room. The academic partner’s coding of all interviews was divided up according to the interview subsets so they were included in each group’s sorting. After each small group completed their sorting, they presented their thematic categories to the rest of the council and the academic partner facilitated a discussion with the YCSP membership to further collapse small group themes into overall interview themes to guide future actions of the YCSP. The findings discussed below are based on this final large-group thematic analysis. To ensure validity of the findings, YCSP youth researchers reviewed the detailed analysis for accurate representation of their work.
Findings

The following sections are organized by the six main themes identified in the participatory group analysis of interviews: (1) youth need help understanding suicide, (2) the perceived reaction of others guides youth behavior, (3) youth need help taking suicide seriously, (4) youth prefer small groups, (5) supportive schools are essential, and (6) using social media as a prevention tool. A rich description of the findings within these themes is provided to better understand adolescent perceptions of suicide, how it gets addressed, and recommendations for improving conversations about suicide.

Youth Need Help Understanding Suicide

Interview youth frequently noted the difficulties associated with understanding adolescent suicide and mental health in general; however, these difficulties spanned a variety of reasons. First, they thought that some of the challenges in understanding it were related to a lack of experience with issue. Many of them noted that unless you or someone you know had experienced suicidal thoughts, you were unlikely to think much about the issue. They thought youth who do not have direct experience do not realize the extent to which others may be experiencing mental health issues or suicidal thoughts. As one participant succinctly stated, “Unless you’ve had an experience with it, I don’t think it’s something that people think about very much or understand very much.”

A second reason that youth have a hard time making sense of suicide is the sensitive nature of the topic. Youth reported not knowing how to talk about suicide unless they were prompted because of a personal experience with themselves or someone they knew or through a formal method where the topic was raised, such as a classroom program. And even in these situations they felt a tension in knowing that it is an important issue, but not being sure how to
deal with the emotions associated with it. Early in the interview, one participant stated, “I mean, obviously it doesn’t make you feel happy to talk about it, so you kind of avoid it when you can.” Another participant said, “I think it’s a sensitive topic that no one really wants to hear about or talk to people about.”

Nevertheless, youth also indicated a sense of yearning to talk more about mental health and suicide as a means to make sense of it. They wanted to understand why it happens and how to notice signs of depression and anxiety. Youth in this study seemed aware that suicidal thoughts and behaviors could impact anyone and that they may never know if someone close to them is experiencing it. As one participant said, “There are people who are really outgoing who you wouldn’t think would be thinking about suicide, but they could…anyone could be thinking about it and it can be associated with anyone you know. You just don’t really know.” Conversely, they were not necessarily certain that peers in their school realized that it could impact anyone. Hence, they still had a desire to understand suicidal thoughts at a much deeper level than they have previously been exposed to and thought their larger peer group would also benefit from a greater understanding of the issue.

The primary way participants thought a greater understanding could be achieved, is to talk about mental health and suicide more openly. They thought peers and adults hesitate to talk about it due to the sensitivity associated with the topic. Consequently, overall participants thought open conversations needed to occur in different areas of their life—for example, with friends, parents, and school personnel—in order to encourage youth to seek help and understand that they are not alone. Part of the reason for this is because they did not know how to initiate or engage in the difficult conversation about suicide, either at a personal help-seeking level or in thinking about broad-based prevention strategies. For example, when asked how likely youth are
to talk to others about suicide, one participant said, “If it were in some sort of context like it is now or it came up in conversation I would talk about it, but it’s not exactly a conversation starter for me.” Furthermore, for those who did have a personal experience, they were not sure how to share that experience with others either as a way to seek help or to educate on the topic. Therefore, not only did they see an open line of communication as helping to raise awareness of the prevalence of suicide and understanding why people may feel suicidal, but it was also used as a gauge for determining who youth might be able to turn to in a crisis.

**The Perceived Reaction of Others Guides Youth Behavior**

The previous finding is important because it suggests that youth help-seeking and problem-solving behaviors hinge on their perceived reactions of others. Sometimes this perception assumed a positive response, but other times it assumed a negative response. On the positive side, if a peer or adult was perceived to be open to discussing the topic, youth indicated they were more likely to turn to them for help. This was because they were less fearful of being negatively judged or getting into trouble. On the negative side, if people in their life do not talk about it, youth assume the topic is taboo or may generally be too upsetting to the person.

The youth in this study were particularly sensitive to negative reactions in regard to talking with parents. One of the participants noted, “Sometimes I’m scared to open up to my mom because I feel like she’s going to cry. Because she does that a lot, she breaks her back for me. And I’m like, ‘I don’t wanna put you through that’.” Even when youth knew their parents would be concerned about them, they hesitated to talk about these issues because “…I would be afraid that they wouldn’t trust me then or they’d want to kind of protect me so much to the point that it became overbearing.” This concern about parental response also affected the youths’ willingness to turn to teachers and other school personnel. Even if they had an adult at school
whom they believed they could turn to for support, knowing that the school would have to contact their parents caused youth to refrain from reaching out.

Not surprisingly, many of the youth who were interviewed indicated they were likely to turn to their friends if they were having emotional problems. Conversely, many of them were interested in the topic because friends have previously come to them when they were depressed and suicidal. While youth were willing to listen to their friend and try to help them, they were not sure of the appropriate course of action. Some of them turned to their own parents for help and others turned to their friends’ parents. Regardless of their chosen strategy, they all indicated conversations about mental health and suicide should include information about how to help someone you know. In connection with the finding highlighted above, regular and consistent conversations about mental health and suicide were deemed to facilitate a better understanding of the issues and options for getting help. This openness also prompted conversations that felt more natural, conveyed a person’s willingness to listen and help, and reduced youth pressure to initiate difficult conversations.

Youth Need Help Taking Suicide Seriously

Despite having strong feelings about the need to increase and improve communication about mental health and suicide in general, youth who were interviewed frequently discussed concern that their peers may not take the topic seriously. The youth researchers in this study identified this as a separate theme than the one discussed above; however, participant perceptions of why their peers do not take it seriously are related to the previous findings. For instance, some of the interview participants equated the lack of seriousness to youth feeling awkward discussing this sensitive topic. They thought if mental health and suicide were addressed more regularly and effectively, it would help youth to see how it (a) could affect anyone, (b) does not mean a person
is “weak”, and (c) is not just about “seeking attention”. These were all considered reasons that youth may not take current approaches to suicide prevention seriously.

Other participants thought that people who had experienced suicide on a personal level—either with themselves, a friend, or a family member—were more likely to take the topic seriously. For example, when asked why their peers do not take it seriously one youth responded, “I’m not sure. Maybe they don’t have any experience with it so they don’t understand the full impact of suicide on their family and friends.” This sentiment was raised repeatedly, which prompted many of the participants to suggest that communication about suicide should include personal stories. More specifically, it should not be forced sharing of personal stories amongst youth or students participating in programming, but rather presentations and curricula offered at school or in other settings should discuss the personal stories of others, such as the presenter. Personal stories were viewed as more than a mechanism to educate and develop youth empathy toward others. Participants in this study thought personal stories could resonate with youth on thoughts and experiences that are typical in adolescence, such as fitting in with peers, managing stress, and feeling valued. In a powerful statement about what thoughts or emotions the word suicide provokes, a participant said:

Where do I belong? When I hear suicide, I picture all the kids saying, ‘Where do I belong? Where am I supposed to be in this world? How do I fit in this clique that clique? How can my teachers judge my religion or try to put me in their religion even if I’m not? How can I fit in?’

**Youth Prefer Small Groups**

Although the sharing of personal stories was considered an essential component of adolescent suicide prevention strategies, youth stressed the format for conversations about
suicide is important to them. They found universal curricula typically delivered in an existing class, such as health, to be ineffective because students disregard the teacher and the information they learn in a single week-long series over their entire secondary education seemed to be insufficient for engaging in the ongoing dialogue they thought was needed. Furthermore, although school-wide or grade-specific assemblies were seen as a strategy for reaching the general population of students, youth reported the positive effects of these approaches were short-lived and did not further their overall understanding of why suicide happens or what to do when someone they know needs help. According to one participant:

We talked about it in religion classes before. It is addressed as, you know, kinda in a formal setting. Outside of the classroom I wouldn’t say it’s talked about a lot. We haven’t really had any seminars or anything like that about it, but there is some talk about it. As far as suicide prevention, I would say that there is definitely an effort but probably not good enough.

When asked to think about the conditions for engaging with the difficult topic of suicide, participants repeatedly cited small groups as the ideal format. They thought young people would generally be more comfortable in this format and that a sense of trust could be developed. Trust and comfort were seen as facilitators of conversations that have more depth and address youth hesitation about initiating conversations about mental health and suicide. As a result, youth thought using this format over time could improve student willingness to reach out to peers and adults. Reflecting on an experience that included both a large and small group format, one participant observed:

…one was a big group and some people felt comfortable opening up there. But, I think you would also have to talk about it in a smaller group because there is [sic] a lot of
people that aren’t comfortable talking in a large group that would be comfortable talking in a small group.

Another youth who had a successful experience with smaller classroom conversations that were conducted regularly stated, “We have a group discussion every Friday in religion class. That’s the only [place] where everybody opens up.”

**Supportive Schools are Essential**

The previous theme from the study interviews highlighted conversation format, but the setting for the conversation is also important to youth. A few participants identified their family home and church as settings where they have had helpful conversations about mental health and suicide; however, most participants focused their thoughts about format and setting on the school environment. They were quick to suggest future suicide prevention efforts should occur within schools because that is where young people spend so much of their time; however, two other noteworthy reasons for focusing on school-based strategies were cited by participants.

First, while most participants indicated some type of mental health and suicide programming was occurring at their schools, most of them thought these activities were inadequate. For some, the programming was inadequate because of infrequency; several youth noted the topic was only discussed one time during their first year in secondary school and was never addressed again. Whereas other participants found suicide prevention efforts at their school tend to lack sufficient content to prepare youth for helping themselves or a friend, or they simply do not adequately engage students. One participant captured these sentiments in the following statement:
I’m not really sure if [suicide has been addressed] at all this year. But, you know, I’m a freshman so I don’t really know. They always do these weird talks where they try to explain it, but I don’t really think they do it that well.

Second, minus some exceptions, youth overwhelmingly thought students needed additional support from school personnel compared to what is currently provided. Many of them reported teachers and other personnel do not seem to care about them or are not willing to listen if they have a problem. Furthermore, they primarily saw guidance counselors as helping with academic and college enrollment as opposed to being available for emotional support. One participant emphatically stated, “If they were more open to us, then we would be more open to them.”

A number of participants also cited frustration when a student suicide occurred at their school and the administration “just swept it under the rug”. They felt it contributed to their difficulty trying to make sense of suicide and understanding why it happens. In addition, it further validated their perceptions that a lack of open communication means those adults cannot be trusted or are unable to help when they have problems. When trying to make sense of why this might happen, one youth stated:

I think the admin [sic] is just afraid of addressing conversations that aren’t comfortable for people. Just because we go to a big school the controversy that surrounds those topics, they’re worried about the school being associated with bad things…they just don’t want to glorify suicide.

Ultimately, the participants’ need for additional support in the school environment centered on the earlier finding that adolescents need more open and ongoing communication about mental health and suicide. Youth feel like they are ready to advance the difficult
conversation about this topic, but they are not willing nor have the capacity to do it without leadership from their schools.

**Social Media as a Prevention Tool**

Perhaps on the surface adolescent interest in engaging with the topic of suicide through social media is not necessarily noteworthy. However, this study helped to identify how the communication and tools youth are seeking to obtain are already playing out on social media where the issue of suicide is frequently raised. Notably, the context of how it comes up varies greatly. Participants cited instances where they were concerned about the welfare of someone they knew because of comments they made on social media. Whereas in other instances, they were alarmed at the bullying that takes place on social media and how flippant their peers could be in telling someone they should kill themselves. In both of these situations participants noted they were not sure how to respond and felt they lacked the tools to adequately navigate the situation. As discussed previously, they were also concerned how other young people were not taking the situation seriously. One youth likened it to a competition:

…it’s like a ‘post’ war, basically. And they always be like, the suicide game at the bottom…it’s really serious to young kids because, you know, there’s been a lot of deaths lately [in the local school district]. People like it and comment at the bottom, but it’s like they’re not taking it seriously. They put laugh emojis.

Despite concerns about the negative uses of social media, youth in this study also thought there was great potential in using that platform to raise awareness of mental health and suicide as a means to reduce stigma. It was also viewed as a place where young people go to express themselves, but that adults do not see the value of it in youth culture. Social media was regarded as having the potential to expand conversations about the topic so it is discussed and addressed
as readily as other physical health issues. Participants viewed a comprehensive prevention strategy as incorporating social media in a positive way to help young people learn about local resources and strategies for helping others.

Discussion

The qualitative interview study conducted by members of the YCSP was intended to inform the suicide prevention actions to be taken by the council. In fact, the findings are currently being used by council members in the development of social media and school-based strategies that can be implemented during the 2016-2017 academic year and to build a foundation for continued prevention efforts. Although the findings of this study provided an important blueprint for their work during this cohort year, they also have implications for adolescent suicide prevention in general. Furthermore, combined with the findings from my study of YPAR, this project provides support for strategies to improve youth help-seeking, problem-solving, and treatment engagement and utilization. First, I discuss the implications of this study in regard to adolescent suicide prevention strategies. Second, I discuss how YCSP is using the findings to address suicide in the local setting.

Implications for Adolescent Suicide Prevention

Interview findings indicate that youth perceive a primary barrier to talking about suicide is that people do not understand how it happens and do not know what to do about it. Although many youth want to better understand the topic, they believe adults are not willing to talk about it because it is a sensitive topic and they are too worried that talking about it will trigger youth to become suicidal, which is a finding that has been found elsewhere (Chambers et al., 2005; Dyck, 1991). Yet, it is this lack of open communication about the topic between adults and adolescents that youth believe contributes to the stigma around mental health and suicide and, consequently,
contributes to their peers not taking the issue seriously. Furthermore, it gives youth the impression they cannot turn to the adults in their life for questions or support when they have a problem. In addition to concerns about stigma and adult reactions, a reason for this may be that youth feel they are expected to be self-reliant and do not want to appear to be weak (Curtis, 2010; Gilchrist & Sullivan, 2006). Youth in the current study stressed the need to expand communication about suicide as a means to encourage youth to seek help and learn how to solve problems related to their own or others’ emotional health with the support of others. Perhaps if adults are made aware of studies that indicate talking about suicide with high school students is not inherently harmful (Gould et al., 2005) they would be more willing to discuss it. Expanding communication may have important implications for treatment engagement and utilization for youth who have a higher level of need or for maintaining informal supports to help youth through turbulent times that do not meet diagnostic criteria or necessitate ongoing treatment.

Another interesting aspect of this finding is that it suggests youth are interested in connecting with adults and peers about suicide in a general sense and when they have a specific concern. In fact, youth in this study specifically noted the need for expanding conversations in schools because of the central role of this environment in an adolescent’s life. School-based suicide prevention is not a new concept; however, previous findings indicate these efforts have not been reliably effective in improving help-seeking and problem-solving behaviors (Cusimano & Sameem, 2011; Robinson et al., 2013). The findings in the current study reveal that one possible reason for the ineffectiveness in these programs is the lack of ongoing and meaningful communication about mental health and suicide beyond what is delivered in a one-time program. Although these programs encourage youth to seek help and educate youth on the signs of suicide, youth lack the opportunity to apply this knowledge with the support of peers and adults over time
as they are exposed to new situations and emotions. This is particularly problematic if schools deliver the programming as part of a one-time lesson early in secondary education.

The desire to understand suicide and apply the knowledge with the support of others suggests the importance of social connectedness in suicide prevention with adolescents. This is consistent with a developmental-transactional model of youth suicide behavior proposed by Bridge et al. (2006), where connections with others, primarily related to family and school, were considered to be key protective factors in adolescent suicide. Social connectedness is also a central component of the Good Behavior Game (GBG) prevention curriculum as a means to promote psychological well-being and coping skills (Wilcox et al., 2008). The evidence for GBG is promising and although it focuses on younger children, findings from the current study indicate that older youth also deem social connections to be important for their mental health, as well as for making sense of an extremely complicated issue. It may explain why study youth emphasized the need for prevention activities to include stories about personal experiences; it helps them feel like they are connected to others which generates a sense of understanding as well as empathy for others.

The emphasis on social connectedness as an important protective factor in suicidality suggests that adolescent suicide prevention strategies may benefit from incorporating elements of relational theory. The premise of relational theory is that healthy psychological development occurs through supportive, genuine, and mutually beneficial interactions with others, as opposed to traditional psychological models that focus only on individual autonomy and self-sufficiency (Miller & Stiver, 1997). Relational context is crucial in clinical and therapeutic settings across the life span (Miller & Stiver, 1997) and has important implications for student learning in school settings (Raider-Roth, 2005). Although some selective and targeted suicide prevention
strategies may have relational components, by and large universal strategies do not seem to focus on building long-term connectedness. Yet, the youth in this study identified a need to build relationships between youth and adults and amongst peers as a meaning-making process and to construct a support network. Even when discussing social media, youth suggest they need help navigating the relational aspects of that environment, while simultaneously seeing benefits of using social media as a relational prevention tool.

As noted above, social connectedness in this study was more than building a community of supports, it was also about making sense of suicide and developing strategies for problem-solving and seeking help. Youth in this study thought a small group format would most likely resonate with youth and encourage them to seek help when needed. Small groups were seen as effective for building trust and helping youth feel comfortable addressing the topic, which in turn could help young people understand the seriousness of suicide while building connections with others. The use of small groups in education settings have proven to be an effective format for deep learning, especially when combined with experiential learning theory (Elwyn et al., 2001) which involves a continuous cycle of active student involvement in concrete experiences which students then reflect on with others and form abstract concepts of so that they can test their concepts (Kolb, 2015). Similar to the theory of positive youth development, this continuous experiential and relational process is thought to have a cumulative effect on student learning and ability to analyze complex concepts (Kolb, 2015). Considering the youth recommendation for small groups and the literature on the effectiveness of experiential learning methods, these should be included in adolescent suicide prevention efforts, especially those delivered in school settings.

Local Implications
The primary purpose of the study conducted by the YCSP was to inform local suicide prevention efforts. After analyzing interview data and developing the main themes of the study, the youth were highly motivated to take action on their newfound knowledge. On their own, they developed a vision statement to guide their development of prevention activities for the remainder of the year. The statement is included here to show how the youth are transferring what they learned to the real-world setting.

*The lack of education about suicide at school leads to people not understanding suicide and feeling like there is a lack of social supports. To prevent suicide we need to address concerns about how others react, target social media, and make use of small groups.*

Since this time, the youth have formed subcommittees to develop (a) a social media plan; (b) a new video with updated personal stories about depression, anxiety, and suicide; and (c) a school-based program they can each deliver at their own schools around the region. The school-based program is focused on building a supportive mental health culture in their schools and will involve the presentation of their study findings, a brief overview of suicide facts, and a modified version of future creating workshops. Future creating workshops are a common approach in critical utopian action research and aim to provide a space for members of a community to reflect, share knowledge, and create action steps for change (Nielsen & Nielsen, 2006). In their use of future creating workshops, YCSP will engage school personnel as facilitators of small groups where students will brainstorm what a supportive mental health environment would like in their school and strategies for building that environment. This process is intended to extend suicide prevention activities beyond YCSP, to use small groups to democratically engage the entire student body in strategies for addressing the complex problem of suicide, and to open up communication about mental health and suicide in schools by using experiential learning and
personal stories. Hence, it incorporates all of the findings from the study designed and conducted by the YCSP youth. Formative and summative evaluation of the program created by YCSP would be useful for identifying whether this is an effective suicide prevention strategy.

**Limitations**

Although the interview study was not intended to be generalizable, the limitations identified in this study are also key learnings for the implementation of YPAR, especially in a community-based setting. They are discussed here to provide a more comprehensive understanding of YPAR as a strategy for adolescent suicide prevention.

First, participant recruitment proved to be more challenging than initially expected. YCSP youth researchers had a goal of obtaining 30 interviews with peers and they had originally planned for all recruitment to be directed through the electronic survey site so interviews could be arranged by the academic partners. However, midway through the study this method of recruitment was determined to be moving slowly due to schedule conflicts for the YCSP youth researchers as well as interviewees. At this point, recruitment shifted to each YCSP youth researcher reaching out to peers in their own schools or social networks and scheduling the interviews on their own. Although this provided a short boost in completing additional interviews, the goal of 30 interviews was still not achieved during the cohort year. However, after analyzing the interviews, the group agreed that saturation had been achieved and they had enough data to move forward with the action planning stage of their project.

Second, despite the use of an organized project timeline and ongoing attention to project details, it was not possible to design the study, conduct interviews, analyze data, and disseminate findings in a single year as expected. The community-based nature of project and limited meeting time contributed to the length of implementation, as was discussed in the main body of
my dissertation. Although this was frustrating at times to the youth researchers and myself, in hindsight, two years is probably a realistic timeframe for using YPAR in this setting. The recommendation for a two-year project cycle is also consistent with the findings of another health promotion study that used YPAR (Suleiman et al., 2006). A longer timeframe is especially necessary if trying to adhere to the major principles of YPAR as opposed to a diluted version of the approach.

Third, although PAR models have been used for a long time and increasingly so in recent years, methods of participatory analysis appear to be limited. This is especially the case for analysis of qualitative data (Foster-Fishman et al., 2010). Due to the lack of a readily available participatory group thematic analysis for a group this size, I combined group level assessment and concept mapping sorting methods to facilitate first and second cycle coding of interview data. The process worked well in this setting and gave everyone a chance to engage in multiple steps of analysis; however, additional exploration of this and other participatory processes for qualitative analysis would be useful for the PAR field.

**Conclusion**

The interview study designed and conducted by youth involved with the YCSP was useful for getting them to think about what needed to be included in their suicide prevention efforts before going out into the community. However, the findings also underscore specific considerations for the development of adolescent suicide prevention strategies outside of this local context. Strategies that build social connectedness and incorporate experiential learning may foster a greater understanding of suicide, as well as lead to improvement in behaviors related to seeking help, problem-solving, and utilizing treatment services. As YCSP members further develop, implement, and refine the strategies they are using locally to build these
protective factors, future study of these activities is necessary and may have further implications for the field. Nonetheless, bearing in mind the major tenets of YPAR, it should be emphasized that YCSP youth researchers are using what they learned from the study to be intentional agents of change. They are now bringing their knowledge to their peers and school personnel, and democratically engaging those individuals in further understanding of suicide and taking action to create a positive culture of mental health within the school environment. And the YPAR cycle continues.
Appendix B: Study Information Sheets

Youth Council for Suicide Prevention
Member Questionnaires

INFORMATION SHEET

Purpose
You are being asked to complete these questionnaires as a member of the Youth Council for Suicide Prevention (YCSP). The questionnaires are used with council members to understand how their involvement in YCSP impacts their beliefs about themselves. Questionnaires that are completed by YCSP members who joined or continued in the 2015-2016 school year will be used by the University of Cincinnati researcher, who also serves as coordinator for YCSP, as part of a research project about the youth-academic partnership and to inform partnership activities. The coordinator/researcher will use results of the questionnaires to understand how youth think about themselves at the end of the project in comparison to the beginning of the project.

The choice of whether or not to complete the questionnaires is completely up to you. You are not required to complete the questionnaires as part of your participation in YCSP. You may continue to participate in YCSP even if you decide not to complete the questionnaires.

Protection of Information
The information you provide in the questionnaires is confidential and will only be used for this project. No names will be used on the questionnaires and they will only be identified with a unique ID number assigned by the researcher. Completed questionnaires will be stored electronically in password protected files and computers. Individual responses will be grouped with others and only that grouped data will be reported.

Additional Information
- You have a choice whether or not to complete the questionnaires.
- You have a choice of whether or not to answer any question.
- If you have questions about the study you may contact:

Lisa Vaughn, Ph.D.  
YCSP Advisor  
Children’s Hospital Medical Center/University of Cincinnati  
Phone: 513-636-9424  
Email: Lisa.Vaughn@cchmc.org

Robin Lindquist-Grantz, LISW-S  
YCSP Project Coordinator  
University of Cincinnati  
Phone: 513-556-5142  
Email: lindqurn@uc.edu
**Youth Council for Suicide Prevention**  
**Youth Interview Project**  
**INFORMATION SHEET**

**Purpose**  
You are being asked to take part in an interview. The interview is being conducted by members of the Youth Council for Suicide Prevention, sponsored by Cincinnati Children’s Hospital Medical Center. The project includes interviews with peers who are 14-21 years old in order to address communication around the topic of suicide.

We are going to ask your thoughts and opinions about how youth talk about the topic of suicide, who they talk to about it, and what needs to be included in conversations about suicide. Even if you think you do not have personal experiences with suicide, we would still like to hear your thoughts. Sometimes we might even ask you to expand on your thoughts to help us fully understand what you are thinking.

You have a choice about whether or not to participate in the interview. The choice is completely up to you. You may choose not to answer any questions you do not want to answer. And, if you feel uncomfortable, you may stop the interview at any time.

**Protection of Information**  
Our conversation will remain confidential and will only be used for this project, unless we have to reach out to report abuse, neglect or any threats to do serious harm to yourself or others. No names will be used and your answers will be grouped with others. Only that grouped information will be shared. Any information with your name will be kept separate from your answers and will be destroyed after the project.

**Additional Information**  
- You have a choice whether or not to do the interview.  
- You have a choice of whether or not to answer any question.  
- If you have questions about the study you may contact:

  Lisa Vaughn, Ph.D.  
  YCSP Advisor  
  Children’s Hospital Medical Center/University of Cincinnati  
  Phone: 513-636-9424  
  Email: Lisa.Vaughn@cchmc.org

  Robin Lindquist-Grantz, LISW-S  
  YCSP Project Coordinator  
  University of Cincinnati  
  Phone: 513-556-5142  
  Email: lindqurn@uc.edu
Appendix C: Data Collection Tools

Self-Esteem Questionnaire (SEQ)

These questions ask how you feel about yourself. For each question, choose the one answer that best describes how YOU feel about yourself. There are no right or wrong answers—just give your HONEST opinion. Circle the appropriate letter for each question.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree (SD)</th>
<th>Disagree (D)</th>
<th>Agree (A)</th>
<th>Strongly Agree (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am as popular with kids my own age as I want to be.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>2. I am as good a student as I would like to be.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>3. I am happy about how much my family likes me.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>4. I am happy with the way I look.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>5. I am as good at sports/physical activities as I want to be.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>6. I am happy with the way I can do most things.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>7. I am as good as I want to be at making new friends.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>8. I am doing as well on school work as I would like to.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>9. I am too much trouble to my family.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>10. I like my body just the way it is.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>11. I wish I was better at sports/physical activities.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>12. I sometimes think I am a failure (a “loser”).</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>13. I have as many close friends as I would like to have.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>14. I am good enough at math.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>15. I get in trouble too much at home.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>16. I feel good about my height and weight.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>17. I feel OK about how well I do when I participate in sports/physical activities.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>18. I am happy with myself as a person.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>19. I am as well liked by other kids as I want to be.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20. I am as good at reading and writing as I want to be.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>21. I feel OK about how important I am to my family.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>22. I wish I looked a lot different.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>23. I am happy about how many different kinds of sports/physical activities I am good at.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>24. I am the kind of person I want to be.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>25. I feel good about how well I get along with other kids.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>26. I get grades that are good enough for me.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>27. I get along as well as I would like to with my family.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>28. I wish it were easier for me to learn new kinds of sports/physical activities.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>29. I often feel ashamed of myself.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>30. I wish my friends liked me more than they do.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>31. I feel OK about how good of a student I am.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>32. My family pays enough attention to me.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>33. I participate in as many different kinds of sports/physical activities as I want to.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>34. I like being just the way I am.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>35. I feel good about how much my friends like my ideas.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>36. I do as well on tests in school as I want to.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>37. I am happy with how much my family loves me.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>38. I am as good a person as I want to be.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>39. I feel OK about how much other kids like doing things with me.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>40. I get too many bad grades on my report cards.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>41. I feel good about how much my family cares about my ideas.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>42. I wish I had more to be proud of.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
</tbody>
</table>
Psychological Empowerment Survey (PES)

Psychological Empowerment Survey Measures
Emily Gao, gaoe@berkeley.edu

Please indicate how much you agree or disagree with each of the following statements by marking the appropriate bubble:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am often a leader in groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I feel like I have a pretty good understanding of the important political issues which confront our society</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I can usually figure out how to get an adult to see my point of view, even if they don't agree with me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following questions are about your feelings about your school:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I want to have as much say as possible in making decisions in my school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. There are plenty of ways for students like me to have a say in what our school does</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I know how to gather useful data about an issue if I want to improve a problem in my school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I know how school rules and policies are made at my school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I have spoken with adults in my school about issues that I want to improve at my school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I have spoken with other students about issues that I want to improve at my school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. If issues come up that affect students at my school, we do something about it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Students should work to improve our school even if we can't always make the changes we want</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Students have a say in what happens at my school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Students at this school get to help plan special activities and events</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. There is a student council here that gets to decide on some really important things</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following questions are about your feelings about your city:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I know how to gather useful data about an issue if I want to improve a problem in my city</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I can work effectively with other students on an issue if I want to improve a problem in my city</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I know how city rules and policies are made</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I have spoken with other youth about issues that I want to improve in our city</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. If issues come up that affect youth in my city, we do something about it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Youth have a say in what happens in our city</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I want to have as much say as possible in making decisions in my city</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. There are plenty of ways for young people like me to have a say in what our city government does</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. It is important for youth to try to improve our city even if we can't always make the changes we want</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please indicate how much you have done or experienced the following by marking the appropriate bubble:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Once</th>
<th>2-3 times</th>
<th>4 or more times</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have led a group of young people working on an issue we care about</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I have made a presentation to a group of people I don't know</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I have interviewed an adult to learn their perspective about an issue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* b. Items generated by study authors.
* c. Items From Developmental StakesCenter (2008), Middle School Student Questionnaire Measures: school autonomy measures. Oakland, CA.
Research and Action Self-Efficacy (RASE)

Answer each of the following questions based on what you think at this time. There is no right or wrong answer. Circle the appropriate letter for each question.

| 1. I can explain guidelines for conducting good research to another person. | SD | D | A | SA |
| 2. I can teach other students to develop their own research projects on issues of concern for them. | SD | D | A | SA |
| 3. I can work well with a group of other students to organize a program or event at my school. | SD | D | A | SA |
| 4. I can make a real difference in improving my school. | SD | D | A | SA |
| 5. I can make a real difference in improving my city. | SD | D | A | SA |
| 6. I can write a letter to the editor of a newspaper about an issue I care about. | SD | D | A | SA |
| 7. I can make a good presentation to students at my school on an issue I care about. | SD | D | A | SA |
| 8. I can make a good presentation to my teacher and principal on an issue that I care about. | SD | D | A | SA |
| 9. I can start an organizing effort among my peers on an issue that I care about. | SD | D | A | SA |
| 10. I can work well with a group of other students to make a difference at my school. | SD | D | A | SA |
| 11. I can make a presentation to the school board or board of supervisors on an issue that I care about. | SD | D | A | SA |
| 12. I can develop a research tool that gathers useful information. | SD | D | A | SA |
| 13. I can respectfully discuss pros and cons of an issue I care about with youth my age. | SD | D | A | SA |
| 14. I can use research results to come up with realistic recommendations. | SD | D | A | SA |
| 15. I can respectfully discuss pros and cons of an issue I care about with adults at my school. | SD | D | A | SA |
| 16. I know how to break down important issues facing youth to figure out what we can work on. | SD | D | A | SA |

YCSP End-of-Year Focus Group

2015-2016

Thank you for coming today. We are going to ask for your thoughts and opinions about the work done in YCSP this year, particularly the research project you have been working on. This information will provide important feedback to council leaders and help them to develop future activities. The information discussed today will also be used by Robin Lindquist-Grantz as part of her doctoral dissertation. If you have questions about how it will be used in her report, please feel free to contact her.

We would like to hear from everyone today. Everyone’s opinions are important. We may call on you if we haven’t heard from you in a while. If we have heard from you, we may ask that you provide space for others to share their opinions.

We would also like to record today’s conversation so we don’t miss any information. However, please remember that everything discussed here today should stay here.

1. Compare the project you worked on this year to last year’s activities/projects.

2. Describe the process of developing a youth-led research project.

3. Tell me a part of the project that worked really well.

4. Tell me about a part of the project that was challenging.

5. Would you describe the project as successful or unsuccessful? Explain how you know.

6. What best prepared you for the work on the project?

7. What else did you need to learn to be successful with the project?

8. Tell me about a time when you felt you needed something else for the project to be successful, but didn’t have it (support, resources, council members).

9. If another group of youth were going to do a research project, what advice would you give them? What would you warn them about?

10. What are your hopes for the next year of YCSP based on this project?

11. Explain how you would like to share what you have learned from your research.
End-of-Year Painting Reflection

Reflect on the work we did this year. Some of our activities included:

- Developing group values/ground rules
- Developing mission statement
- Developing focus of research project
- Developing research questions
- Identifying target population
- Developing interview guide
- Developing and implementing recruitment plan
- Conducting interviews
- Conducting preliminary analysis

Think about…

✓ what you have learned as a result of your work on the research project.
✓ skills you have developed as result of your work on the research project.
✓ your ability to take action on suicide prevention as a result of your work on the research project.
✓ Other ways working on this project impacted you.

1. Paint a picture that represents what you are taking away from the experience of conducting the research project this year.

2. Write 1-2 paragraphs to describe what you have painted. Describe different aspects of your painting (for example, shapes, colors, etc.) and what those represent. Be sure to include words that tell the reader what you are taking away from this project.
Youth Council for Suicide Prevention

Youth Interview Project

Introduction [READ ALOUD TO EVERY PARTICIPANT]

Thank you for doing this interview! We are members of the Youth Council for Suicide Prevention through Cincinnati Children’s Hospital Medical Center. We are working on a project to address communication about suicide. This year we are interviewing people our own age and in the future we hope to interview school personnel and other professionals and adults.

We are going to ask your thoughts and opinions about how youth talk about the topic of suicide, who they talk to about it, and what needs to be included in conversations about suicide. Even if you think you do not have personal experiences with suicide, we would still like to hear your thoughts. Sometimes we might even ask you to expand on your thoughts to help us fully understand what our peers are thinking.

Our conversation will remain confidential and will only be used for this project, unless we have to reach out to report abuse, neglect or any threats to do serious harm to yourself or others. No names will be used and your answers will be grouped with others. Only that grouped information will be shared. Any information with your name will be kept separate from your answers and will be destroyed after the project.

___________ will be taking notes today but we would also like to record our conversation so we don’t miss anything that you say. You may choose not to answer any questions you do not want to answer. And, if you feel uncomfortable, you may stop the interview at any time.

Do you have any questions for us before we get started?

Interview Questions

We are going to start the interview by talking about school because that’s where we spend so much of our time.

1. How would you describe your school? (If not currently in school ASK: how would you describe the last school you attended?)

2. How comfortable do you think students are (were) asking for help at your school?

3. Is (was) suicide addressed at your school? Please describe how it is or is not addressed (e.g. by school personnel, among peers, etc.)

4. In what other areas is suicide addressed? [PROBE: people, places, groups, school, books, etc.]
Now we’re going to talk a little more about the topic of suicide. These questions may or may not directly relate to your school environment.

5. When you hear the word “suicide”, what do you think of?

6. In what ways do your thoughts about suicide reflect or not reflect how other people your age think about suicide? Why do youth think about suicide this way?

7. How likely are youth to talk to others about suicide? Please explain.

8. What prevents youth from talking about suicide?

9. What would make it more likely for youth to talk about suicide?

10. What are the ideal conditions for talking about suicide personally? What about in an educational way? [PROBE: place, timing, other person, etc.]

11. What and who needs to be included in conversations about suicide? Explain why.

12. If you or someone you knew was feeling suicidal who would you turn to first for help? Explain why.

13. Is there anything we didn’t discuss that would help us improve communication about suicide?

Now, I have just a few questions to help us understand the group of youth who have completed interviews.

14. What is your age? ______________

15. How would you describe your race? ______________

16. Are you Hispanic or Latino? ______________

17. How would you describe your gender? ______________

18. What school do you attend? ______________

Wrap-Up

Thank you for taking the time to meet with me today. I appreciated hearing your thoughts and opinions. This will be helpful as our group plans future activities.
Renae, Age 16

I painted a tool box to show that during this year I have been given many tools concerning research. The ruler is for measuring the amount of time we have to carry out the project. We had to set goals which included ruling out unnecessary questions for the interviews. Meanwhile, I also learned how to balance types of questions and the demographics of participants, which explains the balance. The hammer and nails are to show that I learned how to build a research project.

By working as a team we developed our blueprints for the year and any time we look back on the year, we will see what we have constructed. These basic tools will provide for an eventful and informative year next year. With these tools we can find a conclusion to our research and focus on how to share our findings in order to help end the stigma around talking about suicide so more people are comfortable about talking about suicide, which, in turn, helps those who are struggling with suicidal thoughts.
Connor, Age 17

My painting represents what I feel like my mind has unlocked this past year with help from this council. As seen in my painting, I feel like I have unlocked a world of possibilities and they seem endless. This past year has deepened my understanding of other people and situations I may not otherwise be comfortable with. Through all of our work I have developed skills of group discussions as well as interview and research skills. I know these skills will translate into other areas of my life as I begin my journey into the adult world.

I like painting pictures of landscapes and natural scenery, such as this mountain landscape, because that is where I find the most beauty and peace in the world. I always feel right at home and at peace whenever I am look at a beautiful, natural landscape. I wanted to share this with all who see to maybe inspire peace in their lives.
Brooke, Age 17

This is a painting of the night sky filled with stars. This to me is a metaphor for suicide. The dark sky represents everything that we don’t know about it. The stars represent what we do know. Although there are a lot of stars, there is still so much that we can learn. This could also be a metaphor for society. The sky represents everyone who is ignorant about the topic, while the stars are the people who are trying to decrease the stigma around suicide.
Margot, Age 17

My painting represents our influence as a council on each other and the community. I began with a bland, gray-black-white background to represent the “pollution” within society and the minds of our generation. Then, colors expand from the lower left corner and spread into tiny, colorful dots around the gray. This is supposed to represent our influence as a council. We aim to spread a variety of positive beliefs, outlooks, and general hope and optimism around society, and particularly to those our age.

Through this project, I’ve become increasingly aware of the negative aspects of our age and norms, and the saddening reality that suicide has become an accepted response. I’ve also become aware that a contributor to this issue is the lack of communication about suicide and the stigma around discussions about it. As my painting depicts, we aim to get rid of these preconceptions and spread awareness and access to help instead.
Amanda, Age 17

I have drawn a man (or woman) who is at the top of a hill in a motion of running or walking. At the flat, bottom part of this hill has a blackened ground will skies filled with whites, greys, and shades of black. These color schemes are depressing, since these colors are usually identified with a lifeless vibe. However, the first arch to making this hill is starting to show shade of green in the land, symbolizing life and evolution. Later, the ground is filled with color and the sky becomes colorful with pastel colors. The man is at the top of this hill, with a white glow. This man is in the beautiful land of color and does not hold any residence in the dark area.

The idea is what the suicide prevention council represents. If the dark is the depression, and that man represents all of humanity, we see our mission complete. There is a goal to stop the suicidal attempts on a large scale, and this painting reminds me of what the bigger goal is. We want to see everyone on the top, in the color. This explains the overall idea that suicide prevention is about. To rise above suicide and fulfill your life in a colorful wave of prosperity.