STRONG WOMEN START ON A BICYCLE:

HOW GIRLS-ONLY BICYCLE EMPOWERMENT PROGRAMS CAN HELP URBAN GIRLS GROW UP TO BE STRONG WOMEN

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CONTENTS

I think [the bicycle] has done more to emancipate women than any one

thing in the world. I rejoice every time I see a woman ride by on a bike.

It gives her a feeling of self-reliance and independence the moment she

takes the seat; and away she goes, the picture of untrammeled

womanhood.

-Susan B. Anthony, 1896.[1]

I. INTRODUCTION

Bicycles have been linked to the empowerment of women since their invention in the late 1800's. For men, the bicycle was a new thing to play with. For women, it began a new way of life. "To men, the bicycle in the beginning was merely a new toy, another machine added to the long list of devices they knew in their work and play. To women, it was a steed upon which they rode into a new world".[2] It allowed women to go places without a driver, sparked the invention of less restrictive and more active clothing and changed the way women moved, felt and explored. It also prompted major scandals over women wearing "bifurcated garments" and visiting "un-chaperoned".[3] Today, while the stigma of pantaloons has faded, the potential of bicycles to empower women remains. Most importantly, the potential for bicycles to empower young, urban women is yet to be explored.

Bicycles have the unique ability to act as both a metaphor and a means for moving young women forward. Riding a bicycle can build independence, expand one's world, increase positive body image, improve health and increase one's connection to her environment. In addition, fixing bicycles can empower young women to fix other things in their lives. At once a bicycle provides a way to move forward physically, as well as the confidence to problem solve in new and innovative ways. Given the unique challenges that accompany living in a city, young, urban women can benefit particularly from the confidence, power, time and space a bicycle provides.

In urban centers in the United States today, male cyclists outnumber women cyclists almost four to one (urban commuters are 26% female).[4] Furthermore, cycling organizations just for women are few and far between. In New York City, while there are approximately 27,917 bike

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commuters (not counting people who ride on the weekends for fun), 5,848 of them women,[5] there is only one women-oriented non-competitive cycling group, called "Dykes on Bikes." This appears to be the only non-racing female oriented group in New York City and it caters to a small gender queer group of people, not the greater female cycling public.[6] Cycling opportunities for youth in New York City are also slim. There are two organizations that offer non-competitive youth bicycle programming: Recycle-A-Bicycle and VeloCity. Neither of these organizations offers girl-specific programming. Across the country there exist only two girl-specific, non-competitive bike programs: Bikes Not Bomb's *Girls in Action* program in Boston, Massachusetts and West Town Bikes' *Girls Bike Club* in Chicago, Illinois. The connection between women's empowerment and cycling has been all but eliminated in the United States.

In developing countries, however, bicycles continue to be a means to empower women. Organizations such as Build a Better Bicycle (Mozambique), World Bicycle Relief (Sri Lanka, Zambia, Zimbabwe, Kenya), Bicycling Empowerment Network (South Africa, Namibia), the Village Bicycle Project (Ghana) and Mukhyamantri Balika Cycle Yojna (India) provide bicycles to rural communities in order to increase transportation and entrepreneurial opportunities. Transportation has the ability to transform lives, especially the lives of women. As Clarisse Cunha states, "transport facilitates access to social services, income-generating opportunities and community activities" and because "women account for 70% of household labor and 85% of household daily effort spent on transport," the introduction of bicycles into a community disproportionately affects women.[7] Interestingly, however, while bicycles may make work easier for women, they do not change the cultural roles and responsibilities required of them. Women continue to do more of the housework than men and property often continues

to be controlled by the men in the family.[8] Young women in India and Zambia who received bicycles as part of the Mukhyamantri Balika Cycle Yojna program[9] and World Bicycle Relief, respectively, were allowed to go to school more often because a bicycle enabled them to get to school on time after finishing their household chores.[10] These young women were still expected to be responsible to their chores at home first, and their education second. As Cunha puts it, "women's decisions regarding the use of their bicycle may, at times, reinforce existing roles in the family, replicating gender inequality and not working for wider change."[11] The power of bicycles to alter individual lives is clear; however, they do not immediately and magically create cultural and institutional change. What bicycles *can* do is create opportunities that allow young, rural women to pursue knowledge they would otherwise be denied.

Empowerment of young, urban women in the United States will look very different than empowerment of rural Indian and African women; however, bicycles remain a constant in creating opportunities. Transportation in America's urban centers is not the most important issue facing young women. Taxi's, subways, elevated train lines, city buses and school buses allow young people to explore their spaces rapidly and independently. However, with this independence come a variety of other issues that threaten young women. These issues range from developmental concerns that all girls must navigate on the way to becoming women, such as self-esteem, body image and health issues, to issues that are disproportionately threatening to urban girls including drugs, personal safety, pregnancy and individual and community violence. This paper provides a framework to understand the issues facing our young urban women, and proposes girls' bicycle programming, such as the WE Bike Girls' Program, as a way to empower young women in New York City through bicycle riding and repair.

This paper begins by exploring the issues that the majority of girls face as they grow and develop. Both physical and emotional changes take place during puberty that can lead to a variety of responses and crises among young women. We look first at Erickson's traditional theory of "storm and stress" and then Brown and Gilligan's exploration of the ways girls go "underground" in their pre-teen years. We then explore statistical depictions of girls in the United States as a whole and New York City in particular. Finally, we look at the ways girls see themselves through the lenses of confidence and self-esteem, body image, health and perceptions of the future. There is consensus that the experiences of young women between the ages of 11 to 17 are tumultuous and strongly influence their adult lives.

The second section looks at the ways that after school and out of school time (OST) programs can address these issues. While school programming is centered more and more around student performance on standardized tests, out of school time programs can devote time to arts, athletics, empowerment and extra-academic skills that have been budgeted out of public school programming. Additionally, by providing safe spaces for youth in the hours between school and when parents arrive home from work, OST programming can alleviate some of the stressors of violent or unsafe urban environments.

While there is yet to exist a girls' empowerment programming that centers around bicycles and bicycle mechanic skills, there do exist empowerment programs, sports programs, bicycle programs and even girls bicycle programs. By looking at a few of these programs we are able to see what challenges a program like the WE Bike Girls' Program might face, as well as where it might fit in the OST community of New York City.

Finally, this paper will provide a rationale for combining many of the strengths of empowerment programming, sports programming and bicycle programming into the WE Bike Girls' Program. This section addresses challenges to a female cycling program such as space, safety, materials (bicycles, helmets, locks), and recruitment, yet also explores the way cycling and bicycle mechanics provides the unique opportunity to address many of the issues facing young women growing up in New York City today.

The appendix of the paper contains a complete project proposal for the WE Bike Girls bicycle program to be piloted in New York City during the 2012-2013 school year.

II.   GIRLS, WOMEN and IN-BETWEEN: GROWTH and DEVELOPMENT

A.   Developmental Theory

During puberty, as we all know from experience, many changes occur. The most obvious of these are physical changes. Women typically go through these changes between the ages of 11 and 17, although there is considerable evidence that women are starting puberty at younger and younger ages.[12] During this time girls' bodies begin to change shape, going out at the hips and chest and in at the waist (if they are lucky) as well as beginning to sweat more, grow hair in new places and, of course, start menstruating. The physical changes during puberty are discussed thoroughly in health classes and after-school specials on televisions. The psychological changes that accompany puberty, however, are often boiled down to, "growing up" and "being an adult." While young women are prepared for the physical changes of puberty (in most cases), they are not prepared for the accompanying shift in the perceptions of people around them, and the changes in their relationships with each other and themselves.

Physical changes will happen, more or less, no matter what we do or do not do for our girls. They will grow into genetically and environmentally pre-disposed bodies and they will have those bodies for their entire lives. The psychological and emotional road traveled by young women, however, is not so straightforward. The environment, adult supports, and experiences available to young women can drastically change the way they experience themselves and those around them. For better or worse, thee experiences also stay with young women for their entire lives. This section looks at two contrasting developmental theories, as well as in depth surveys of the ways girls perceive themselves and those around them at the time of puberty.

1. Early Theorists

The first developmental theory we will explore is Erik Erickson's theory of "Storm and Stress."
According to Erickson, there are eight stages in which every person comes into conflict with
himself or herself, and in resolving this conflict reaches a new platform of identity and self-
knowledge. As Erickson puts it, "anything that grows has a ground plan, and that out of this
ground plan the parts arise, each part having its time of special ascendancy, until all parts have
arisen to form a functioning whole."[13] In each of these 'special times' or stages, the individual
has a period of stress which they resolve to become more of a "functioning whole." The pivotal
stage in Erickson's theory arises during adolescence. This is the fifth stage of "identity and
diffusion." In this period, youth integrate their prior experiences into an understanding of
themselves that will influence the way they experience the world moving forward. As
Berzonsky explains, "Positive resolutions to prior crises - being trusting, autonomous, willful
and industrious - facilitate the process of identity formation, whereas previous failures may lead
to identity diffusion."[14] Erickson believes that youth who come from supportive homes and
have positive previous experiences will be most successful in resolving their identity crisis.[15] In
order to understand how this crisis is resolved for different youth, Jim Marcia created four types
of identity resolution.

Marcia's four identity resolutions explain how youth successfully or unsuccessfully resolve the
crisis in Erickson's fifth stage of development. The first and most successful youth are
"identity achievers." These are youth who, after looking within themselves, decide on a set of
"goals, values and life choices" that will guide them in the future. "Identity moratoriums" are
youth who continue to look inward but have not settled on a set of principles for themselves.
"Identity foreclosures" are those who refuse to look within and take on the goals and values of

those around them. Finally, "Identity diffusers" have not committed to a set of goals or values

nor are they interested in the self-exploration necessary to achieve them.[16] Both Marcia and

Erickson believe that identity is something within a person that needs to be discovered. An

inner quest is required in order to arrive at one's identity. The most successful youth "achieve"

the pre-disposed identities hidden within them, whereas the least successful youth refuse to look

within themselves and result in a foreclosed or diffused identity.

While Erickson is by no means the only historical theorist on adolescent development, he serves

as a touchstone between Freudian theories that are often dismissed as old and out of touch, and

newer theories such as Piaget where development is based purely on reasoning skills, assuming

that youth will reason themselves into adulthood. For all of these theorists, the majority of

subjects studied were white men.[17] Through the 1960's women were often considered

maladaptive, as their ideas and issues often did not fit neatly within existing frameworks.[18]

Women, and in many cases, multi-cultural youth, appeared to have developed two (or more)

identities: one public and one private.[19] Brown and Gilligan address this idea by exploring the

voices of young women going through puberty.

2. Brown and Gilligan

Brown and Gilligan explore women's psychological development in their book *Meeting at the

Crossroads*, based on a five-year study of a small sample of upper and middle class young

women at a private school in the United States. In this study, they interview girls from one year

to the next and use a unique manner of evaluating and understanding interviews, called the

Listening Guide. In this way, the researchers look for the voice of young women from four

vantage points,

(1) Who is speaking?
(2) In what body?
(3) Telling what story about relationship - from whose perspective or from what vantage point?
(4) In what societal and cultural frameworks?[20]

Brown and Gilligan explore the voices of young women through their relationships with themselves (their inner voices), their bodies, others and their environment. Unlike Erickson, Brown and Gilligan do not see identity as a fixed thing to be arrived at ("a seed whose parts need only to arise"), but as a process of relationships that can be influenced, changed and supported through interactions with self, others, environment and physical body.

What Brown and Gilligan discover is that young women are not becoming stronger, older and wiser, as we often imagine happens in puberty, but instead, they are becoming confused, scared and quiet.

> If we consider responding to oneself, knowing one's feelings and thoughts, clarity, courage, openness and free-flowing connections with other and the world as signs of psychological health, as we do, then these girls are in fact not developing, but are showing evidence of loss and struggle and signs of an impasse in their ability to act in the face of conflict.[21]

Where Erickson sees the inner conflict of adolescence as a catalyst to identity development, Brown and Gilligan see the inner conflict between girls and themselves as a catalyst to young women going "underground," to hiding their feelings and thoughts below the surface.

Building on Brown and Gilligan's ideas, recent youth development theorists have proposed that having only one, fixed identity is increasingly unlikely in our multi-ethnic and diverse society.[22] When we examine the different roles we expect young women to play, it is unreasonable to expect them to be the same person in every role. A 2007 New York Times article explored the pressures and expectations of high school youth in Massachusetts. "Girls who have grown up

learning they can do anything a boy can do, which is anything they want to do, [feel] if you are free to be everything, you are also expected to be everything."[23] Girls today are expected to simultaneously be many things to many people. As Leadbeater and Way put it, "Women engage in many more social roles and responsibilities than men, including such roles as spouse, homemaker, primary parent and career woman."[24] In addition, many young women are asked to be translators, athletes, academics, performers and confidants. Butler proposes that identity is not a singular concept that emerges during puberty and then exists independently from the worlds and experiences of people. Identit*ies*, she argued, are constantly being created, changed and expressed in new and different ways.

> Self-understanding is not simply individual, internal, subjective conceptions of one's 'essential self' rooted in the 'core of one's being,' that emerge from self-reflection, or as a result of the resolution of deeply seated intra-psychic conflicts or struggles. Rather, according to this view, identities are as much social as they are personal. In fact, they link the personal and the social: they entail action and interaction in a sociocultural context, they are social products lived in and of, through activity and practice and they are performed and enacted.[25]

Girls today hold multiple different identities within themselves and learn to enact those that are beneficial at each given moment or appropriate in each social context. This 'code-switching,' while helpful at times, can be troubling. The fear is that girls will grow up knowing how to act without knowing who they are. As Gilligan puts it,

> These new demands may create an impasse for many girls who face psychological dilemmas in which they [feel] that if they said what they were feeling and thinking no one would want to be with them and if they didn't say what they were thinking and feeling they would be all alone, no one would know what was happening to them.[26]

For young women, and old, this paradox is a frightening one. The question becomes, then, how do we help young women explore all the different identities they are expected to enact, while simultaneously building an internal base on which to stand?

First we must understand the young women of today. Then we must work with them to create programs and spaces that will support, nurture and encourage them to be all the things they are. After school programs and out of school time provide a unique opportunity to address the psychosocial needs of developing young women. If young women are turning inward, not as Erickson would see it, because that is the way they were made, but because they are reacting to the relationships around them, then adolescence is an important time for intervention. Youth programs, such as WE Bike Girls' Program are in a position to address, change and at the very least make visible those relationships and their influences on the ways young women see themselves and how they hold and use their voices. Programs such as WE Bike Girls' Program provide a space for young women to construct something outside themselves, a bicycle, while at the same time exploring what is inside them. As Leadbeater said, "Identity development is not merely an answer to the question, Who am I? It must also answer the question, but to a young person's community: Who will you recognize in me?"[27] OST programs provide an opportunity to create a supportive and safe community where young women can thrive.

B.   Girls Today

Before we can propose new ideas and programs, we must first understand who we are working with. Who are girls today? What does this multiplicity of voice and identity look like in our young women? If girls are going "underground," how are their struggles manifested on the outside? This section will look at a statistical portrait of young women in the United States as a whole, and compare that to girls in New York City. In this way we will construct an image of the statistically 'typical' American girl, as well as a picture of an urban subset. How many people are we talking about? Where do they live? What do they think of themselves and others? Additionally, how is the statistical picture different for young women in New York City? What

additional challenges do urban girls face and how do these challenges affect their views of themselves and their futures? The information in this section is summarized in Table 1.

       1. The Typical Girl in America

According to the 2010 US Census, girls ages 10-19 make up 6.8% of the population of the United States.[28] That means there are over 20 million young women in our schools, streets, malls, bodegas, apartment buildings and parks.[29] According to the census, 72.4% of the population identifies as white, 12.6% as Black or African American, 0.9% as American Indian or Alaskan, 4.8% as Asian, 0.2% as Native Hawaiian or Other Pacific Islander and 6.2% identify as "Some Other Race."[30] Additionally, 16.3% of the population nationally identifies as Hispanic or Latino of any race.[31] The majority of girls (80.7%) live in urban environments[32] and female headed households make up 12.6% of homes.[33] The median family income is $51,914 per year and 10.1% of families live below the poverty line.[34] Additionally 12.7 % of the national population is foreign born and just over half of foreign born people are not US Citizens (56.9%).[35] Nationally, 20.1% of households speak a language other than English at home.[36] Overall, the national population of the United States is white and English speaking.

       2. The Typical Girl in New York City

Girls who live in urban environments have very different life experiences than the typical American girl. Bonnie Leadbeater writes,

> Urban girls are frequently marginalized by ethnic and racial discrimination, political neglect, poor education, poverty, parenting as adolescents, dating violence, and high risk behaviors.[37]

This section compares the current national statistics above to one urban environment, New York City. In addition, it explores the results of a study by Richard Lerner et. al. comparing the

differences between urban and non-urban girls using data from wave two of the 4-H study on Positive Youth Development (2003- 2004 school year). These two sources confirm that the lives of urban girls are quite different than the statically typical American girl.

Young women in New York City between the ages of 10-19 make up 6% of the population.[38] The population of New York City identifies as 44% white (as compared to 72.4% nationally), 25.5% Black or African American, 0.7% American Indian or Alaskan, 12.7% Asian, 0.1% Native Hawaiian or Pacific Islander, and 13% "Some Other Race."[39] Additionally, 28.6% of the population of New York City identifies as Hispanic or Latino.[40] In New York City, 18.7% of households are headed by females.[41] The median family income in New York City is $50,285, and 16.2% of the population lives below the poverty level.[42] In addition, almost 36.8% of the New York City population is foreign born, and 48.6% of foreign born people are not US citizens.[43] Finally, 48.3% of the households in New York speak a language other than English at home.[44] Girls in New York City are more likely to be non-white, multi-racial, live in a female headed household, live below the poverty line, and speak a language other than English at home than the general population of girls in the United States.

Comparison of National Population with that of New York City using 2010 Census Data	New York City	National Population
Percent of Total Population Females Age 10-14	2.8%	3.3%
Percent of Total Population Females Age 15-19	3.2%	3.5%
Race (Entire Population)		
White	44.0%	72.4%
Black or African American	25.5%	12.6%
American Indian or Alaskan	0.7%	0.9%
Asian	12.7%	4.8%
Native Hawaiian or Other Pacific Islander	0.1%	0.2%
Some Other Race	13%	6.2%
Two or More Races	4.0%	2.9%
Hispanic or Latino (any race)	28.6%	16.3%
Urban[45]	100%	80.7%
Female householder (no husband present)	18.7%	12.6%
Median Household Income	$50,285	$51,914
% of Families Whose Income in the past 12 months is Below the Poverty Level	16.2%	10.1%
Foreign Born	36.8%	12.7%
% of Foreign Born Population Not a U.S. Citizen	48.6%	56.9%
Language other than English Spoken at Home	48.3%	20.1%

Table 1. Comparison of national population with that of New York City in key areas using data from the 2010 United State census. [46]

Lerner and his team found similar differences in 2003-2004 in their exploration of the 4-H Longitudinal Study of Positive Youth Development.[47] Lerner and his team were able to isolate urban girls from their non-urban counterparts in the data, as well as assess the statistical significance of differences between the two populations. Lerner's data is partially reproduced in Table 2. Lerner found that urban girls were statistically significantly more likely to live in a home with a less educated mother (p<.01), as well as lower per-capita family income (p<.01).[48] It is important to note the extremely large standard deviations associated with income. Urban families had a standard deviation of over $9,000 and non-urban families had a standard deviation of over $8,000. This shows that although the mean income is different, income varies largely in both urban and non-urban environments.

As noted above the ethnic breakdown of the two populations showed that urban girls were ethnically much more diverse than their non-urban counterparts. They were statistically significantly less likely to be white (p<.001) and more likely to be African American (p<.001), American Indian (p<.05), Multiracial (p<.01) and/or Latino/a (p<.001).[49] Single mother households were almost twice as common in the urban sample (13.0% of households were headed by single mothers in urban environments as compared to 7.7% in non-urban environments, p<.01).[50] Lerner also noted that Depression was statistically significantly more prevalent with urban girls (p<.01), as was the breadth of activities they participated in (p<.05).[51] It is important to note in Lerner's study that the data were collected through the 4-H clubs, a largely non-urban organization, and that the urban cohort was much smaller than the non-urban sample (n[urban]= 277, n[non-urban]= 799).[52]

Means, Standard Deviations, and Percentages of Demographic Characteristics and Outcome Variable for "Urban" and "Nonurban" Girls in the 4-H Study of PYD		
Demographic Characteristic	*Urban Girls (n=277)*	*Nonurban Girls (n=799)*
Mother's education in years (mean, sd.)	13.3 (2.94)	13.93 (2.35)**
Per capita family income in dollars	11,396.73 (9,293.17)	13,879.47(8,254.18)**
Race/ ethnicity (%)		
European American	27.3	72.4%***
African American	16.9%	4.9%***
American Indian	6.0	2.9%*
Asian American	3.7	2.3
Other	0.7%	0.9%
Multiracial	8.6%	3.6%**
Latino/a American	36.7%	13.0%***
Single Mother Households (%)	13.0%	7.7%**
Depression (mean, sd: ranges 1-52)	14.7 (9.76)	12.58 (9.54)**
Breadth of activity participation (count of activities, range 1-22)	2.61 (1.95)	2.91 (1.98)*
Key: * p< .05, **p<.01, ***p< .001 ****Independent samples t-tests were computed for all continuous variable comparisons and chi-square analyses were conducted for all categorical variable comparisons.		

Table 2. Means, Standard Deviations, and Percentages of Demographic Characteristics and Outcome Variable for "Urban" and "Nonurban" Girls in the 4-H Study of PYD reproduced from Lerner's study of Positive Youth Development. [53]

From these two sets of information, we can see that urban girls face very different life circumstances than their non-urban peers. In addition, census data shows that girls in New York City are likely to be from a family with foreign-born members and to speak a language other than English at home.

What does this mean for our girls? In addition to the developmental hurdles of adolescence, urban girls, and girls in New York City in particular, are more likely to have additional challenges. From the statistics we see they are more likely to live in poverty, have less well-educated mothers, live in single parent households, live in more ethnically diverse communities and suffer from depression. In addition they are more likely to live in homes with foreign born family members and speak a language other than English in their homes. This means girls may be expected to take on family tasks such as taking care of siblings, earning money for family income or act as translator for friends and relatives less familiar with the language. Urban girls participate in fewer activities than non-urban girls, which may be due to having less time because of other responsibilities, or to lack of options. In addition to these familial responsibilities, community violence, drug use and risky sexual behavior are much higher in urban communities than non-urban communities. The national Youth Risk Behavior Surveillance System, (YRBSS) reported that New York City youth were less likely to carry a weapon (11.2%) than the national average (17.5%), however, youth in New York City were almost twice as likely to have stayed home from school on at least one occasion because they "felt unsafe at school or on their way to school."[54] Nationally 5.0% of students stayed home from school at least one day because they felt unsafe, however in New York City, 9.1% stayed home.[55] Furthermore, girls were more likely than boys to stay home because they felt unsafe (10.2% of girls stayed home compared to 7.9% of boys).[56] As Savin-Williams put it, "We must

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make a commitment to understanding how urban children can maneuver their way through multiple risks and keep themselves alive so that staying healthy is relevant."[57] The mental stress and strain that comes along with growing up is hard to express in population statistics. While Lerner *et al.* showed that urban girls are statistically significantly more likely to suffer from depression, the reasons for this depression remain to be explored. The next sections look at the ways young women perceive confidence and self-esteem, body image, health and their futures. Finally, given the racial differences between urban girls and non-urban girls, it is important to note that not all girls experience these things the same way.


      C.   **Perceptions and Care of Self, Body and Future**

          1. Confidence and Self-Esteem

In 1991 the American Association of University Women (AAUW) compiled a report that combined information from over 1,300 published studies on girls in school.[58] While this study may appear dated, it is still considered one of the most authoritative pieces on girls' development and self-concept. In addition to the AAUW report, information is drawn from the 2009 National Youth Risk Behavior Survey,[59] National Institute of Mental Health and "Real Girls, Real Pressure: A National Report on the State of Self-Esteem" commissioned by Dove in June of 2008.[60]

The AAUW reported that the "gender gap in self-esteem" increases as girls get older. Figure 1 shows that in elementary school 60% of girls and 67% of boys responded "Always True" to the statement "I'm happy the way I am."[61] By high school, only 29% of girls and 46% of boys responded "Always True."[62] The gap between girls and boys of 7 percentage points in elementary school grew to 17 points in high school. Additionally, the 'self-esteem index',

compiled from five measures including "I like the way I look," "I like most things about myself," "I'm happy the way I am," "Sometimes I don't like myself that much," and "I wish I were somebody else" shows a similar discrepancy.[63] Figure 2 shows elementary school girls' scores averaged 3.93 and boys averaged 4.99; however, by high school girls averaged a score of 2.77 and boys averaged 4.65.[64] While boys' self-esteem dropped only three tenths of a point, girls' self-esteem dropped more than one point.
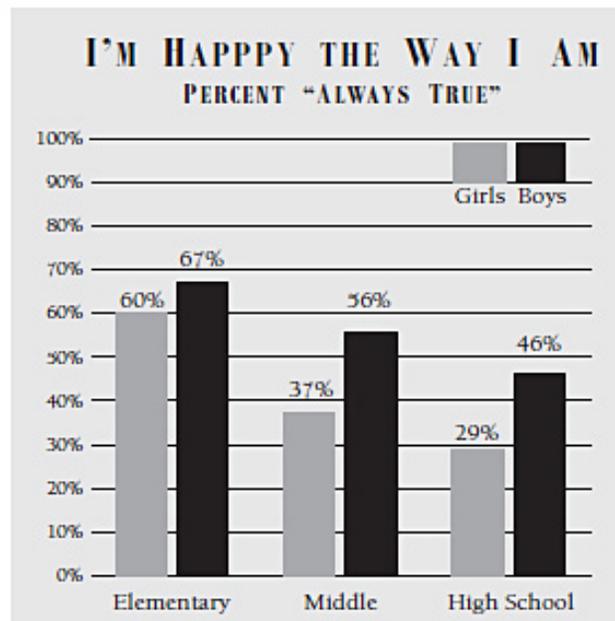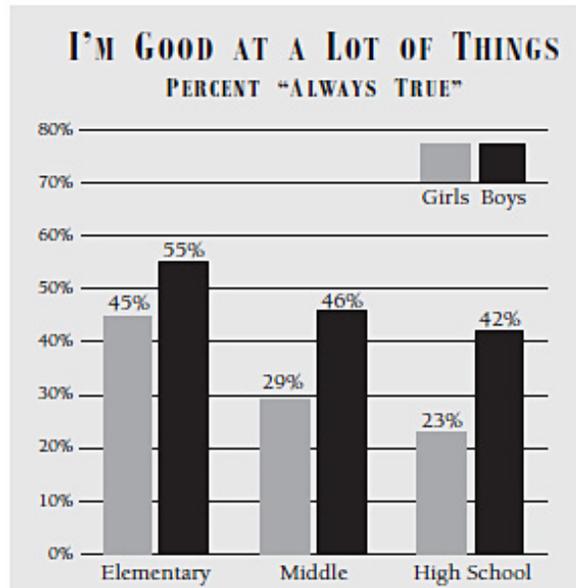

Figure 1. Decline in Girls' Self-Concept Over Time.[65] Reprinted from the American Association of Women's study, *Shortchanging girls, shortchanging America*.
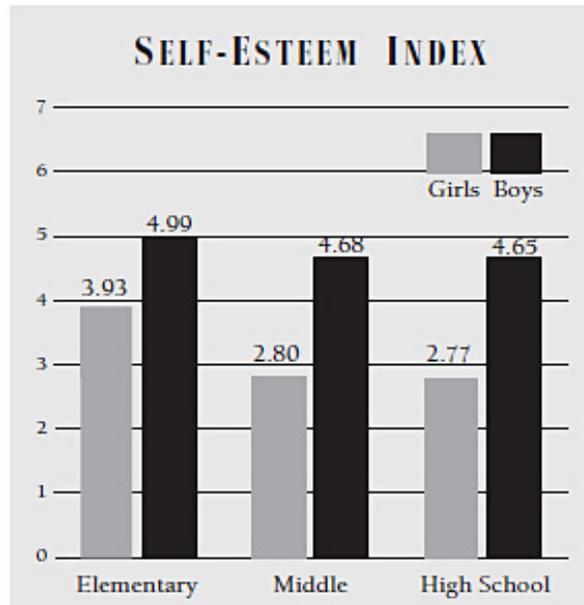
SELF-ESTEEM INDEX

Figure 2. Decline in Girls' Self-Esteem Index Over Time.[66] Reprinted from the American Association of Women's study, *Shortchanging girls, shortchanging America.*

In addition, the report points out, "Adolescent girls are more likely than boys to have their declining sense of themselves inhibit their actions and abilities."[67] Boys are more likely than girls to argue when they think they are right. "Girls are much more likely than boys to say they are "not smart enough" or "not good enough" for their dream careers."[68] The low self-esteem among adolescent girls is directly inhibiting future prospects and aspirations of our young women. By high school, only 23% of girls responded "Always True" to the statement "I'm good at a lot of things" compared to 45% in elementary school and 29% in middle school.[69] Figure 3 summarizes these findings. Girls are losing faith in themselves as they grow older and that is translating into the ways in which they behave and the aspirations they have.

I'M GOOD AT A LOT OF THINGS
PERCENT "ALWAYS TRUE"

Girls Boys

Elementary: Girls 45%, Boys 55%
Middle: Girls 29%, Boys 46%
High School: Girls 23%, Boys 42%

Figure 3. Decline in Girls' Self-Efficacy Over Time.[70] Reprinted from the American Association of Women's study, *Shortchanging girls, shortchanging America*.

These statistics from 1991 are echoed in a 2008 study conducted by Dove. In *Real Girls, Real Pressure: A National Report on the State of Self-Esteem*, researchers reported, "seven in ten girls believe they are not good enough or do not measure up in some way, including their looks, performance in school and relationships with friends and family members."[71] Girls feel they are not doing things right. In addition to feeling that they do not "measure up," girls are more likely than boys to blame themselves for their failings instead of circumstances or those around them.

While boys generally attribute their successes to skill, girls are more likely to attribute them to luck. As Clance notes, females "tend to attribute their achievement to external factors or good fortune, rather than to innate ability. Success does not guarantee high self-esteem."[72] Gilligan echoes this thought in her book *A Different Voice*. She notes that men have two ways of looking at a challenges - they can be hopeful they will succeed, called "hope-success" or fearful they will fail; "fear-failure." Women, on the other hand have a third way of viewing challenges

called "fear-success." In this perception, women are afraid to succeed because it may change

the way they are seen or negatively affect their relationships with others. As Mclleland writes,

> Women appeared to have a problem with competitive achievement, and that problem
> seemed to emanate from a perceived conflict between femininity and success, the
> dilemma of the female adolescent who struggles to integrate her feminine aspirations
> and the identifications of her early childhood with the more masculine competencies she
> has acquired at school.[73]

This "fear-success" mentality combined with a perception of success as a masculine trait means

that showing girls they can do it is not enough. Even if girls are successful, they may attribute

this success to something outside of themselves, and their self-esteem will therefore not

increase. In this way, people who work with girls and young women are challenged to both

create successes and foster environments where girls can acknowledge and appreciate those

successes themselves.

The most serious result of this self-esteem deficit in young women is the rate at which young

women are attempting suicide. Suicide, usually a last result after long and difficult bouts of

severe depression, is significantly higher in adolescent women than in young men. The national

Youth Risk Behavior Surveillance System shows that in 2009, 8.1% of 9-12th grade girls in the

study attempted suicide in the 12 months before the study.[74] That is almost twice as many as

adolescent boys in the study (4.6%).[75] In addition, 13.2% of girls made a plan about how they

would attempt suicide in the 12 months before the study, and perhaps, most frighteningly,

almost one in five (17.4%) of girls seriously considered attempting suicide during the 12

months before the study.[76] In New York City, 10.7% of young women surveyed and 9.0% of

males surveyed attempted suicide in the 12 months prior to the survey.[77] This supports the

differences between urban and non-urban youth discussed above. In New York City one in ten

young women has tried to kill herself in the last year.[78] This crisis of confidence is

unacceptable. There is a dire need for programs to specifically address issues of confidence and depression in young women in a way that only empowerment programs are able to do.

2. Body Image

Physical Appearance is much more important to girls than boys. The AAUW study found that "Girls are nearly twice as likely as boys to mention a physical characteristic as the thing they like most about themselves."[79] Because an immense amount of research and time has already been devoted to this topic, I will only say that this preoccupation with appearance is not healthy for our young women (or older women). In the New York City Youth Risk Behavior Surveillance System study in 2009, summarized in Figure 4, 57.8% of young women (and 56.7% of young men) felt that they were "about the right weight." [80] Only 13.8% of young women perceived that they were "very or slightly underweight"; 24.6% believed they were "slightly overweight" and 3.8% believe they were "very overweight."[81] According to measures of Body Mass Index in the same sample, summarized in Figure 5, 74.6% of young women were "under/ normal weight", 16.9% were "overweight but not obese," and 8.5% were obese.[82] While 57.8% of girls believed they were the right weight, BMI notes that 74.6% of girls are within healthy weight margins.[83]
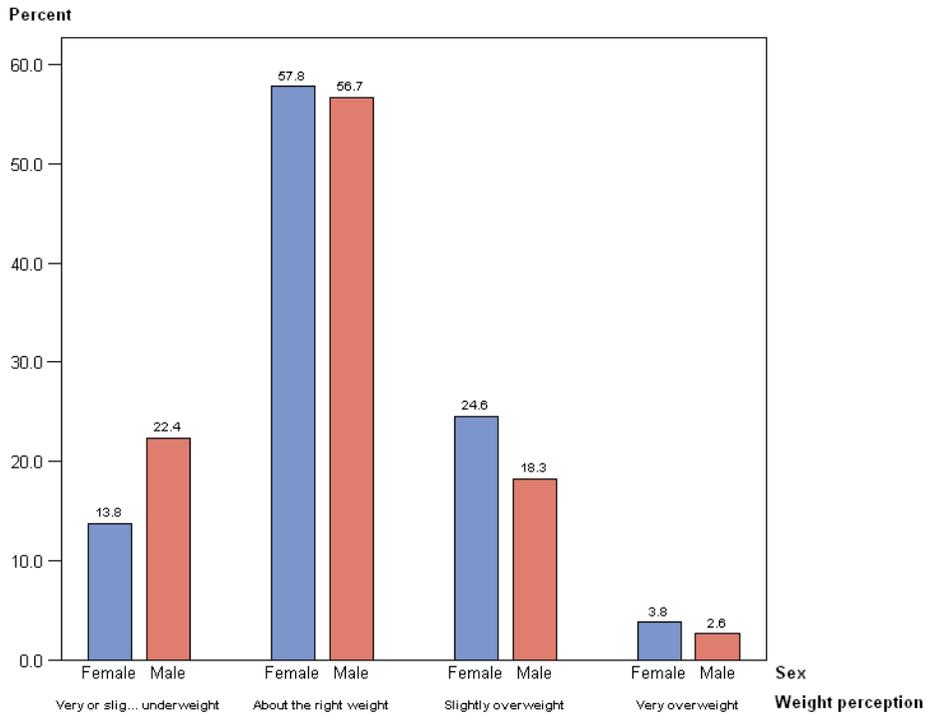
Figure 4. Weight Perception of New York City Youth by Gender 9th-12th Grade 2009[84]
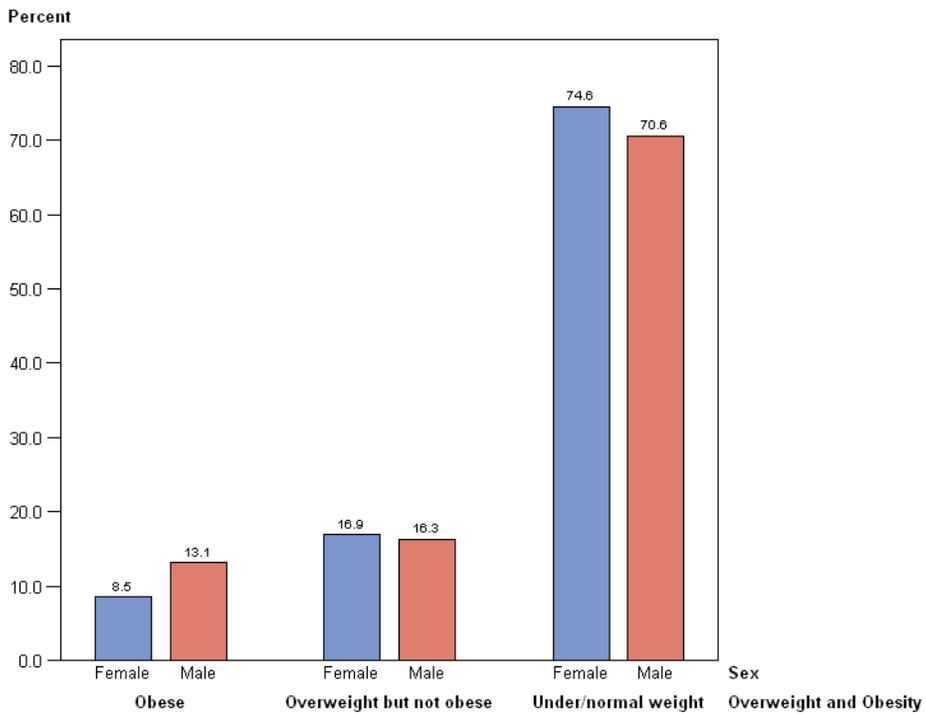
Figure 5. BMI of New York City Youth by Gender 9th- 12th Grade 2009[85]

The data indicate that young women are not connecting healthy living to attractive bodies. Girls continue to engage in unhealthy dieting habits, skip opportunities for exercise and diet when they are not in need of losing weight. The national YRBSS shows that 14.5% of young women surveyed "went without eating for 24 hours or more to lose weight or to keep from gaining weight" (data not available for NYC sample) and almost half (45%) did not attend (skipped) physical education classes when they were in school.[86] Additionally, 62.1% of female students participated in at least one positive weight control method like exercise and monitoring diet, however, only 25.4% were overweight or obese according to BMI.[87] The connections between positive body image and health are weak at best. The health of adolescent girls is suffering along with their self-esteem.

3. Health

This disconnection between external appearance and how girls treat their bodies on the inside is apparent in the health crisis among young women. Statistics about obesity, lack of physical activity, unsafe sexual activities and drug use all show young women are not protecting their bodies from diseases and potential health problems.

As mentioned above, 8.3% of girls nationally, and 8.5% of girls in New York City are obese.[88] An additional 16.9% of girls nationally and in New York City are overweight.[89] The Center for Disease Control lists coronary heart disease, type two diabetes, cancers, hypertension, high cholesterol, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, joint problems and musculoskeletal discomfort, and gynecological problems such as abnormal menses or infertility as some of the consequences of obesity.[90] In addition, the CDC suggests that obese children may be at greater risk of psychosocial problems. "Obese children and

adolescents have a greater risk of social and psychological problems such as discrimination and poor self-esteem, which can continue into adulthood."[91] Obesity is more than an issue of vanity; it is a serious health concern.

The obesity epidemic is fueled by sedentary habits and poor dietary behaviors. While 88.6% of female students report being "physically active at least 60 minutes per day at least one day in the last 7 days," 32% report watching television "three or more hours a day."[92] Interestingly, about 32% of young women are overweight and obese. Additionally, 87% of young women reported eating vegetables less than three times per day and 23% "drank a can, bottle or glass of soda or pop at least one time per day."[93] In New York City 21.2% of female respondents drank a soda each day.

Additionally, females were statistically significantly less likely to play on a sports team than males (p<.05).[94] The benefits of sports participation for females have been well documented. "Female athletes are less likely to get pregnant, are more likely to postpone sexual intercourse, have fewer sexual partners, and are less likely to begin smoking cigarettes."[95] The connection between body, health and confidence appears to be made when girls start using their bodies to play sports. Non-competitive athletic activities may be particularly attractive to young women, however, few exist. [96] The WE Bike Girls' Program provides a unique opportunity for young women who are not interested in competitive sports to participate in an active community on a bicycle.

Athletes or not, the issue of sexual health is something all girls must deal with as they grow. This struggle is both a mental and a physical one. Girls must learn to set boundaries for their hearts and minds at the same time they are learning to set boundaries for their bodies.

> The possibility of girls controlling their bodies and their sexuality is undermined by confusing messages about the negative consequences both of their actions (appearing to be sluts) and their inaction (not protecting themselves). Yet girls are unambiguously held responsible for the consequences.[97]

Empowering girls to make decisions about their bodies means much more than handing out condoms. The YRBSS reported that 45.7% of girls nationally in grades 9-12 had had sexual intercourse.[98] In New York City, 34.5% had had sex.[99] In New York City, 5.5% of girls reported having ever been pregnant.[100] 65% of girls in New York City reported using a condom during their last sexual encounter, and 53.9% of young women nationally reported using a condom.[101] It is impossible to protect against sexually transmitted infections without using a barrier method, and yet only 50-60% of our youth are doing so. Mistakes made in adolescence regarding pregnancy or sexually transmitted infections can drastically alter a young woman's future.

4. Future

Given all the above hazards and challenges, what can our young women expect of their futures? Linda Catelli points out that the most common female occupations in Caldecott Medal winning books are "Queen, Musician, Singer, Dancer and Witch."[102] Furthermore, as noted above, women may look at challenges with a "fear-success" lens that inhibits their drive to succeed. This is manifested in a gap between what young women hope to be, and what they truly believe they will become. Klaw and Rhodes note that "as young minority women approach early adulthood, they often experience a widening gap between their career aspirations and their

actual expectations."[103] The decisions young women make in adolescence can create opportunities or increase challenges. The goal of program providers should be to help young women create a future full of opportunities.

5. Racial Differences

It is important to note that not all girls experience the world the same way. In particular, there are significant differences between girls of different ethnic backgrounds. The AAUW noted that self-esteem differed substantially by ethnic background. These results are summarized in Table 3. In response to the statement "happy the way I am," 55% of white elementary school girls answered "Always True" while 22% of white high school girls answered "Always True."[104] On this scale, white girls experienced a negative 33 percentage point change in self-esteem between elementary and high school. In contrast, Black girls reported a negative 7 percentage point change on the same scale. Hispanic girls reported a negative 38 percentage point change on the same scale between elementary school and high school.[105] From these data, it appears that the self-esteem drop associated with female adolescence is most pronounced for Hispanic girls, followed by white girls, and that black girls somehow mediate this experience differently and more successfully. In addition, the Girl Scouts Report on Leadership noted that 75% of African American girls saw themselves as leaders, compared with 72% of Hispanic girls, 66% of Asian American girls and 56% of Caucasian girls.[106]

Girls' Self-Esteem by Race and Grade[107] "Happy the Way I Am" Percent Always True				
	Elementary School	Middle School	High School	Change	All
White Girls	55	29	22	-33	34
Black Girls	65	59	58	-7	60
Hispanic Girls	68	54	30	-38	52

Table 3. Girls' Self-Esteem by Race and Grade, "Happy the way I am" percent "Always True." Reproduced from the American Association of Women's study, *Shortchanging girls, shortchanging America.*

The New York City results of the YRBSS allow us to compare measures across race. In New York City, there is no statistically significant difference between ethnicities in measures of attempted suicide,[108] weight perception,[109] or having ever been sexually active.[110] Obesity by race was not statistically significantly different among youth in New York City, however, nationally it is known to vary depending on ethnicity.

> There are significant racial and ethnic disparities in obesity prevalence among U.S. children and adolescents. In 2007-2008, Hispanic boys, aged 2 to 19 years, were significantly more likely to be obese than non-Hispanic white boys, and non-Hispanic black girls were significantly more likely to be obese than non-Hispanic white girls.[111]

Finally, White Non-Hispanic young women were statistically significantly less likely to skip school due to feeling unsafe as compared to other ethnic groups.[112] These results suggest that growing up is not a one-size-fits-all event. While all youth struggle at some point in their lives, the trials of adolescence are mediated in different ways by different cultures and communities. As this paper continues, we will talk about urban girls. Urban girls are certainly not a homogeneous group; however, for the scope of this study, we will look at them as a whole, and

not disaggregated by race, or class. It is important to note that this is not because they are all

the same, but because the scope of this paper does not allow us to drill quite so deeply into the

adolescent experience. Furthermore, it is important to note that regardless of all the challenges

that face young, urban women, by and large they are resilient and successful. As Leadbeater put

it,

> The problems that do exist among some urban youth are neither inevitable nor the sum
> total of the range of behaviors that do or can exist among them. [We aim to] stress the
> plasticity of human development and regard this potential for systematic change as a
> ubiquitous strength of people during their adolescence.[113]

The challenges youth face do not determine outcomes, and statistics are not people. Programs

like WE Bike Girls' Program and those that follow have the potential and the passion to change

the way that life unfolds for young women.

III.   AFTER SCHOOL and OUT OF SCHOOL TIME PROGRAMS

As we can see above, girls, and all youth, are experiencing a world that is far from ideal. And

even though many of our youth are experiencing extraordinarily difficult circumstances, they

continue to grow up to be extraordinary people. Many attribute this growth to "protective

processes."[114]

> Protective processes include experiences, events and relationships that operate to
> (a) Interrupt or reverse the downward developmental trajectories
> (b) Diminish the causes or impact of stressful situations
> (c) Reduce the negative chain reactions that characterize pathogenic family or school situations
> (d) Promote the development and maintenance of self-efficacy
> (e) Create beliefs or loyalties that are incompatible with deviant behaviors
> (f) Provide opportunities for positive educational, vocational and personal growth.[115]

 These people, routines, places and programs that act as protective processes are incredibly

important in young people's lives. Young people often seek to break away from family and

establish their independence while at the same time they desire help and guidance. After school

programs are one kind of protective process that can be incredibly influential for young people.

Furthermore, the relational nature of young women's psychological development makes these

spaces particularly important. Young women crave not only a place, but also a connection from

which to root themselves. As Pastor, McCormick and Fine write, "our experience, matched by

that of a growing number of feminist educators of many colors who are bringing groups of girls

together, is that young women of the next generation are 'hungry for an us.'"[116] In creating this

'us', there are two necessary components: a safe space (both physically and emotionally), and a

caring adult. This section aims to explore the rationale behind the Positive Youth Development

model, from which the idea of Protective Processes is drawn, and then explore the ideas,

challenges and successes of a few programs that create these safe spaces.

In recent years, after school and out of school time programming has shifted from a 'keep kids off the street' approach, to a Positive Youth Development (PYD) approach. This approach proposes that out of school time can be more than babysitting and recreation. This time has the potential to provide learning and leadership opportunities for youth that will help them develop into successful, bright and resilient adults. As Solarez, *et al*. put it,

> "Strengths-based approaches focus on tapping or building strengths and competencies; promoting healthy development and wellness; strengthening social environments; and engaging individuals, families, and communities in the development and implementation of solutions."[117]

The PYD approach centers on the five C's: Competence, Confidence, Connection, Character and Caring/Compassion. Roth and Brooks Gunn summarize the five as,

> (1) Competence in academic, social and vocational areas
> (2) Confidence or a positive self-identity
> (3) Connections to community, family and peers
> (4) Character or positive values, integrity and moral commitment; and
> (5) Caring and compassion for others [118]

While it is difficult for any one program to encompass and foster all of these areas, the five C's are seen as a framework for both the development and implementation of out of school time programming in the 21st century.

In *A Place to Call Home: After School Program for Urban Youth*, Hirsch and his team explore how the Boys and Girls Clubs and BYC Beacons incorporate the five C's into their programming and activities. They found that curriculum and programs were less important than creating safe spaces for youth to interact with adults who cared about them. They note,

> McLaughlin and associates found that there was no single prototype for the successful program. Rather, the content of successful program drew on the unique interests of individual staff. Caring staff who were highly motivated to work with youth, and who were responsive to youth interests and input, was the key.[119]

In the end, youth programs depend on people who care about youth. However, Hirsch is not willing to end his book with an "it depends" and proposes five new conclusions to guide out of school time programming in the future. These are:

1. Strengths-based approaches can and do make a real difference in promoting healthy development.
2. Children, youth, families and communities facing adversity are far more capable of meeting challenges than has been previously recognized, *if* they have the necessary basic resources (e.g. housing, health care, social support, safety). However, absent these essential resources, children, youth families and communities do not do well.
3. There are unique patterns of strengths that children, youth, families and communities have that contribute to positive outcomes under adverse conditions.
4. To be effective, approaches must be both developmentally and contextually appropriate.
5. There are general, integrated approaches to building strengths that apply across groups and across circumstances.[120]

These suggestions, although sometimes vague, reiterate that youth are amazing people, and what they need, more than anything, is the space and opportunity to thrive.

Girls appear to especially benefit from the safe spaces provided by caring adults.[121] Pastor, McCormick and Fine poetically explain this need.

> Young women of many colors are hungry for spaces in which to talk and dressing rooms for trying on (and discarding) ways to be women: White, African American, Latina, Asian American, straight, lesbian, bisexual, celibate…[122]

There are so many roles we expect young women to play, that the need for a safe space in which to try out these roles is invaluable. Leadbeater and Way propose that strength and resilience are not exclusive characteristics which one person may have and another may lack, but characteristics of communities and relationships to which youth are connected.

> Strengths and resilience, we argue, are not only characteristic of individual girls, but also are located in the context of support available to these young women and in the action, relationships, program and policies that support their positive development.[123]

Because of this, strategies for intervention must go beyond helping individual youth, to also focus on strengthening community. In her study of creating vocational opportunities for Hispanic adolescent girls, De León suggests six strategies for intervention:

1. Provide female role models for adolescent girls and for women in general.
2. Provide support and mentoring activities to girls and adult women in order to increase their participation in education and career awareness programs.
3. Design program and activities that will increase young women's awareness about social-structural barriers that limit their educational and career development and participation in society.
4. Use models of intervention that enhance girls' sense of self-confidence, assertiveness and achievement motivation.
5. Help girls to acquire information about career, improve their perceptions about possibilities and expand their range of career aspirations and options.
6. Help girls to develop effective ways to identify personal and external barriers to their educational attainment and career aspirations.[124]

Given the above approaches for successful youth programming this paper will now examine several kinds of programs related to the WE Bike Girls' bicycle program. This section explores the strengths and challenges of a few leading programs in each of these categories in order to understand and address where and how a girls' cycling empowerment program may fill gaps, or face challenges. While a girls' bicycle program integrated within a specific empowerment framework is yet to exist in the United States, the following programs address the key elements of empowerment programs, cycling programs and girls' cycling programs.

Each section below discusses the fundamental principles behind each type of programming as well as reviews one or two programs in that area of focus. Each review will look at the mission of the organization, the population served, programs offered, and potential strengths and challenges. Whenever possible, organization personnel were contacted for their input. The point of this section is to reiterate the conclusions above - that there is no one way to help youth,

as well as to provide a foundation for the creation of the WE Bike Girls' Program as a unique

and important contribution to the New York Youth Development arena.

A.   Girls' Empowerment Programs

Girls' empowerment programming has been around since the first girls club formed in

Waterbury, CT in 1864.[125] The Girl Scouts, founded in 1912 boast 2.3 million girl members

and 890,000 adult members.[126] Girls Inc., founded in 1945 is another giant program serving

150,000 girls annually. Both Girl Scouts and Girls Inc. operate on a national level. A lesser

known, yet also national girls' empowerment program operating in New York City is Willie

Mae Girls Rock Camp. We have chosen to review this program because of its innovative

approach to empowerment as well as its deep connection to New York City. Additionally, the

lessons, challenges and successes of a smaller, local program are likely to be more relevant to

the WE Bike Girls' Program development.

1.   Willie Mae Rock Camp for Girls

Willie Mae Rock Camp for Girls (WMRC) was founded in 2004 by a group of New York City

women. Over the last 8 years, WMRC has served about 250 youth in summer and school year

programs. The WMRC summer program is staffed entirely by volunteers and the program runs

on a paid staff of about eight people. The mission of WMRC is:

> Willie Mae Rock Camp for Girls is a non-profit music and mentoring program that
> empowers girls and women through music education, volunteerism, and activities that
> foster self-respect, leadership skills, creativity, critical thinking, and collaboration.[127]

While Girl Scouts and Girls Inc. are adaptable to the resources available in each community,

WMRC introduces the added complication of music. With music comes instruments and noise.

The challenge of finding space to store instruments as well as space to make a lot of noise has

been a challenge for the program. However, the challenge pays off in the way that music is able to take young women out of their shells and let them make some much needed and at times socially unacceptable noise. In this way WMRC addresses Brown and Gilligan's dilemma of girls going "underground" head on by bringing them up on stage. This unique approach has earned WMRC national recognition.

Emmet Moller, WMRC's volunteer coordinator listed challenges such as space and diversity on the top of the list for the camp. As noted above, storing multiple instruments as well as finding space to practice is a constant challenge for the camp. Additionally, while the campers are a diverse group representative of the population of New York City, the volunteers who run the camp are not. Creating a space that is inclusive of groups not traditionally drawn to a "rock" camp has been an ongoing challenge (personal communication with Emmet Moeller, Program Director, WMRC. 16 April 2012). However, WMRC continues to grow. Because measuring empowerment, self-esteem and self-concept is incredibly difficult, how does WMRC know it is doing the right thing? Emmet responded, "When you are in a room where girls are creating together, you get goosebumps…The space created here is so fiercely protected and defended by the people who are in it [volunteers and campers alike]…it is clear that it is really valued" (personal communication with Emmet Moeller, Program Director, WMRC. 16 April 2012).

B. Girls' Sports Programs

Girls' participation in sports, as noted earlier, is linked to a variety of positive outcomes. It increases health, body image and self-esteem, which have been linked to fewer risk behaviors in adolescence.[128] As Catelli points out, young children explore their worlds through physical activity. "We know that kids' worlds and their knowledge about the world are substantially

affected by what they can physically do."[129] In addition, as girls grow and change, it becomes

increasingly important that they maintain the feeling of efficacy that comes with physical work.

She writes, "Any adolescent psychologist will tell you how extremely important it is for girls,

when their bodies are changing, to feel and believe that they are competent and successful in

what they can physically do."[130] The sense of empowerment and efficacy that comes with

sports participation is seldom replicated in other types of programming. However, sports

programs can be some of the most difficult to start, recruit and maintain. PowerPlay NYC runs

the only sports program in New York City specifically for girls with an empowerment focus.

1. PowerPlay NYC

In New York City, PowerPlay NYC is the most well-known girl-specific sports program.[131]

PowerPlay, founded in 2000, works with 25 schools and community-based organizations in

New York City and serves about 400 girls each year.[132] Their mission:

> PowerPlay NYC is a 501(c)(3) dedicated to educating and empowering girls through
> sports, teaching life skills and building self-confidence and self-esteem for life! Our
> programs provide girls, ages 7-18, with the opportunity to feel connected, competent and
> confident, so they can make positive decisions about their lives and learn how to 'live
> healthy.'
>
> Our programs reflect the fundamental principles of PowerPlay:
> - Girls who participate in sports are more likely to feel better about
>   their bodies and have higher levels of self-esteem than girls who do
>   not play sports.
> - Many of the fundamental life skills for success can be learned
>   through sports participation.
> - It is critically important to continually provide opportunities for girls
>   to engage in sports and fitness to encourage a lifelong commitment to
>   an active, healthy lifestyle.[133]

PowerPlay successfully implements many of the program suggestions in the previous

paragraphs. One challenge faced by PowerPlay is that it operates within existing organizations

such as schools and community centers. In this way, the curriculum and activities of the

program are responsible for creating an emotional safe space when the physical space is not necessarily guaranteed to be perceived by participants as safe. Another challenge of sports programming is that many sports require space and equipment. However, the benefits are clear in this testimonial from a participant, Christie Ramiah:

> My experience at PowerPlay has been fantastic. Every day at the Summer Leadership Academy we learned something new…My life has been completely changed by this experience; from the way I eat to the way I speak. My life will never be the same again.[134]

Sports programs provide a unique environment for young women to test their skills, feel competent and belong to an intimate and supportive group.

C.   Youth Bicycle Programs

Youth bicycling programs face many of the same challenges as sports programs. Bicycles are expensive and a significant amount of secure space is needed in order to store and maintain them. Bicycles aren't the only equipment required. Helmets, locks, lights and water bottles are important equipment as well. Finally, if bicycle mechanic skills are to be taught as part of the curriculum, tools, stands and workshop space must be procured. Recycle-A-Bicycle in New York City created a workbook called *Tools for Life* for community bike shops that outlines how to start a program.[135] They estimate tool costs ranging from $191 (in 1994) for the bare minimum to $2,611 for a dream workshop. In addition, *Tools for Life* stresses the importance of finding qualified staff for youth bicycle programs. Youth bicycle programs need leaders who are not only exceptionally competent with all types of bicycle mechanics, but who are also sensitive to youth and good teachers.[136] Finally, one of the biggest hurdles for youth bicycle programs face is liability. Bikes can be dangerous, and riding on city streets is always risky. In addition, working with tools and refurbished bikes contribute additional risks. Finding

affordable insurance as well as organizations willing to take on these risks can be challenging, to say the least. In New York City there are two main bicycle programs for youth: Recycle-A-Bicycle (RAB), and the much smaller, VeloCity. We will look at the mission statements of both of these programs, as well as how they meet program challenges.

1. Recycle-A-Bicycle

Recycle-A-Bicycle (RAB) started in 1994 under the larger bicycle advocacy program Transportation Alternatives. From there it has grown into an organization with two retail shops, and eight school and community sites throughout all five boroughs of New York City.[137] Their mission statement reads,

> Recycle-A-Bicycle (RAB) utilizes the bicycle as a resource to foster youth development, environmental education, community engagement, and healthy living. Through retail storefronts, social entrepreneurship, and innovative programs, Recycle-A-Bicycle empowers the youth of New York City. RAB is a 501(c)3 non-profit organization. Donations are tax deductible and purchases from our storefronts support our youth programs and environmental initiatives.[138]

RAB serves youth of all ages and boasts 100 youth in job training internships, 500 youth in school-based programs and 100 youth involved in Kids Ride Club every year.[139] They engage an additional 500 youth through bike giveaways and community programs and events each year.[140] The bulk of the message from Recycle-A-Bicycle revolves around recycling and personal health.

> In the past year alone, more than 1,000 RAB youth collectively refurbished 500 bicycles, pedaled 10,000 miles, and burned 1,500,000 calories. On average, RAB salvages 1,200 bicycles each year from the waste stream, diverting a total of 36,000 pounds of waste from NYC's landfills.[141]

The environmental effects of RAB are striking when they are explained in such terms, and while youth development is clearly an outcome of RAB programs, it is not the main focus.

RAB provides a variety of programming from "Earn-A-Bike, Green Jobs Training Programs, High School Internships, Recycled Arts Workshops, Summer Youth Employment Program, and Kids Ride Club."[142] The majority of programming is structured as after school and weekend classes for youth. Each site is slightly different, but the majority function under the Earn-A-Bike model. This model means that youth attend classes and contribute a set amount of time to helping maintain the workshop and perfecting their skills. After contributing the required amount of time, calculated on an "hours economy," youth earn a bicycle that they can fix up and take home as their own. An "hours economy" means youth can earn and spend "hours" just like other people spend money. Youth earn hours by helping at the shop and spend hours on bicycle parts or accessories. New handlebar grips may cost two hours, whereas, a used bike to fix up may cost as much as 45 hours. This creates ownership, responsibility and sustainability by requiring youth to work for what they earn, saving up their hours for a long term goal and providing them with the tools to keep their bicycle functioning in the months and years to come. This model provides an environment that sustainably builds bikes into people's lives as tools, instead of toys or sports equipment. Its' success is clear in the way it has grown in the last 18 years from four sites and an annual budget of under $67,000 to the leading youth cycling organization in New York City.

2. VeloCity

VeloCity, a much smaller, urban planning oriented program, focuses on riding bikes, not building them.[143] VeloCity uses urban planning as a means of empowering high school aged youth to understand, own and change their communities.

> VeloCity develops innovative cycling-based urban planning and design education
> programs for youth from diverse, underserved communities. By providing access to

information and education in these disciplines, VeloCity empowers young people to become active voices in the processes that shape the places they live.[144]

One goal of VeloCity is to increase the diversity of people making decisions about our cities. While most people who live in cities are non-white (56%), and majority women (52.5%), city's elected officials are overwhelming white (70%) and male (55%).[145] VeloCity attempts to expand the number of people of color in traditionally white professions such as architecture and urban planning.

VeloCity programming consists of two programs: Taking the Lane (school year) and Bikesplorations (summer). Both programs provide an opportunity for youth to explore their community through bicycle riding, identify issues in their environments and propose design solutions to address these issues. Youth are trained in the "three fundamental areas of active design principles: active transportation, food access, and public space" and use these skills to create realistic and plausible solutions to community concerns. Participants are required to know how to ride a bike and bicycles and helmets are provided for them to use during the program. Additionally, participants who complete the school year program are awarded a monetary stipend.[146]

VeloCity was founded in 2009 and has served 100 youth so far (personal communication with Karyn Williams, VeloCity Founder and Director. 24 April 2012). Its direct focus on empowerment encourages the development of youth who are not only able, but also expected to change their environment for the better. In this way, VeloCity uses a Positive Youth Development (PYD) framework in a way that Recycle-A-Bicycle does not. It is clear that this PYD focus creates an environment that requires staff with a different set of skills. While RAB

staff must have extensive mechanics knowledge, VeloCity staff must understand urban planning and how to use this as a tool to help empower youth. Additionally, by choosing to serve youth who are in the minority of the cycling population, such as youth of color and women, recruitment for such a project can be a challenge. VeloCity is a strong model for using cycling to empower, not just transport young people.

D. Girls' Bicycle Programs

Girls are a greatly underserved population in the youth cycling community. Across the United States there are only two female-only youth programs that I have been able to identify: Bikes Not Bombs' *Girls in Action* program in Boston, Massachusetts and West Town Bikes' *Girls Bike Club* in Chicago, Illinois. Both of these programs are components of community bike shops much like Recycle-A-Bicycle and face many of the same challenges. What sets them apart is the realization that bike space is gendered and young women may not feel comfortable in a co-ed, or more often de-facto male, environment.

1. Bikes Not Bombs: *Girls in Action*

Bikes Not Bombs' *Girls in Action* program is structured the same way as co-ed youth programs with slight differences in activities and field trips that might be more appealing to girls. The website mentions "henna tattoos" as one thing girls might learn in this program.[147] The program is a seven-week, once a week after school program that meets for three hours each session and costs participants between $25 and $50 for the program. The program is described below.

> Girls in Action is BNB's all-girls program. Just like our co-ed Earn-A-Bike program, Girls in Action combines bicycle mechanics and riding and is a great way for girls aged 12-18 to learn new things, make friends, get active and earn a bike of their own! In

addition to mechanics, GIA offers fitness, safety, and environmental activities, as well as weekly workshops or field trips! You might visit an urban farm, learn how to do henna tattoos, or do community service, all while meeting other cool girls and learning how to completely rebuild a bike.[148]

The *Girls in Action* program strives to fulfill the greater mission statement of Bikes Not Bombs.

It states,

- Bikes Not Bombs uses the bicycle as a vehicle for social change.
- We reclaim thousands of bicycles each year.
- We create local and global programs that provide skill development, jobs, and sustainable transportation.
- Our programs mobilize youth and adults to be leaders in community transformation.[149]

While it is admirable that Bikes Not Bombs recognizes the need for a safe space for young women, their program is substantially the same as that for young men and co-ed groups. The mission of the organization is to create social change. In this way it is oriented towards social goals, not individual youth development goals.

Bikes Not Bombs has been successful both in the United States and around the world. It was founded in 1990 and hosts Earn-A-Bike, instructor training, vocational training, community organizing, health programs and programs specifically aimed at underserved populations including youth with disabilities and girls.[150] Since 1990, Bikes Not Bombs has served over 3,000 youth in Boston, Massachusetts.[151] In addition, they run programs in Ghana, Guatemala, St. Kitts and Nevis Island, and Uganda.[152] Bikes Not Bombs makes a huge difference in many lives; however, it does not explicitly fulfill Positive Youth Development goals.

2. West Town Bikes: Girls Bike Club

West Town Bikes is another community bike workshop similar to Bikes Not Bombs and Recycle A Bicycle. Their mission states,

West Town Bikes is a community bicycle learning workshop. WTB offers bicycle mechanics workshops, youth programs and special events to members of the community. WTB is also used as a creative workspace for special bicycle building, utilitarian human powered design, kinetic art, advocacy projects and all sorts of constructive creation.

The overarching goals of West Town Bikes are to promote bicycling in the city of Chicago, to educate youth with a focus on under-served populations, and to foster and serve Chicago's growing bicycling community. While maintaining headquarters and a workspace in Chicago's West Town neighborhood, WTB has become a city-wide service provider for youth programs in the city of Chicago.[153]

Girls Bike Club is different from *Girls in Action* in that it grew up organically from women in the West Town Bikes community, and was not passed down through the organization. West Town Bikes provided the physical space for women to get together, and the project took off from there. The main goal of "Girls Bike Club" is to "Fight male patriarchy."[154] Liz Clarkson, leader of the five dedicated young women and four adult female staff, reiterated over and over again that "it's not about the bikes." Girls Bike Club, more than anything, is about creating safe spaces for women and girls in what is a very male oriented environment. Mothers, volunteers and girls make up what is an egalitarian group making space for all women in the community, not just girls.

Girls Bike Club is still a new group. They started last year in 2011 and have hosted weekly meetings since their inauguration. The group started as a grant funded summer program to encourage more girls to bike. When the funding ran out, the group stayed on. The group has hosted a community "decorate your bike day" and is planning a "Heels on Wheels" fashion show as well.[155]

The "Girls Bike Club" is one of the most successful programs at creating a safe space for women and girls in the cycling community. The dedication of the leaders and members to

continue the project after funding ran out indicates the need for programs like this. While the

program does not use a specific curriculum, and in many ways is not about bikes, but about

community, it provides a model for other groups in creating an inclusive and productive space

for women and girls to explore bikes, community and empowerment.

IV.   WHAT'S MISSING: GIRLS' EMPOWERMENT through BICYCLES

Girls benefit in different ways from empowerment programming, sports programming and bicycle programming. Empowerment programs generally address issues of self-esteem and belonging. Sports programs tackle these issues for more athletic girls as well as including issues of health and body image. From the above analysis we can see that there are many programs out there, however, the Afterschool Alliance indicates that more are needed. Only 21% (644,287) of New York's K-12 children participate in any kind of afterschool program.[156]

A girls' empowerment program centering on bicycles, such as the WE Bike Girls' Program, has the power to address the developmental and social issues facing young women through the creation of safe space in a traditionally male environment. Through bicycles, girls can learn self-esteem, positive body image, healthy habits, problem solving for positive future outcomes and vocational training, thereby effectively combining the best aspects of existing empowerment, sports training, and bicycle programs.   Furthermore, cycling provides an athletic opportunity that is accessible to all girls, regardless of physical ability, skill or competitive spirit.

A.   Why Bicycle Riding?

Bicycles address the same issues of body image and self-esteem as other sports programs; however, they appeal to girls who don't consider themselves athletes, or who don't like the idea of competitive sports.[157] Furthermore, cycling is an activity that can be mastered by almost anyone. Girls who are overweight or obese may not be inclined to join the track team because their joints are already under stress; however, cycling is a healthy activity that can be performed without added stress on knees and ankles.

The non-competitive nature of cycling also welcomes young women who are caught in the "fear-success" approach to challenges. Cycling provides an opportunity to be active and master a skill without comparison to others. Girls who do not think of themselves as athletes or who lack hand eye coordination skills are less inclined to join sports teams for fear of letting the group down. An effective PYD cycling program provides a supportive environment that allows girls to fail and succeed without the fear of jeopardizing relationships with others.

In addition, bicycles provide a way of understanding and expanding girls' environments. As VeloCity notes, bikes allow youth to understand their neighborhoods and the problems and solutions available to them. It literally and metaphorically opens up girls' worlds and provides a means and a metaphor for allowing girls to take themselves wherever they want to go.

B.   Why Bicycle Mechanic Skills?

Bicycle mechanic skills are an equally important component to empowerment programming through bicycles. Learning the skills of bike mechanics provides another opportunity for mastery and success. Learning to ride a bike is great, and it can provide almost endless health and environmental benefits, but as noted earlier, there is a need for a program that also addresses the social-emotional needs of young women. Competence in a bike shop provides a feeling of accomplishment as well as lending a layer of self-sufficiency to the lifestyles encouraged through cycling. Young women who feel confident in one traditionally male environment are more likely to explore other traditionally male spheres with more confidence.

Bike mechanic skills also contribute to the sustainability of a bicycle program. Bike repairs can be expensive and difficult. By teaching young women how to fix their own bicycles, financial barriers to riding are diminished. By providing youth with bicycles they can fix and maintain, they are able to incorporate cycling into their lives both within the program and at home.

The skills that young women learn in the bike shop are not just after school program skills, they are legitimate vocational skills in one of the fastest growing areas of New York City. In New York City bikes are booming. With the addition of bicycle lanes and a public bike-share program, more and more people are riding bikes. Young women who learn bicycle mechanics will be prepared to work in bike shops in the city over the summer or as a career, providing a unique vocational aspect to programming that empowerment and sports programs do not provide.

Mechanic skills education provides three important elements to empowerment programming: self-esteem, sustainability and vocational training. Girls who can fix their own bikes will feel empowered to fix other things in their lives, they will have the skills to keep riding over months and years, and they will have employment skills much in demand in New York City.

C. Why Girls-Only?

Finally, why create a space only for girls? Couldn't all youth benefit from a bicycle program? Why segregate young women? There are many reasons for creating a space exclusively for young women. These reasons are both theoretical and practical. Theoretical justification for female-only space relates to Brown and Gilligan's theory of development discussed above, as well as the statistical snapshot of young women today. Growing up female is fundamentally

different than growing up male and there needs to be space to explore these differences. Additionally, from a practical standpoint, a girls' empowerment program encourages young women to take risks with their bodies and the way they present themselves to others. Young women may be less likely to take risks in front of young men. By creating a girls-only space these concerns can be minimalized. Finally, it must be acknowledged that bicycle workshops are a traditionally male space and experience has shown that co-educational programs will generally be majority male.

The theoretical justification for female-only programming is based largely on Brown and Gilligan's theory of female adolescent development discussed above. Girls are met with different challenges and need different supports. Gender-specific programming has been used as a way to discuss health issues with young women for years. By providing a single-gender environment for young women, programs like the WE Bike Girls' Program allow participants to ask questions beyond bicycles. One reason a girl-only mechanic shop is so important is that it provides a space to expand bicycle riding and mechanics to other life experiences. By allowing girls to move forward through their own power on a bicycle, they are also gaining the confidence to move forward through their own power in school, their community and their futures. In the same way, by providing a safe space for girls to ask questions about bicycles, girls' empowerment bicycle programs also provide a safe space to ask questions about other issues. As one participant in a girls-only empowerment program put it, "Why this program was so real and so successful and moved me so much was because it was just for women and it was such as safe space."[158] In providing a space for girls only, issues such as sexual health, body development, psychological development, insecurities and aspirations can be openly discussed both formally and informally.

Additionally, girls' bicycle programs like WE Bike Girls' Program ask young women to take risks with their bodies and their appearances. Learning to ride a bicycle is not a graceful event, nor is riding 30 miles in 100˚F heat. Bicycle mechanic skills are as dirty, awkward and clumsy as they are empowering and freeing. Studies have shown that a major barrier to girls' participation in sports revolves around personal appearance. Taylor *et al*. found that "girls expressed strong concerns about activity spoiling their hairstyle and make-up" and girls "report a fear and dislike of sweating and perspiring."[159] Adolescent girls have real concerns about the way they present themselves and the way they are seen by others. By creating an all-girl environment these concerns can be addressed by empowering young women to take risks in a supportive environment instead of diminishing their concerns as "vain" or "lazy" as can occur in a co-ed environment.

Finally, it must be acknowledged that bicycle workshops are a male gendered environment. Female mechanics are the exception, not the norm, and this manifests in the gender imbalance of youth who chose to participate in bicycle programming. VeloCity has about 33% female participants, even though the program is run by three women (personal communication with Karyn Williams, VeloCity Founder and Director. 15 April 2012). The Recycle-A-Bicycle program in Washington Heights, although drawing from a gender balanced student population, has only one female participant in a class of 14 students (personal experience, Washington Heights, 4/15/2012). This gender imbalance creates an intimidating environment for girls who, as Brown and Gilligan mentioned and the above statistics show, may already be experiencing a crisis of confidence. Providing a space exclusively for girls within this gendered context breaks

down barriers to participation and encourages young women to take risks they may otherwise

not take.

It is true that all youth may benefit from bicycle programs, however, what is important to note is

that currently, it is a majority of young men who are benefiting from these programs. Creating

an all-girl bicycle program is not aimed at diminishing number of opportunities for boys, but

rather at increasing the opportunities available to young women. Female-only programs can

address the specific needs of adolescent girls, break down barriers to participation and provide a

safe space for young women to take risks that does not exist in a co-educational environment.

D.   Challenges

Creating a bicycle program in New York City is not without challenges. In addition to the

challenges of equipment, space, and liability mentioned in regards to other bicycle programs in

the city, it is possible that recruitment for a girls cycling program will be slow to start.

According to the YRBSS in New York City illustrated in Figure 6, only 10.9% of girls in grades

9-12 rode a bicycle in the 12 months prior to the survey.
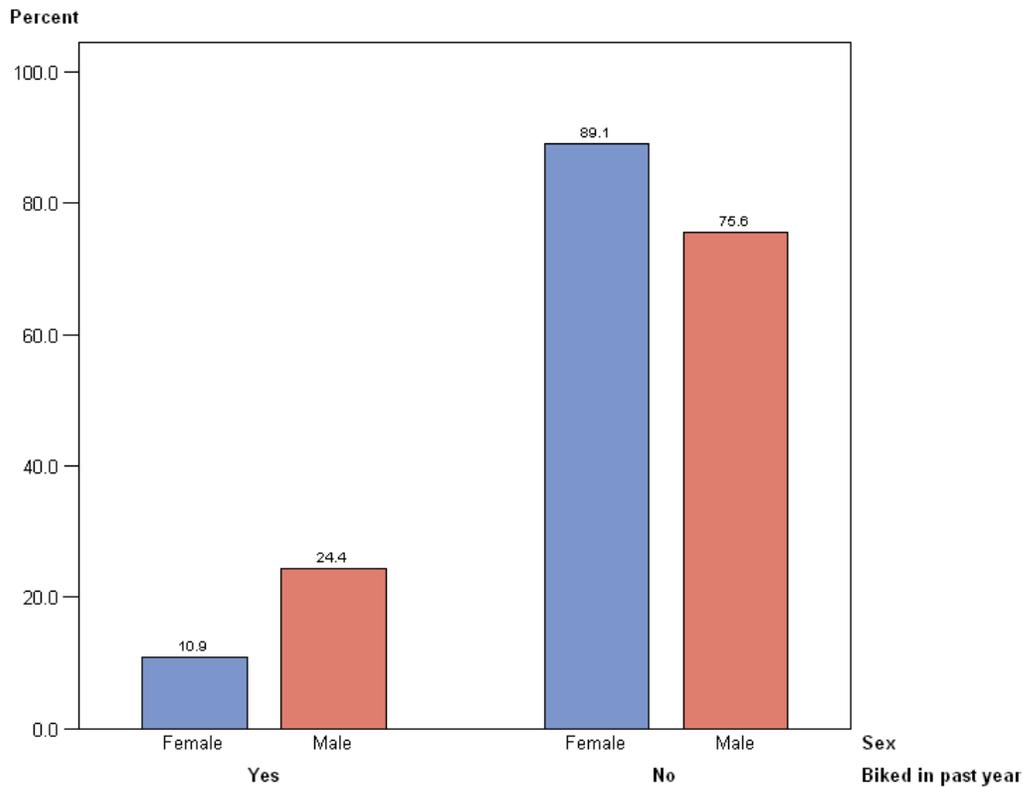
Figure 6. Percent of Youth Who Rode A Bicycle in Past Year by Gender 9th-12th Grade 2009[160]

Youth bicycle programs are often male and as evidenced by the *Girls in Action*'s reference to henna tattoos, girls often need something more than bikes to bring them in. Recycle-A-Bicycle started a bicycle jewelry program to bring in young women, who started making necklaces and finished making bicycles.

One difference in the WE Bike Girls' Program is that it is a girls-only program. This decreases much of the anxiety young women may feel walking into a situation where they feel both uncomfortable and incompetent. A female-only space with female staff will create an environment that is welcoming to young women in a way that most shops and bicycle programs

are not. While recruitment may be a challenge, partnering with existing organizations and creating a welcoming space will likely overcome this hurdle.

The WE Bike Girls' Program is a prototype for future programs. It aims to combine many of the strengths of existing programs into a powerful tool for supporting young women. It addresses both mental and physical developmental stages in female development and provides a safe space for challenge, opportunity and success. Most importantly, the WE Bike Girls' Program provides a safe space for girls to fail, succeed and grow. WE Bike Girls' Program encourages girls to fall down, and get back up again both physically and metaphorically.

V.   CONCLUSION

Growing up is not easy. It is especially difficult for young women in urban environments. The statistics in the second section of this paper show just how much our young women are struggling. They are faced with what can seem like endless expectations and real and difficult challenges. Self-esteem is low for girls, and only continues to drop as they get older. Preoccupations with weight and appearance reinforce low self-esteem and can result in dangerous behaviors, including thoughts of suicide. Our young women are unhealthy, inactive, and sad. Keeping our kids safe is only one part of creating healthy, motivated adults.

Out of school time programming in a Positive Youth Development framework is one way to help move youth along a positive path into adulthood. Existing programs such as Girl Scouts, Girls Inc., and Willie Mae Rock Camp have created empowerment programming for young women that addresses many of the above difficulties of growing up. Additionally, girls' sports programs provide alternative methods of empowering young women to be healthy and active. Research has shown that successful youth programs should aim to incorporate the five C's into their programming in order to help youth succeed in the future: competence, confidence, connections, character and caring.

Bicycle programs are powerful tools with which to promote the five C's. The WE Bike Girls' Program is the first of its kind to combine empowerment, sports and bicycle programming into one, girls-only program. By drawing on the most successful and helpful aspects of these programs, WE Bike Girls' Program is able to promote all five of PYD's core components. It promotes competence through mastery of bicycle mechanic skills in a typically male

environment; confidence in mind and body through physical activity; connections to others through strong within group relationships as well as community service; character in trying something new and foreign; and caring in the way young women treat themselves, their bikes and each other. WE Bike Girls' Program does not strive to replace any existing programs, nor does it believe that this is the best program for all girls. This paper only hopes to provide the rationale for a new kind of programming for young women that may be effective in helping young women become strong adults. The WE Bike Girls' Program is not for every girl; however, it is certain that it can provide innovative and unique benefits to participants that are not being served with current OST programming in New York City.

While there are many challenges that face bicycle programs in New York City, the potential power of a program that simultaneously addresses health, body image, self-esteem and vocational skills is incredibly high. Existing bicycle programs, even those aimed at young women have not created curriculum designed specifically to address the needs of young, urban, female youth. The WE Bike Girls' Program puts into practice what we know about adolescent development, urban youth, OST programming and human nature. We all want to go fast and far; however, we can't do it alone. As novelist Sloan Wilson wrote,

> "The hardest part of raising a child is teaching them to ride [a] bicycle. A shaky child on a bicycle for the first time needs both support and freedom. The realization that this is what the child will always need can hit hard."[161]

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WE Bike Girls' Program

Learn. Build. Give Back.

I.   **Program Summary**

II.   **Needs Statement**

III.   **Goals, Objectives and Methods**

IV.   **Timeline**

V.   **Budget**

I.   PROGRAM SUMMARY

WE Bike acknowledges the many dimensions of what it means to be a girl in New York City today. The lives of girls in New York are composed of multiple layers of responsibility, dreams, obstacles and possibilities. We expect them to be students, caretakers, friends, daughters, secret keepers, decision makers, translators, peacekeepers, fighters, and sometimes mothers. We expect them to do all this before they have even discovered who they are and who they want to become. In addition, early adolescence is often a time when young women begin to lose their voices and their confidence. **The WE Bike Girls' Program uses bicycles as a means and a metaphor to provide a safe space for young women to experiment, change, grow and ask questions. Participants gain personal empowerment, health and vocational skills through riding and fixing bicycles. These skills are taught using a three-part curriculum: Learn, Build, Give Back.**

The WE Bike Girls' Program is one facet of the larger WE Bike Girls' Program in New York City that strives to empower women of all ages through bicycle riding and bicycle mechanics. The youth program in particular provides a safe space for girls and female identifying youth to confront and explore three major themes of growing up: personal empowerment, health and vocational skills. WE Bike's Girls' Program does this through a three part curriculum that addresses these issues individually and in concert. While the order of the modules can change to accommodate weather conditions, the message stays the same – Learn, Build, Give Back.

Learn

The first module centers on bike riding. It emphasizes safety, responsibility and mastery in riding as well as building on a foundation of strength training exercises. The goal of this module is to teach young women the skills necessary to explore their city by bike. In addition, issues of body image, health, and exercise are addressed through targeted activities and reflections. Bicycles promote exercise as part of daily living, not as an extra routine. In addition, cycling promotes the concept of positive self-image based on ability, not appearance.

Build

The second module focuses on mechanic skills. Mechanic skills provide much more than the ability to fix a bike. These skills give young women confidence in a typically male dominated arena while at the same time giving them legitimate employment skills very much in demand in New York City. Furthermore, young women will learn how to build their own bicycle, following partner organization, Recycle-A-Bicycle's Build-A-Bike curriculum. At the end of the 5 week "Build" module, girls will have mastered the skills and built their own bicycle, which they will then be able to take home as their own.

Give Back

The third module empowers young women to be the change they wish to see in their city. In this module, girls will take the skills they have learned through the "Learn" and "Build" modules and create a service project in their community. This could be anything from a presentation in school about body image and eating disorders, to a "learn-to-ride" Saturday

workshop in their community. The goal of this module is to not only give young women skills to succeed, but to support them in using those skills to help others.

In the WE Bike Girls' Program bicycles serve as a unique lever to propel young women forward. It gives them social-emotional skills for success, daily skills for healthy living, and concrete skills for employment. More than anything, it provides an environment where supportive adults and growing young women can get together and just be girls.

II.   NEEDS STATEMENT

Girls in New York City are experiencing a crisis of confidence and health during adolescence that can negatively impact their futures if not addressed. The statistics below show that girls in New York City have lower self-esteem and worse exercise and health habits when compared to youth generally in the United States, and boys in New York City. The combination of these two problems, along with a lack of marketable job skills can lead to diminished options later in life, health problems, and even suicide. Many empowerment programs seek to address these issues with young women in the city, however, no program simultaneously addresses self-concept, health and job training in a holistic and comprehensive manner like the WE Bike Girls' Program.

Confidence and Self-Esteem

On a national scale, it has been shown that girls' confidence and self-esteem drop much more than boys' as they enter adolescence. The American Association of University Women 1991 report "Shortchanging Girls, Shortchanging America" reported that girls' 'self-esteem index' (compiled from five measures including "I like the way I look," "I like most things about myself," "I'm happy the way I am," "Sometimes I don't like myself that much," and "I wish I were somebody else") starts lower than boys in elementary school (mean girls' self-esteem index is 3.93 in elementary school as compared to 4.99 for elementary school boys) and also drops considerably more than boys by high school. Girls' mean self-esteem index of 3.93 in elementary school drops more than one point to 2.77 (change -1.16) by high school, whereas the mean for boys drops only .34 points. Additionally, the AAUW report shows that while 60% of young women in elementary school responded "Always True" to the statement "I am happy the way I am," only 29% of high school girls responded "Always True" to the same question. By high school, two thirds of young women are not satisfied with who they are.

Girls in New York City appear to be particularly vulnerable to this trend. Suicide rates in New York City (most often attributed to depression and low self –esteem) illustrate this point in a chilling way. Nationally, in 2009, 8.1% of 9-12th grade girls in the study attempted suicide in the 12 months before the study. That is almost twice the rate of adolescent boys in the study (4.6%). In addition, 13.2% of girls made a plan about how they would attempt suicide in the 12 months before the study, and perhaps, most frighteningly, almost one in five (17.4%) girls seriously considered attempting suicide during the 12 months before the study (National Youth Risk Behavior Surveillance Survey 2009- NYRBSS*).*   In New York City, one in every 10 girls surveyed (10.7%) actually attempted suicide in the 12 months prior to the survey. (New York CityYouth Risk Behavior Survey 2009- NYC YRBS*).*

The crisis of confidence of our young women is not an abstract concept specific to a few individuals. Instead it is an epidemic of young women so sad, alone and depressed that one in ten attempts to end her life before she reaches 12th grade. WE Bike Girls' program addresses self-confidence and depression through increasing girls' sense of self-efficacy and proactive decision making skills. Additionally, employment skills provide an opportunity and financial means for young women to set themselves on a path to success.

Health

The mental and physical health of our young women is at risk. Girls privilege their appearance over the health of their bodies. The American Association of University Women (AAUW) report found that "Girls are nearly twice as likely as boys to mention a physical characteristic as the thing they like most about themselves" (AAUW 1991). The Youth Risk

Behavior Survey data from New York City indicates that 57.8% of women perceived themselves as being "about the right weight" whereas, Body Mass Index of the same sample indicated that 74.6% of young women were at or below "normal weight" (NYC YRBS 2009). Many fewer women see themselves as the appropriate weight than BMI indicates (NYC YRBS 2009). Additionally, obesity among young women continues to grow. In New York City, 8.5% of girls are obese and an additional 16.9% are overweight (NYC YRBS 2009).

Young women do not appear to connect healthy bodies with attractive bodies. Statistics about obesity, lack of physical activity, unsafe sexual activities and drug use all show young women are not protecting their bodies from diseases and potential health problems. Unhealthy sexual behaviors put our young women's health at risk. In New York City, 34.5% of young women in grades 9-12 have ever had sex (NYC YRBS 2009*).* One in 20 girls (5.5%) reported having "ever been pregnant" and only 65% of girls in New York City reported using a condom during their last sexual encounter (NYC YRBS 2009). It is impossible to protect against sexually transmitted infections without using a barrier method, and yet only 65% of our girls are doing so.

Health complications from lack of exercise, unhealthy dieting, obesity, pregnancy or sexually transmitted infections can drastically alter a young woman's opportunities in the future.

Employment Skills

In addition to negative self-concept and poor health, the employment opportunities for young women just out of high school are still much narrower than those for boys. The price of a college degree is increasing, and yet, the promise of finding a job once one has received a diploma is decreasing. Additionally, many youth have to work during college in order to pay for school. Men are much more likely to see physical work as an employment option after high school, whereas, traditionally female professions such as teaching and nursing require advanced degrees. Providing young women with job training in a traditionally male environment gives them much more than bicycle mechanic skills. Training in a traditionally male gendered space provides young women with the confidence to attempt other skills traditionally thought of as male professions. In addition, the skills necessary to be a successful mechanic: problem solving, patience, follow-through and review are useful in many other arenas besides the bicycle shop. WE Bike Girls' Program does not see bicycle mechanics as a means to evade college, but rather, by providing young women with marketable job skills out of high school, it enables college to be in reach for many more young women.

WE Bike Girls' Program Impact

Young women's futures are in jeopardy. One in ten girls has attempted suicide by the time she graduates high school, one in twenty has been pregnant, and another one in three are overweight or obese. Low self-esteem and poor health choices make the road to success even more difficult for our urban youth. Furthermore, the promise of a job after high school is small, putting college even farther out of reach. Young women in New York City deserve the opportunity to appreciate their minds, bodies and hands for what they can do, not what they look like; to learn to take care of themselves both physically and mentally in a safe and supportive environment; and to gain the skills and confidence to be able to propel themselves into the future they imagine.

WE Bike Girls' Program is an empowerment program for young women that uses bicycle riding and bicycle mechanics to propel young women forward both physically and metaphorically. By allowing space for girls to explore their own power both on and off a bicycle, WE Bike Girls' Program is able to simultaneously address many of issues faced by young women. Bicycles and bicycle mechanics allow girls to move under their own power and fix the obstacles and problems that may arise along the way. These skills provide both a theoretical, physical and a monetary base on which young women can build their futures.

III.   GOALS, OBJECTIVES and METHODS

The overarching goal of the WE Bike Girls' Program is to increase positive future opportunities for young women aged 11-14 years old in New York City through increasing confidence, health and employment skills.

To accomplish these objectives the WE Bike Girls' Program uses methods modeled after existing Positive Youth Development approaches, empowerment programs and youth bicycle programs. By combining these methods and learning from previous successes and challenges in the field, the WE Bike Girls' Program is both a theory and practice based approach.

For complete evaluation protocol including instruments, timeline and proposed statistical analysis please see detailed evaluation proposal.

Confidence:
Objective C1: Increase self-confidence of program participants as measured on the 'self-confidence index' by 30% as evidenced by pre- and post- tests.
Objective C2: Decrease thoughts of depression and suicide by 25% as evidenced through pre- and post-tests.
Objective C3: Increase sense of self-efficacy by 40% as evidenced through pre- and post- tests as well as personal journals kept by participants.

Method:
All WE Bike Girls' Program sessions will be broken into two sections- an action section and conversation section. Each of these approaches allows the WE Bike Girls' Program to address issues of self-confidence both directly and indirectly. Action sections will alternate (depending on weather) between mechanics and riding sessions. In these sessions girls will be encouraged to take risks with their bodies and try new things. Each success and also each challenge that is met with support instead of reprimand will increase participant perceptions of self.

Conversation sections will be a forum for participants to directly address issues in a supportive group setting. Conversation sessions will start with an activity, such as a body map or future plan which will then be discussed within the group. While activities are structured, the participants are encouraged to suggest different topics they would like to address and each participant will be responsible for leading one session.

Health:
Objective H1:100% of participants will understand healthy body weight and BMI. 80% of program participants will move closer to a healthy body weight as evidenced through BMI and calories burned.
Objective H2: Participants will statistically significantly increase the number of sit ups, push-ups and miles bicycled from the beginning of the program to the end.
Objective H3: 65% of participants will incorporate cycling and other healthy habits into their daily routines outside the program as evidenced through activity journals, participation in physical activities at school and other out of school time programs.

Method:
Issues of health will be addressed in both action and conversation sections. By training their bodies through cycling and strength training, young women will become more in tuned with what their body is capable of doing and what a healthy body means for them. In addition to physical activity, healthy eating, sleeping and sexual habits will be discussed during the conversation sessions. Finally, by the end of the program participants will have built their own bicycle to take home. In this way, it is possible for the healthy habits encouraged through the program to be sustained after the program is finished.

Employment Skills:
Objective E1: 95% of participants will increase problem solving skills as evidenced through staff observations of a willingness to take on challenges, try new things and work cooperatively to address issues.
Objective E2: 100% of program participants will increase their knowledge of bicycle mechanics as evidenced by their abilities to repair bicycles and knowledge of community bicycle resources.
Objective E3: 50% of participants will identify traditionally male professions as possibilities for future careers.

Method:
Employment skills will be encouraged through the bicycle mechanic skills section of the action program. Girls will participate in 10 classes where they learn about a component of the bicycle and how to assess, adjust and repair it. At the end of the 10 sessions, participants will be given a used bicycle to fix up using what they have learned. Once students have fixed the bicycle, it is theirs to keep after the program finishes.

IV.   TIMELINE

Planning
<u>May</u>
- Procure space and community partnerships
- Court funders
- Begin grant application process

<u>June</u>
- Procure space and community partnerships
- Court funders
- Continue grant application process

<u>July</u>
- Begin branding process and outreach
- Attend community meetings

<u>August</u>
- Continue branding process and outreach
- Attend community meetings
- Attend back to school events
- Recruit college mentors
- Recruit program assistant

Session 1
September: Recruit
September 6: First Day of Classes
September 11-22: Recruiting and publicizing
September 25: First Day of WE Bike, Session 1
        Week 1- Get to know each other activities

October: LEARN
October 1: Week 2- Introduction to bicycle parts and safety
October 8: Week 3- Bicycle Riding 101, mini-rodeo
October 15: Week 4- Bicycles for exercise, touch on health and body image
October 22: Week 5- First Bicycle field trip, in depth discussion of body image
October 29: Week 6- Begin Bicycle training rides, health discussion

November: BUILD
November 6: Week 7- Training ride- tools, fix a flat
November 13: Week 8- Training ride, ball bearing systems
November 20: Week 9- Training ride, brakes
November 27: Week 10- Training ride, gears

December: GIVE BACK
December 4: Week 11- Build, Explain service project

December 11: Week 12- Build, Assign service project roles
December 17: Week 13- Present/ execute service project in community, Program Graduation
December 24th- January 6th Winter Recess

Session 2
January: Recruit
January 7: Students come back to school
January 7- 21st: Recruiting and publicizing
January 28: First Day of WE Bike, Session 2
	Week 1- Get to know each other activities

February: BUILD
February 4: Week 2- Parts of the bike, fix a flat
February 11: Week 3- Tools, Bearing systems
February 18: February Break
February 25: Week 4- Overhaul bearings

March: BUILD
March 4: Week 5- Brakes
March 11: Week 6- Shifting
March 18: Week 7- Plan of Action Quiz
March 25: Spring Break

April: LEARN
April 1: Week 8- Bicycle Safety
April 8: Week 9- Bicycle Riding 101, mini-rodeo
April 15: Week 10- Bicycles for exercise, touch on health and body image
April 22: Week 11- First Bicycle field trip, in depth discussion of body image
April 29: Week 12- Begin Bicycle training rides, health discussion

May: LEARN
May 6: Week 13- Training ride, careers and futures
May 13: Week 14- Training ride to college campus, healthy relationships
May 20: Week 15- Field Trip to career aspirations, goal setting
May 27: Week 16- Training ride, setting boundaries

June: GIVE BACK
June 3: Week 17- Training ride, Explain service project
June 10: Week 18- Assign service project roles
June 17: Week 19- Present/ execute service project in community, Program Graduation
June 26: Last day of School

V. BUDGET

WE Bike Girls' Program
2012-2013 School-Year Pilot Budget
Budget reflects costs to run 4, semester-long sessions that meet two times a week, serving a total of 48 youth and 12 college age mentors.

Revenue

FOUNDATIONS	85%
INDIVIDUALS	5%
GOVERNMENT (City)	5%
SPECIAL EVENTS	3%
OTHER INCOME	2%
Total Revenue	**100%**

IN KIND	
Recycle A Bicycle	project bicycles
Bike New York	learn to ride classes
Bike and Roll Rentals	bicycle rentals
Bicycle Paintings Screen Printing	screen printing
Scout Designs Graphic Design	logo design
Kind Bar	ride snacks
Robert Tobias, Professor at NYU Teaching and Learning	evaluation guidance
IN KIND TOTAL:	**est. value: 8300.00**

Expenses

PERSONNEL:	
PROGRAM DIRECTOR	42,000.00
FULL TIME SALARIES SUB TOTAL:	42,000.00
INTERNS	
COLLEGE MENTORS ($500 X 12 mentors)	6,000.00
P/T & TEMP SUPPORT STAFF	
PROGRAM ASSISTANT	23,200.00
SALARIES TOTAL:	**71,200.00**

CONSULTANTS:

SELF DEFENSE CLASS	2,000.00
CONSULTANTS TOTAL:	**2,000.00**

FACILITIES & EQUIPMENT:

RENT	TBD
MAINTENANCE SERVICES	TBD
STORAGE	TBD
MAINTENANCE AND REPAIRS	TBD
INSURANCE	3,000.00
FACILITIES & EQUIPMENT TOTAL:	**3,000.00**

PROGRAM SUPPLIES:

OFFICE SUPPLIES	500.00
TOOLS	2,000.00
BICYCLE LOCKS	1,000.00
BICYCLE HELMETS	400.00
POSTAGE AND MAILING EXPENSE	200.00
PRINTING AND COPYING	500.00
TRANSPORTATION	500.00
FIELD TRIP ADMISSIONS	400.00
T-SHIRTS	560.00
FOOD	1,000.00
MISCELLANEOUS EXPENSES	500.00
PROGRAM SUPPLIES TOTAL:	**7,560.00**

PRELIMINARY OPERATING BUDGET TOTAL:	**83,760.00**