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Leah King
Fostering Positive Identity
Development In Adolescents:
Beneficial Aspects of Learning at
The Putney School

ABSTRACT

This study investigated the ways in which learning environments foster positive identity development in adolescents. For the purpose of this study, positive identity development was defined by self-esteem, self-control, and resilience. The study utilized a single-system design to extract a data subset from The Putney School's previously administered 7 wave longitudinal study and measured specific data points related to self-esteem, self-control, and resilience. The survey results of 65 four-year seniors who graduated between 2012 and 2014 from The Putney School, a progressive, co-educational boarding school in New England, were analyzed. No significant change was found for self-esteem, self-control, and resilience after running a paired t-test of T-1 (registering freshmen) and T-2 (graduating seniors). However "change scores" were created by looking at the difference between scores at T-1 and T-2 for self-esteem, self-control, and resilience, which established positive, negative, and zero change scores. The final sample size (N=43) for self-esteem showed 49% of student's self-determined positive change in self-esteem between T-1 and T-2. Self-control had an N of 43 and survey participants communicated a 58% negative change score. However, individuals communicated a 65% positive change score for resilience (N=45).

Findings from this study were utilized to reflect on the learning environment at The Putney School and how they influence the ways in which they effect change in identity

FOSTERING POSITIVE IDENTITY DEVELOPMENT IN ADOLESCENTS

development in the adolescents who spend their high school years fully immersed in The Putney School education, or what is referred to as “The Putney Experience.”

**FOSTERING POSITIVE IDENTITY DEVELOPMENT IN ADOLESCENTS:
BENEFICIAL ASPECTS OF LEARNING AT
THE PUTNEY SCHOOL**

A project based upon independent investigation,
submitted in partial fulfillment of the requirements
for a degree of Master in Social Work

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2015

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CHAPTER I

Introduction

The current way in which many learning environments address adolescent development reflects a structure that emphasizes deficits rather than strengths. Focusing on strengths during the critical time of adolescent identity development supports the healthy emergence and growth of self-esteem, self-control, and resilience, all of which contribute to increased likelihood of positive outcomes during adolescence, early adulthood and beyond. The concept of positive youth development (PYD) has evolved over the past 25 years. Positive youth development was born in the 1990's with convergent interest in the strengths held by young people, the plasticity of human development, and the notion of resilience (Lerner, Bowers, Minor, Boyd, Mueller, Schmid, Napolitano, Lewin-Bizan, & Lerner, 2013).

The last ten years of PYD research have focused on gathering data related to adolescent engagement in extracurricular activities; the goal has been to establish a strengths-based model to measure positive identity development. Previously, there was little research showing a direct correlation between adolescent involvement in extracurricular learning environments and the resulting positive identity development. Currently, the research on PYD has brought to light increasing evidence that there is an eminent need to provide adolescents with constructive environments that nurture their capacity and desire to grow into community assets. In this way, adolescents themselves can transcend the potentially overwhelming challenges of shoring up their positive attributes. This evidence-based understanding of adolescent identity development

will hopefully influence policy-makers, high school administrators, teachers, and practitioners to support a much needed shift toward viewing adolescence as a crucial time for becoming contributing members of society.

Overview of Existing Research

4-H Study of Positive Youth Development and the 5 C's model. The 5 C's model of positive youth development was recently established, and was supported by the most extensive data set on PYD gathered over eight years by the 4-H Study of PYD (Lerner et al., 2013). Lerner and colleagues sought to establish the 5 C's as a way to measure positive identity development in adolescence by measuring the change over time of the bi-directional relationship between learning environments and the individual adolescent (individual \leftrightarrow context) (Bowers, Li, Kiely, Brittan, Lerner, & Lerner, 2010).

Lerner and colleagues (2013) developed a model to study the relationship between an individual adolescent and the ecological context, or learning environment in which they are engaging. They wanted to test the following hypothesis: "if positive development rests on mutually beneficial relations between the adolescent and his or her ecology, then thriving youth should be positively engaged with and act to enhance their world" (Lerner et al., 2013, p. 373).

The main outcome of the 4-H study of PYD demonstrated a positive correlation between adolescent engagement in extracurricular activities and increased growth in the 5 C's. The 5 C's (competence, confidence, character, connection, and caring) emerged from the 8-wave longitudinal 4-H Study of PYD to identify the specific strengths gained by adolescents who engage in extracurricular activities within learning environments (ecological contexts) (Lerner et al., 2013). They found that engagement in extracurricular activities was associated with higher levels in 5 C's measurements, which seemed to prepare individual adolescents with tools and

skills to support them in becoming confident, engaged, and contributing members of society. Presently there are a strikingly small number of schools that actively support and guide adolescents' exploration of their strengths and passions through extra-curricular engagement beyond their academic requirements.

Thesis Question

The question this thesis will explore is --“what aspects of a learning environment foster positive identity development in adolescents?” The reason for asking this question rests in the desire to discover how a positive learning environment can greatly enhance an adolescent's strengths, and thereby bolster his or her confidence in becoming a contributing member of his/her ecological environment. Self-esteem, self-control, and resilience are the three aspects of identity development chosen in this research to measure positive development in adolescence.

The Putney School longitudinal study. In order to answer this question, data gathered by The Putney School's (TPS) longitudinal study was used. The Putney School began its study in the fall of 2008 and is currently on its seventh wave of quantitative data collection. They have gathered their data through a compilation of mini surveys, which make up one large survey. The first wave of students who initiated the study consisted of all freshmen. The subsequent waves included entering freshman and sophomores. A participant in the longitudinal study completes the survey for the first time during new student registration at the beginning of the school year; they take it again at the end of the first year. Subsequently, students take the survey every year while at TPS and for the following 5 years after graduation, at which point it gets completed once every five years.

The Putney School is a secondary school founded 80 years ago by Carmelita Hinton. Carmelita was a woman who, after graduating from Bryn Mawr in 1912 as a teacher, moved to

Chicago where she lived in Hull House. While residing at Hull House, a tenement house co-founded in 1889 by Jane Addams and Ellen Gates Starr, she was secretary to Jane Addams.

Through a Hull House connection, Hinton was able to buy Elm Lea Farm in Putney, Vermont in 1934. In 1935 she founded The Putney School, the first co-ed boarding school in New England. She believed in the value of art, music, and manual labor; and she created the structure of the school to hold these areas of learning as equally important to academics. She had the desire to send her graduates out as well-rounded adults who could change the world.

The Putney School is an alternative boarding school that is also a functioning dairy farm and certified organic garden. Students play a major role in keeping the school/farm/garden operating in addition to staying on task with academics, sports, and many forms of performing and fine arts. In summary, TPS is a college preparatory school that also requires students to engage in many different types of community oriented and personally driven extra-curricular activities.

This idea of supporting adolescents in their self-discovery through academic and extra-curricular learning activities reinforces the hypothesis that there is a high likelihood that an adolescent will develop a positive identity given the opportunity to engage in a variety of learning environments where the exchange is mutually beneficial. It may seem as if this thesis asks a question that is synonymous with what the 4-H Study of PYD hypothesized about the 5 C's model--"if positive development rests on mutually beneficial relations between the adolescent and his or her ecology, then thriving youth should be positively engaged with and act to enhance their world" (Lerner et al., 2013, p. 373). However, The Putney School began its longitudinal study without knowing about the 4-H Study of PYD. The Putney Schools' interest in conducting research was grounded in its desire to assess and measure the ways in which the

progressive inter-disciplinary educational model was working to support adolescents in becoming confident and contributing individuals, and how these factors get carried forward into the future. Unlike the 4-H Study of PYD that used the 4-H program to gather its data from adolescents engaging in extracurricular activities outside of the academic/school setting, TPS' curriculum offers students the opportunity to engage in non-academic environments, and requires completion of a set number of extra-curricular activities and work jobs for graduation.

Repetition of a similar type of longitudinal study has its benefits. The demonstration of similar results may make the claims of effectiveness stronger. In this case the effectiveness demonstrates the benefits of viewing adolescents as individuals with strengths and capacities to become contributing, thinking individuals in society. Repeated findings will also increase the validity of the idea that engaging in extracurricular activities can help with positive identity development. The Putney School is gathering data on the benefits of having students engage in art, music, athletics, and manual labor in addition to academics, where all of these opportunities are offered on the school campus. The 4-H Study of PYD has gathered data on youth who participate in the 4-H program across 42 states who also may have engaged in a variety of additional out-of-school activities beyond what the 4-H program offered.

In many ways, this research project is yet again a repetition of these two aforementioned studies. The studies are similar in their hypotheses---adolescents will become assets to their communities if they have an opportunity to experience a mutually beneficial exchange with their learning environments (ecological contexts). The studies are different in the purpose or envisioned goal of the research. The 4-H Study of PYD was focused on establishing a measurement for thriving, while also providing a vast data set from which other hypotheses relating to positive youth development could be tested. The TPS study aims to continue to better

understand how its progressive form of education is beneficial for the students, and what it is about these students that make them a good match for The Putney School.

Based on a data set derived from the larger data set provided by TPS, this thesis will look at “what aspects of a learning environment foster positive identity development in adolescents?”

Definitions

Positive identity development. In order to define positive identity development I will begin by explaining the concept of identity development. Erik Erickson (1980) defines the concept of identity development in terms of having a “sense of ego identity” (Erickson, 1980, p. 94). Adolescents’ internal sense of identity finds cohesion with what they feel society expects them to be, according to what is commonly considered acceptable at the time of transition from childhood to adolescence.

In terms of defining the word positive, I refer to Damon’s (2004) article on Positive Youth Development. He discusses approaching the research and practices around youth by considering “an approach with strong defining assumptions about what is important to look at if we are to accurately capture the full potential of all young people to learn and thrive in the diverse settings where they live” (p. 13). Within the 4-H Study of PYD, “thriving is seen as the growth of attributes that mark a flourishing, healthy young person, for example, the characteristics termed the ‘Five C’s’ of PYD—competence, confidence, character, connection, and caring” (Geldhof, Bowers & Lerner, 2013, p. 2). For the purpose of this thesis, the definition of positive identity development will be narrowed down to three key terms: self-esteem, self-control, and resilience.

Self-esteem. According to Erickson (1980), “self-esteem, confirmed at the end of each major crisis, grows to be a conviction that one is learning effective steps toward a tangible future,

that one is developing a defined personality within a social reality which one understands” (p. 95). It is an internal strength that one develops after ferrying through a struggle without giving in to the challenges encountered along the way. Adolescence appears to be a vulnerable time for self-esteem as the foundation period from whence self-esteem continues to grow until it peaks somewhere between 50 and 60 years of age and then declines more rapidly. Although self-esteem is a relatively stable trait, it isn’t necessarily unchanging (Orth & Robins, 2014). According to Orth et al. (2014), “High self-esteem prospectively predicts success and well-being in life domains such as relationships, work, and health” (p. 381). These three components encompass most of what a successful and satisfactory life is about.

Self-control. Self-control is crucial to achieving success and satisfaction in relationships, work, and health. Casey and Caudle (2013) define self-control as “the ability to suppress inappropriate emotions, desires, and actions” (p. 82), and demonstrates that heightened emotional states are the principle prohibiting factors for the use of self-control in adolescent decision-making. Peers are also influential in an adolescent’s ability to utilize self-control. A peer with strong self-control will affect their friend’s capacity to manage their feelings, desires, and behaviors in any given circumstance (Meldrum, Young, & Weerman, 2012). However, an individual may still be influenced to lessen their level of self-control to match the level deemed necessary by the majority of peers, even if there is risk involved. Erikson (1980) also speaks to the power of peer relationships and the adolescent who shifts their better judgment to suit the stance of peers when he says, “they are sometimes morbidly, often curiously, preoccupied with what they appear to be in the eyes of others as compared to what they feel they are” (p. 94). Having self-control along with emotional regulation skills will likely demonstrate positive decision-making and the possibility for resilience.

Resilience. Resilience, in its early history, was often described “simply as good adaptation or development in the context of risk or adversity” (Masten, 2014, p. 1018). Resilience science and positive youth development (PYD) share roots and overlap in many ways. However for the purpose of this thesis, the definition of resilience will be grounded in PYD. Positive youth development emphasizes resilience as the mutually beneficial exchange ($\leftarrow \rightarrow$) between a learning environment (ecological context) and an adolescent, where this thriving relationship enhances positive outcomes for both (Lerner, Lerner, von Eye, Bowers, & Lewin-Bizan, 2011).

Learning environment. A learning environment, as used in this thesis, is also referred to as an ecological context in the 4-H study of PYD. A learning environment is most likely structured and offers youth the opportunity to gain skills and knowledge pertaining to a particular subject. The subject may be academic, athletic, artistic, musical, or manual. Ideally, the learning environment or ecological context is one in which the exchange of knowledge occurs between both the students and the teachers, learning is mutually beneficial, and a sense of mastery may be gained by both parties.

Conclusion

Adolescent identity development is crucial and impacts the rest of one’s life. There is a lack of research on how learning environments impact an adolescent’s identity development. This study aims to highlight self-esteem, self-control, and resilience as three key components of positive identity development in adolescents. Learning environments can foster these through a mutually beneficial exchange between an individual and ecological context. The ultimate goal of this mutual exchange is to reinforce the capacities of adolescents to grow into creative, compassionate, and contributing members of their community and society as a whole.

In order to better understand how adolescents have the potential to develop positive identities through the mutual exchange of knowledge and learning within their learning environments (ecological contexts), the next four chapters delve more deeply into this topic. The following chapter reviews the literature found through a series of searches facilitated by access to Smith College Library's archives and their membership in an extensive network of (journal) databases. Following the literature review is a detailed explanation of the methodology used to measure the data gathered through The Putney School's longitudinal survey containing several instruments. The instruments selected for this thesis determined whether there was change in adolescents' levels of self-esteem, self-control, and resilience between T-1 (freshman registration) and T-2 (senior graduation), with a four-year period of time in between. The findings chapter highlights the outcomes of data measurements and explains in a factual manner through the use of "change scores" and percentages what the data demonstrated. Discussion of the findings comes last, allowing for expanded reflection beyond what the literature states and findings show. This final section provides space for retrospection on "The Putney Experience," the shared experience of all students who pass through the living, learning, and working community of this progressive high school.

CHAPTER II

Literature Review

The question this thesis explores is, “What aspects of a learning environment foster positive identity development in adolescents?” The purpose for asking this question emerges out of an interest in ascertaining ways in which engagement in extra-curricular learning environments can enrich an adolescent’s assets and, in turn, create a heightened sense of confidence, inspiring membership in and contribution to his/her (ecological) community. Three aspects of identity development focused on for this thesis are self-esteem, self-control, and resilience, selected for measurement of positive development during adolescence.

This literature review is composed of four sections. The first section reviews identity development in adolescence (Erikson, 1980) and provides a foundation for how the concept of Positive Youth Development (PYD) came about. The second section reviews the literature on the emergent concept of Positive Youth Development (Damon, 2004), where the child is viewed as complete, competent, and ready to engage with his/her surrounding environment. Within this section, there will be a particular focus on the literature surrounding the 4-H Study of PYD (Bowers et al., 2010; Lerner et al., 2011), which was “a noteworthy partnership between the National 4-H Council and the Institute for Applied Research in Youth Development led by Richard M. Lerner at Tufts University” (Hamilton, 2014, p. 1008). The third section looks into aspects of positive identity development with particular attention to self-esteem, self-control, and resilience. The fourth section reviews the literature on the learning environments that foster

positive identity development in adolescence, and the importance of a mutually beneficial and uplifting relationship between adolescents and their learning environments, or ecological contexts (Bowers, Geldhof, Johnson, Lerner, & Lerner, 2014; Geldhof et al., 2013; Lerner et al., 2011; Lerner et al., 2013).

Identity Development in Adolescence

In his theory of identity development, Erickson (1980) depicts puberty as the onset of a life-stage where everything that once seemed stable and integrated – parents, teachers, peers, skills – comes into question. The adolescent, who, as a child, successfully integrated a skill-set with the consistent and continuous support of mentors, most likely doubts the benefits of the skills along with those who taught them. However, if an adolescent has a meaningful connection to a skillset, an “inner capital,” in addition to at least one solid relationship with an adult mentor who holds a similar skillset, transition out of childhood into adolescence can occur more smoothly.

This combination of skillset and mentor is crucial for phasing into adolescence because during this period of development, the focus shifts from acquiring ego strengths through the resolution within stages of human development having to do with trust, autonomy, initiative, and industry, to resolving their integration into a unique social role and identity (Erikson, 1980). This process of identity development, the re-incorporation of ego strengths, lays the groundwork for understanding the part of this thesis that looks at “positive identity development in adolescents.” However, healthy identity development, as mentioned before, happens with the support of mentors.

Mentors exist within contexts and comprise a large part of what this thesis refers to as “aspects of a learning environment.” Learning environments where mentors hold skillsets shared

by an adolescent can more likely support the re-integration of self-esteem, which, according to Erikson (1980), can be gained through the resolution of each stage of child development (trust, autonomy, initiative, and industry) and the accumulation of ego-strengths. Re-assimilation of self-esteem during adolescence can, in turn, reinforce self-control and resilience, which can be considered “developmental assets” (Lerner et al., 2013) and likely increases the ability of an adolescent to hold a positive view of his/herself, an identity.

An adolescent searching for identity is in a bind, transfixed by what they are supposed to present to the world while grappling with who they have known themselves to be. Ideally, an individual entering adolescence can be situated in constructive social settings, learning environments where they can more easily re-integrate previously internalized skills/assets gained between infancy and school age. A healthy integration of these skills and assets will likely foster a feeling of cohesion between self-acceptance and social integration. Erickson (1980) refers to achieving cohesion as obtaining a “sense of ego identity” the capacity to stay true to the self while still feeling accepted in society, whatever society’s influences are at the time. According to Côté (2011), “Erikson saw his model of human development as ‘biopsychosocial,’ where the biological potentials of each individual become activated or deactivated as they are filtered through the individual’s particular psychological make-up and specific social environment” (p. 1226).

The next section looks at Erikson’s belief that nurturance can support a person’s ability to gain positive psychological potential, which is the foundation of positive youth development (PYD). This discussion is central to this thesis, as it outlines the process underlying positive identity in adolescence—the development of a “sense of ego identity” (Erikson, 1980).

Positive Youth Development

Erikson (1980) discusses his theory of identity development in adolescence as resolutely reintegrating previously gained assets without becoming overly influenced by the surrounding social demands of peers. His theoretical advancements in human development laid the foundation for future researchers to realize the importance of studying adolescence within the Relational Developmental System Theory where, “it is possible to assert that youth represent ‘resources to be developed’” (Bowers et al., 2014; Lerner et al., 2013, p. 367).

A strengths-based theory, Relational Developmental Systems Theory (Overton, 2010) highlights that human development in its basic processes engages a bi-directional relationship between a developing individual (adolescent) and the various layers of his/her fluctuating environment. This theory comprehensively holds the binary concept of positive youth development and accentuates the mutually influential and vitally essential relationship between an adolescent and their learning environment. When the individual $\leftarrow \rightarrow$ ecological context relations are mutually beneficial, Lerner et al. (2013) refer to this as “thriving.” In relational developmental systems theory terms, youth resources are being positively developed.

Through the lens of relational developmental systems theory, which in expanded terminology reflected what Erikson discussed in his theory of adolescent identity development, the study of human development in ecological context (learning environment) progressed; “interests in the strengths of youth, the plasticity of human development, and the concept of resilience coalesced in the 1990’s to foster development of the concept of positive youth development” (Lerner et al., 2013, p. 365). Hamilton, in an unpublished manuscript he wrote for Cornell University in 1999, was referenced by Lerner et al. (2013) in an article where three distinct yet interconnected aspects of PYD are being understood “1) as a developmental process,

2) as a philosophy or approach to youth programming, 3) as instances of youth programs and organizations focused on fostering healthy and positive development in youth” (p. 365).

Hamilton’s three points touch on the concepts this thesis is focusing on--positive identity development and the ways in which this can be fostered through aspects of learning environments.

Resilience science. One of the measures of positive identity development in this thesis is resilience. Ann Masten followed closely behind Hamilton in her early research on resilience science (Lerner et al., 2013). She viewed resilience as the outcome of shifting maladaptive behavior that is initially influenced by high-risk contexts or adversity, where the contexts and individuals are mutually influential. Masten (2014) considered resilience to be a positive aspect of development; but she theorized that resilience and positive development are hardly possible without some amount of risk factors being present in the environment. In order to better understand what supports an adolescent in his or her positive identity development, this thesis explores the aspects of a learning environment (ecological context) that potentially foster positive identity development in adolescents.

Positive learning environments give a sense of purpose. William Damon (2004) saw the need to shift positive youth development away from the perception that young people’s lives were likely fraught with risk and deficits, and vulnerable to stress and danger. Rather, he purposed that the PYD approach is designed to understand, educate, and engage “children in productive activities rather than correcting, curing, or treating them for maladaptive tendencies or so-called disabilities” (Damon, 2004, p. 15). He underscored the likely positive impact a variety of learning environments outside the academic setting can have on an adolescent’s capacity to flourish.

In 2008, Damon pushed his idea of positive learning environments further by highlighting an adolescent's need for a sense of "purpose." According to Damon, "a purpose is a stable and generalized intention to accomplish something that is once meaningful to the self and is of intended consequence to the world beyond the self" (Lerner et al., 2013, p. 367). Having purpose can bolster coping mechanisms and support psychological cohesion, both of which can be considered strengths for navigating adolescence. Coping mechanisms are likely attributable to self-esteem, self-control, and resilience, which can all be considered strengths-based developmental assets.

Strengths-based perspectives. Strengths in adolescence may be deemed "developmental assets," a term Peter Benson and his colleagues at the Search Institute invented in 2008. They described these developmental assets as "internal or individual assets" that "describe a set of 'skills, competencies, and values' of a young person" (Lerner et al., 2013, p. 368). There are four categories of assets: "1) commitment to learning; 2) positive values; 3) social competencies; and 4) positive identity" (Lerner et al., 2013, p. 368). These qualities are what propel an adolescent forward and if they are well aligned with their context (learning environment), there can be a mutually beneficial and fruitful relationship between the two. Seeing an adolescent as having "developmental assets" reinforces the strength-based perspective of positive youth development, and elucidates the value of exchange between the individual and their learning environment.

According to research conducted by Jacquelynne Eccles and her colleagues (Lerner et al., 2013), in order to foster positive exchanges between adolescents and their learning environments, the "social contexts must be developmentally appropriate for the youth populations they serve in order to ensure a (developmental) 'stage—environment fit'" (Lerner et

al., 2013, p. 369). The work of Eccles and her colleagues’ “provides a theoretical model for and empirical evidence of the dynamic person \leftrightarrow context interactions that result in positive outcomes for young people” (Lerner et al., 2013, p. 369).

The need for positive exchange between adolescents and their learning environment (context) goes back again to Erikson’s theory of identity development in adolescence and the relational developmental systems model. The relational developmental systems model reinforces that young people are resources to be developed and emphasizes the need for the individual and the learning environment to be equally engaged in a reciprocal learning experience. This systems model is used to frame the 4-H Study of positive youth development, which in turn frames the question this thesis asks about learning environments, their influence on positive identity in adolescents, and an adolescent’s ability to thrive developmentally in context (learning environment).

“4-H Study of Positive Youth Development” or “The 5 C’s”

In 2002, Lerner and colleagues (2011) put together the 4-H Study of PYD, an eight-wave longitudinal study implemented through the collaboration of the 4-H Council and the Institute for Applied Research in Youth Development (IARYD) at Tufts. This empirical data set has supported the Five C’s Model of PYD (Bowers et al., 2010) and determined that “if positive development rests on mutually beneficial relations between the adolescent and his or her ecology (context, learning environment), then thriving youth should be positively engaged with and act to enhance their world” (Lerner et al., 2013, p. 373). Equally, youth who are thriving are less likely to engage in risky and/or problematic behavior. Instead they will have developed their Five C’s: competence, confidence, character, connection, and caring; and the likelihood that they are thriving, learning from and contributing to the world around them is high. The Five C’s of PYD

are “the psychological underpinnings of prosocial functioning [and] bear some similarities to the ego strengths Erikson (1980) identified as derived from psychosocial stage resolutions: confidence – initiative, competence – industry, character – identity, connection – intimacy, and caring – generativity” (Côté, 2011, p. 1226). Similarly, the mutually beneficial exchange between adolescents and their learning environment (ecological context), as highlighted by the 4-H Study of PYD is similar to the Eriksonian life-cycle theory where an adolescent’s identity development flourishes when teachers and mentors (older generation) mirror and enhance the youth’s (younger generation) strengths and developmental assets.

Positive Identity Development in Adolescence

The 4-H Study of PYD uses “thriving” as the overarching term to define positive development and is measured and defined by the 5 C’s: competence, confidence, character, caring, and connection (Bowers et al., 2010). The 5 C’s Model of PYD is the backdrop for the question this thesis asks: “what aspects of a learning environment foster positive identity development in adolescents,” and investigates positive identity development through three different markers of developmental achievement: self-esteem, self-control, and resilience.

Self-esteem. Self-esteem is vital for positive identity development in adolescence as it enhances an “individual’s ability to hold a subjective evaluation of his or her worth as a person” (Orth et al., 2014, p. 381). Erikson (1980) maintained that feeling a sense of worth through skills and relationship is essential to adolescent identity development. Self-esteem is the underpinning of an adolescent’s capacity to hold their childhood strengths and skills present for integration into the newly emergent, socially aware self that yearns to fit into context. Luckily, self-esteem holds a “good enough” (Orth et al., 2014) quality, a healthy balance, which facilitates a moderated “sense of ego identity” (Erikson, 1980) and tones down the potential feeling and

demonstration of superiority. In other words, “self-esteem involves feelings of self-acceptance and self-respect [rather than] excessive self-regard and self-aggrandizement that characterizes narcissistic individuals” (Orth et al., 2014, p. 381). This is particularly helpful when the mutual exchange between adolescent and learning environment rests on willingness to learn, humility, and the ability to remain open to new and constructive ideas and experiences.

Although research has not pinpointed exactly what the building blocks for self-esteem are, evidence shows that the enhancement of self-esteem in adolescence is an important foundation for an individual’s lasting life success (Orth et al., 2014). Every individual’s trajectory is unique and self-esteem tends to be gained rather than lost with no major fluctuations, until somewhere between 50 and 60, when it begins to decline (Orth et al., 2014). According to Zuffianò, Alessandri, Luengo Kanacri, Pastorelli, Milioni, Ceravolo, Caprara, and Caprara (2014), self-esteem “has been widely recognized as one of the most relevant indicators of well-adjustment in adolescence and young adulthood” (p. 24). An adolescent who feels attuned with his or her own self will likely have an easier time adjusting to their learning environment, which creates an easier and more fulfilling mutual exchange between the two.

Bachman, O’Malley, Freedman-Doan, Trzesniewski, and Donnellan (2011) conducted research on the differences in self-esteem between race/ethnicity, gender, and age through an annual survey of 8th, 10th, and 12th graders in the United States between 1991 and 2008. They found that there was little overall change in study participants’ self-esteem across the 17 years of study; and, “as in most other studies of differences among groups, the overlaps among subgroups [were] far larger than any differences between [race/ethnicity/gender]” (Bachman et al., 2011, p. 462). However, there were some observable differences between race/ethnicity and gender. Self-esteem for students did modestly increase between the 8th and 12th grades. Females

demonstrated slightly lower scores in their responses to questions regarding self-esteem than males did. When differences in scores of the ethnic/racial groups and their responses to questions regarding self-esteem were studied, African American students scored highest, followed by White students who scored only slightly higher than Hispanic students. Asian American students scored the lowest (Bachman et al., 2011). Bachman and colleagues' (2011) study adds depth to this thesis through its investigation into the ways in which race/ethnicity, gender, and age influence the development of self-esteem in adolescence.

Zuffianò and his colleagues (2014) conducted research that looked at self-esteem in relationship to prosociality, the latter referring to “an individual’s enduring tendencies to enact behaviors such as sharing, helping, and caring” (Zuffianò et al., 2014, p. 24). Prosociality research indicated sharing, helping, and caring not only positively affected the person receiving the prosocial behavior, but also the giver. Individual who initiated pro-social actions benefited from the experience because it tended to promote psychological adjustment, particularly during adolescence (Zuffianò et al., 2014). Self-esteem’s relationship to prosociality mirrors the positive dynamic that can take place when there is a complementary interplay between an adolescent and his or her learning environment (context).

Erikson’s (1980) stages of development also unfold within a (pro)social context and involve behavioral give-and-take, as seen in “sharing, helping, and caring” behaviors (Zuffianò et al., 2014). Erikson discusses self-esteem as the outcome of crisis-resolution, which occurs at the end of each major stage of human development. At the onset of adolescence, self-esteem has been building. At the end of adolescence, if successfully resolved, the adolescent develops his or her identity through the major integration of accumulated self-esteem through prosocial engagement within learning environments (contexts).

In 1965, Rosenberg established Rosenberg's Self-Esteem Scale (RSES), which is utilized internationally to measure and assess self-esteem. Supple, Su, Plunkett, Peterson, and Bush (2012) conducted a sub-study based on a larger study that looked at "parental influences and academic outcomes" (p. 748). The purpose of this sub-study was to "evaluate the factor structures of [RSES] with a diverse sample of 1,248 European American, Latino, Armenian, and Iranian adolescents" (p. 748). Supple and colleagues wanted to look more closely at the two-factor or bi-dimensional aspects of the RSES, where negatively-framed and positively-framed questions and their wording may affect how an adolescent answers the questions depending on age, gender, parenting, and culture. What the findings suggested was "that method effects in RSES are more strongly associated with negatively worded items across three diverse groups but also more pronounced among ethnic minority adolescents" (Supple et al., 2012, p. 748). Additionally, they found that negative and positive self-esteem factors were influenced by parenting behaviors and academic motivation.

More recently, in an article titled "Global self-esteem and method effects: Competing factor structures, longitudinal invariance, and response styles in adolescents" Urbán, Szigeti, Kökönyei, and Demetrovics (2014) and his colleagues looked closely at the debated factor structure of Rosenberg's Self-Esteem Scale. In 1965, Rosenberg hypothesized that self-esteem was one-dimensional, even though the factor structure asks the individual to self-reflect from both a negative and a positive frame of reference (method factors). The study Urbán and colleagues (2014) conducted with 2,513 9th Graders and 2,370 10th Graders in urban Hungary confirmed the global self-esteem factor. However, "because the size of method effect [was] not negligible (36% and 54%), it may have an impact on the reliability of the measurement of self-esteem. The variance occurs mostly in the negatively framed questions and may also be

impacted by the order in which the questions are asked. An interesting outcome of this study found “that being a girl and having a higher number of depressive symptoms were associated with both low-self-esteem and negative response style, as measured by the negative method factor” (Urbán et al., 2014, p. 488). Nonetheless, through this research, the construct of global RSES was confirmed and the method effects of utilizing this instrument with adolescents became quantified.

Self-control. Just as self-esteem continues to gain strength during adolescence through exchanges with the learning environment, “self-control continues to evolve...as a result of processes that take place within adolescent peer networks” (Meldrum et al., 2012, p.452). For some adolescents, self-control stays the same throughout this developmental stage, and other times the malleability of identity development in adolescence invites change. Meldrum et al. (2012) asserts that the peer network can likely influence an adolescent’s self-esteem for better or for worse. According to Casey and Caudle (2013), “the challenges of adolescence [with]in the context of self-control [are] the ability to suppress inappropriate emotions, desires, and actions” (p. 82). The study Casey and Caudle (2013) conducted demonstrated that adolescents’ control over their impulses is as strong as, if not stronger than, that of certain adults as long as the context is emotionally neutral. However, “in emotional contexts, adolescents’ impulse-control ability is severely taxed relative to that of children and adults” (Casey & Caudle, 2013, p. 86). Therefore, without a learning environment that fosters positive identity development and self-esteem, the “objectives of this developmental phase will not easily be met” (p. 86).

Positive identity development counts on “the ability to exert self-control over one’s thoughts and actions [and] is crucial for successful functioning in daily life” (Schel, Scheres, & Crone, 2014, p. 236). Not only that, but for the flow between an adolescent and his or her

learning environment to be mutually beneficial, self-control will likely need to be worked on and practiced regularly.

Self-control has been more commonly looked at as an inhibitory response to external stimuli. Recently, a new view has emerged that “[highlights] the importance of intentional inhibition” (Schel et al., 2014, p. 236). Intentional inhibition is the ability to stop an action or emotion at the last possible moment based on a signal that comes from the inside of a person--an “internally generated process” (Schel et al., 2014, p. 236). For adolescents, intentional inhibition continues to be reinforced, especially in motivational contexts. The implication for looking at internal self-control rests in obtaining a better understanding of the mutually beneficial exchange between an adolescent and their context (learning environment) and the potential for positive identity development in adolescents.

Another beneficial aspect of self-control is that it can result in “less exposure to daily stress, less reactivity to daily stress, and more adaptive responses to stress” (Galla & Wood, 2015, p. 69). It appears as though an adolescent who has a higher level of self-control is likely to come into contact with less conflict, fewer demands, and diminished chances of becoming overloaded by stressors. In addition, it seems that adolescents with self-control can manage stress more rationally and reasonably because their self-control has allowed them to develop adaptive coping skills. An adolescent who is able to maintain lower levels of stress and reactivity will likely benefit in greater ways from the experience of giving and receiving emotionally and cognitively within a learning environment. Erikson’s theory of identity development in adolescence reflects the need for self-control and lower levels of stress in order that the process of integration get carried through.

Resilience. The discussion of resilience and resilience science began in the previous section where the history of positive youth development was reviewed. Resilience science and positive youth development have both grown out of developmental systems theory (Masten, 2014). As Masten (2014) says, “perhaps the most salient shared feature of PYD and resilience scholarship is the focus on positive aspects of development, function, resources, and strengths, both in the individual and in the context” (p. 1019). Within the frame of positive youth development, resilience is held neither by the individual nor the context, but exists in the mutual exchange and connectedness fostered by the interaction between the two (Masten, 2014). This relationship between adolescent and learning environment can foster developmental assets, or skills, competencies, and values (Lerner et al., 2013).

Youth have the capacity to gain developmental assets through the resources found in their learning environments (contexts), while also overcoming exposure to risk. Early in its conception, resilience was seen as a beneficial adaptation or growth in the face of adversity or risk. Risk factors will continue to exist in the presence of resilience, and Damon (2004) emphasized early on in the study of PYD, the need to shift common conceptualizations of resilience away from a deficits model, which had historically been the accepted framework. Instead Damon advocated for a strengths-based view of adolescents that sees them as capable and interested young people who need constructive learning environments in which to hone their skills and sense of well being.

Zimmerman, Stoddard, Eisman, Caldwell, Aiyer, & Miller (2013) highlight the usefulness of resilience theory as a framework to understand this phenomenon of youth who attain assets from ecological contexts while they simultaneously transcend adversity. Framed by resilience theory, “resilience occurs when environmental, social, and individual factors interrupt

the trajectory from risk to pathology” (Zimmerman et al., 2013, p. 215). These interrupting factors are called “promotive factors” (Zimmerman et al., 2013). Promotive factors occur in adolescent “prosocial involvement, [which] refers to participation in organized activities that promote healthy development” (Zimmerman et al., 2013, p. 217). When an adolescent engages in his or her learning environment—there is a beneficial exchange of knowledge and experience between both adults and peers. Zimmerman et al. (2013) holds that prosocial involvement is beneficial to increased self-esteem and is at the root of positive identity development in adolescence. In a similar way, Erikson (1980) theorized that this exchange is crucial to adolescent identity development. He maintained that the integration of a child’s previously learned skills into their socially accepted and resilient adolescent persona is paramount for the emergence of stronger self-esteem and self-control. Prosocial activities, which foster positive identity development in adolescence, innately require an ecological context or learning environment for this exchange to be effective, as discussed in the next section.

Learning Environments

Learning environments are the ecological contexts within which adolescents can engage in activities led by peers, adult mentors, teachers, and/or community leaders, while also engaging in meaningful social interactions with these people. A good match between adolescents and mentors combined with intriguing and stimulating content that inspires both parties can create a mutually beneficial exchange of ideas. Growth in this context can promote the development of self-esteem, self-control, and resilience and is represented in the following quote by Zimmerman et al. (2013):

Participation in extracurricular activities in school, church, and community settings holds promise for promoting healthy youth development because these activities occur in safe

and structured environments, expose youths to positive peer and adult role models, help them develop a sense of community, and offer opportunities to explore areas of interest, acquire skills, develop talents, and experience success. (p. 217)

Within the 4-H Study of PYD model, talents, skills, and successes are called “thriving” and referred to as the 5 C’s model of PYD (Bowers et al., 2010): competence, confidence, character, connection, and caring. The 5 C’s contribute to positive identity development in adolescence and become integrated as Erikson (1980) theorized, through relationships with supportive and skilled mentors present in constructive contexts, which encourage the re-integration of previously established skills (ego-strengths) realized during childhood.

In conclusion, within the current literature there exists confirmation that there are many benefits to finding cohesion between an adolescent and his/her learning environment (ecological context), highlighted by the possibility for a young person to thrive. Thriving is a term Bowers et al. (2010) has grounded in the 5 C’s – competence, confidence, character, connection, and caring, all of which are developmental assets, or capital, that an adolescent can carry into his/her future as a contributing and healthy, community-oriented adult, ready to engage in an ever-flourishing life. For the purpose of this thesis, in order to establish a method for measuring thriving and positive adolescent identity development, instruments determining levels of self-control, self-esteem, and resilience were utilized. Data gathered by The Putney School was organized in such a way as to fit into a single-system design and this process will be discussed in the following methodology chapter.

CHAPTER III

Methodology

This thesis focuses on the following question, “What in a learning environment fosters positive identity development in adolescents?” This topic is important because the literature suggests there is potential for youth development to move in a more positive direction and this “is a reason for all people concerned with the health and welfare of adolescents to be optimistic that evidence-based actions can be taken to enhance the chances for thriving among all young people” (Bowers et al., 2014, p. 865). The literature highlights a need for practitioners, researchers, and policy makers to have a common framework that embodies an intricate understanding of the relationship between an individual (individual \leftrightarrow context) and his or her environmental context (Bowers et al., 2014). Studying the impact of the environmental context on identity development, as this thesis aims to do, will ideally shift secondary education in a direction that encourages healthy development of self-esteem, self-control, and resilience, “that [puts] young people on a thriving journey across the adolescent period” (Bowers et al., 2014, p. 865).

Data Set

I have to begin by clarifying that I am an alumnus of The Putney School who has been to several reunions over the years since graduating in nineteen ninety. At reunions I was always struck by how, in essence, people seemed to be the same individuals they had been while at Putney, especially as the time for graduation approached. This led me to wonder what it was

about the school that fostered this striking identity development, at least within the individuals with whom I had contact with at reunions and the handful of friends I had maintained over the years. While I was at The Putney School, there was always reference to “the Putney experience;” but what exactly did this “Putney experience” mean in the context of social work research, grounded in a theoretical framework?

Without knowing that The Putney School had initiated a longitudinal study in 2008, recruiting its first participants from the entering class of freshmen, I emailed the director of alumni affairs, Allyson Frye, and Director of Development Hugh Montgomery, asking if they thought engaging Putney students in a thesis project for Smith School for Social Work would be appropriate and of interest to the school (I had met Allyson at reunions and Hugh worked at Putney in the administration office during the time I was a student). I explained my idea of wanting to use The Putney School as a model to look at how the learning environment likely fosters positive identity development in adolescents. Allyson and Hugh engaged the Director, Emily Jones, and the conversation began in earnest in September 2014. Rather than reinvent the wheel, Emily Jones encouraged me to take advantage of the data they had already gathered over 6 years, entering their seventh.

Emily Jones herself is not in charge of the growing data set gathered through the engagement of student participants in The Putney School’s longitudinal study. Rather, Dr. Judith Petry is. Emily put me in contact with Judith and I began the process of getting permission to utilize the data and establish a working relationship with Dr. Petry. She clarified many questions including – 1) how TPS’ inclusionary process for being a participant in the longitudinal study works, 2) whether TPS’ longitudinal study had been approved through the Institutional Review Board (IRB) or the Human Subject Review (HSR) Board.

The Putney School offers the opportunity to participate in the longitudinal study to all of its entering freshmen and sophomores (after the first wave), and both the student and the parent(s)/guardian(s) have to be in agreement that the student commit (with the option of discontinuing engagement at any point) to the study.

The Putney School does not have IRB approval. However, in 2008, Dr. Petry spoke with Jim Saunders at the New England IRB, and he said there is not a regulatory requirement for TPS to get an IRB but if TPS wanted a Certificate of Confidentiality, they would need one. Jim Saunders explained that in his experience a Certificate of Confidentiality is not commonly sought in research such as TPS' longitudinal study.

Dr. Petry also presented the consent and assent forms for TPS' study to Steve Phillips, the school's lawyer, and he agreed that the forms looked fine and no oversight was needed.

Next, Dr. Petry confirmed that Rosenberg's Self-Esteem Scale and self-control were both included in the survey with permission from the authors and these authors want notification should these scales be included in a publication.

Initially, Dr. Petry emailed me the data set consisting of 265 survey participants. However, as I conversed with my thesis advisor about how to measure positive identity development in adolescents, it became increasingly clear that I needed to select 3 instruments from the 13 included in the longitudinal survey to reflect and measure this concept. I chose Rosenberg's Self-Esteem Scale, a Brief Self-Control Scale, and The Resilience Scale.

In order to measure change over time in self-esteem, self-control, and resilience, I chose to compare the two data points with the furthest amount of time between them. This narrowed the data to include the data taken when entering freshmen first take the longitudinal survey during registration and the data point when these same students take the survey again just before

they graduate. Because only the first three cohorts (waves) of students who agreed to engaging in TPS' longitudinal study had reached graduation at the time of my embarking on this research project, I was able to work with the data from only 65 out of the 265 on the data set. The process of data reduction included eliminating the students who had begun their time at TPS as sophomores (included in the longitudinal study after the first wave) and deciphering which of the registering freshmen had made it through "the Putney Experience" to graduate and had not dropped out or been dismissed (expelled). For demographic information my measurements N is 65, but due to what might be burnout and "senioritis," the majority of missing data points from these 65 happened due to approximately 20 students not completing the survey at the end of their senior year. This left me with N as 43 for measuring change over time of self-esteem, N as 45 for self-control, and N as 45 for resilience.

The data used in this thesis is based on a quantitative data set provided by The Putney School's (TPS) 7-wave longitudinal study. This data set was selected because TPS' educational environment not only maintains rigorous academic standards, but also requires students to choose and participate in many similar extracurricular learning environments also included and evaluated in the 4-H Study on PYD. Some of these extracurricular learning environments include "sports, arts and crafts, interest clubs, religious clubs, performing arts organizations, [and] service organizations" (Lerner et al., 2013, p. 375). The Putney School gathered its data through a survey comprised of several different instruments, which exist in the public domain or have been utilized with the permission of their authors. These instruments were chosen based on their ability to assess a person's socio-economic status, personality traits, health behaviors and beliefs, cultural competence, interests, and talents. Although TPS attempted to engage Brattleboro Union High School (BUHS in Brattleboro, VT) in this longitudinal study, BUHS

declined, leaving The Putney School's study without a control group. Having no control group is a limitation for TPS in that it cannot compare its findings to those of a different type of secondary school learning environment.

Research Design

This thesis uses a single-system design because it offers the ability to measure change over time in areas of positive identity development, specifically self-esteem, self-control, and resilience. Measurements of self-esteem, self-control, and resilience appear in TPS' previously gathered 7-wave longitudinal data and are based on established and recognized instruments, two of which were utilized with permission from their authors. The single-system design was also chosen for this thesis because TPS' longitudinal study mirrors the 4-H Study of PYD's 8-wave longitudinal study, and "the 5 C's model of PYD is the most empirically supported framework to date" (Bowers et al., 2010, p. 721), increasing the validity of using a single-system design for this thesis. The 5C's model of PYD established the 5 C's—competence, confidence, character, connection, and caring--as markers of positive development, and they were determined by analyzing change in adolescent development over time.

This thesis will utilize data from students who entered TPS as freshman and graduated as four-year seniors. The data gathered from freshman at registration will be my first data point and the data gathered at graduation will be my second data point. The independent X variable is the students, and the dependent Y variable is the change in self-esteem, self-control, and resilience within these students over time.

The instruments included in the survey that TPS conducted are: Attachment Style, Rosenberg Self Esteem, Locus of Control, Brief Self-Control Scale (used with permission), Snyder Hope Scale, Learning Style Inventory, The Resilience Scale TM, Basic Empathy Scale

(used with permission), Spiritual Involvement and Beliefs Scale, Multidimensional Health Locus of Control, Five-Factor Personality Mini Scale, Cultural Competence Assessment, and the Marlow Crowne Social Desirability Scale. Out of these instruments, three scales were chosen to include in the single-system design that reflect the three aspects of identity development: self-esteem, self-control, and resilience.

Data Analysis

The Putney School Longitudinal Study data set was provided in its entirety without any first and/or last names attached. Each participant was represented as a number on an excel spreadsheet, which included the demographic data as well as the quantitative answers to the survey instruments. In a separate document were the data codes, explaining how to interpret and make measurable the information on the spreadsheet. For the purpose of this thesis, only participants from the first three waves (cohorts) were included if they first took the survey as registering freshman and graduated as seniors. Because the second point is measured at graduation, this data set was limited because only three out of seven cohorts had potentially made it to graduation (some had withdrawn or been expelled along the way).

One irregularity in the data was created by delayed permission to utilize the instrument that measures self-control. This issue was resolved by replacing time one (students registering for freshman year) for the first wave, with time two (beginning sophomore year), which was the first time this group of participants was presented with the questions relevant to this survey instrument.

In order to refine the data to include only pertinent data points, every instrument aside from those measuring self-esteem, self-control, and resilience was removed (edited). The remaining data set included answers to relevant (to this thesis) demographic questions as well as

other non-demographic questions included in The Putney School's longitudinal survey, which relate to aspects of TPS's education. These non-demographic questions were not removed in order to avoid too much tampering with the data set, or if, for any reason the data they generated presented interesting outcomes.

For yes/no questions, 0=no / male and 1=yes / female. For example, the question that asks whether an individual is a boarding student, and if they are, the data is coded with a "1." A participant who has a mother / father for parents has this information coded with a "1," where all other parental constellations are coded with a "0." A person who is born in the United States is represented with a "1." With this binary coding style, making comparisons between two different answers to survey questions is greatly facilitated.

Once this thesis was completed, the data information that was not directly relevant to this thesis was discarded. Should there be any need to attain the data again, it will be accessible through the same individual who is responsible for it currently.

Limitations

The integrity of TPS data collection rests in its use of pre-tested and standardized instruments, tested for both their reliability and validity. Because TPS used standardized instruments, the survey questions in the longitudinal study are consistent and unchangeable over time. Therefore it is not feasible to make adjustments to the survey in order to rule out participants' plausible desire to adjust their answers from truthful to pleasing ones. Committed participants in a multi-year longitudinal study (like the TPS study) would likely provide truthful answers based on the time and thoughtfulness the survey takes to fill out. Otherwise, participants who no longer feel connected to the purpose of being in the study might drop out. As it is, TPS' choice to incorporate pre-established instruments into their survey maintains

consistency and the participants committed to the longitudinal study will continue to participate as they change and evolve while the survey itself doesn't.

There has been a small rate of attrition in participation in TPS' longitudinal study, which can affect the internal validity of the study if the attrition rates become too high because decreased numbers of participants reduces generalizability. Attrition is likely inevitable due to the fact that each participant in TPS longitudinal study completes the survey as many as 10 times, hopefully more. Luckily, every year a larger group of participants join the longitudinal study and the number of those who join far outweighs the number of those who discontinue their involvement. Although TPS students are, for the most part, consistent in their dedication to learning, extenuating circumstances do come up that create barriers to continued participation in TPS' longitudinal study, leaving small gaps in the data collection. Every year incoming freshmen and sophomores are offered the opportunity to join, minimizing this gap in data caused by attrition.

Given the unchanging survey, the effect of knowing the questions once the survey is taken for the first time and the effect this may have on the participants' manner of engaging in the learning environment TPS offers, the possibility of bias should be taken into consideration. A response bias may be embedded in this study because students may become more familiar with the survey questions with each sequential administration. Also, it may be important to consider how time spent away from TPS (and the associated extracurricular activities) contributes to identity development because this could potentially lead to a confounding variable, or an unexpected effect on the dependent variable. However there is little one can do to control what happens during vacations.

Ethical Issues

There are a few possible ethical issues to mention about the data set from TPS. As mentioned earlier, TPS longitudinal study participants will be limited to individuals who have applied to TPS and been admitted based on their merits. The cost of tuition is high and although the school offers scholarships for those who qualify, the amount of scholarship money is limited. Loans are not an option for everyone who a) cannot afford the tuition and b) do not qualify for a scholarship. Having the sample size limited to privileged populations threatens the generalizability of the sample because the sample is not representative of the target population – adolescents from all sociocultural backgrounds.

TPS's longitudinal survey does ask about some demographic information, such as "in what country were you born," "in what country do you and your family currently reside," "what is your native language," and "are you a member of an organized religion." However, there are no questions that specifically ask about race, ethnicity, gender, or sexual orientation. Not asking these important questions may stand as a limitation when looking at the analysis outcomes. One reason TPS may not have asked these questions is to increase participants' anonymity; or perhaps this information is documented and stored separately from the study data (which is all this researcher has access to). Another possibility for not asking these questions is a reflection of the privilege within TPS and the possible oversight of the importance of including race, ethnicity, gender, and sexual orientation as important aspects of identity to add to the data analysis.

The lack opportunity for a student to directly self-identify (race, ethnicity, gender, sexual orientation, and ability) is contrasted by the inclusion of an instrument on cultural competency. This instrument on cultural competency asks students to reflect on their encounters with people

of diverse races and ethnicities as well as cultures, including white and not excluding encounters with LGBTQ, religious, mentally/emotionally ill, physically challenged/disabled, houseless, and addicted populations. It also asks the survey-taker to consider the level and quality of those interactions and the ways they navigated these encounters. Not being provided the opportunity to reflect on one's personal identity may impact and inform how a student might approach the identity and culture of others. This was a missed opportunity for TPS to gather rich and complex data around aspects of identity development and self-esteem, self-control, and resilience. To have data on a student's race, ethnicity, gender, or sexual orientation, is important information when conducting research for the purpose of making a difference in social work practice.

Through continued research emergent evidence will hopefully become significant enough to shift secondary education in a direction that will encourage the healthy development of self-esteem, self-control, and resilience. The opportunity to use The Putney School's longitudinal study data, as explained in detail in this methodology chapter, will provide concrete findings through the data analysis. These findings will be highlighted and explained in detail in the following chapter.

CHAPTER IV

Findings

The purpose of this thesis is to identify what aspects of a learning environment foster positive identity development in adolescence. The Putney School (TPS), a co-ed boarding school in Southern Vermont, offers the opportunity for students to engage in art, music, and manual labor; and TPS values these learning environments as much as academic achievement. The Putney School began collecting data for a longitudinal study in order to better understand the mutual exchange between its adolescent students and diverse ecological contexts (learning environments). The data set was paired down to include three waves of participants, whose survey answers facilitated the quantitative data analysis by way of a single-system design. This study design was chosen because it offers the ability to measure change over time in areas of positive identity development. For this thesis, positive identity development is defined in terms of self-esteem, self-control, and resilience. The goal is to measure positive identity development by utilizing Rosenberg's Self-Esteem Scale, a Brief Self-Control Scale, and The Resilience Scale, all instruments included in The Putney Schools' longitudinal study. These three instruments are available in the public domain or by permission from the authors.

The Putney School's (TPS) longitudinal study currently consists of seven waves. The first three waves (cohorts) have graduated and moved on to new endeavors. The total number of participants whose data was utilized in this study is 65 (N=65).

This chapter contains a description of the sample (N=65) and summaries of the quantitative data, including self-esteem, self-control, and resilience. In addition, there is a table outlining demographic information of the 65 students. Just less than two-thirds are boarding students and just over one-third are day students. The data set contains information on the individuals' gender and whether or not they were born in the U.S. Additionally, there is a distinction made between students who come from traditional families with a mother and a father living together verses any other type of family, be it a single mother, a single father, two mothers, two fathers, a primary caregiver, etc. The available data for family composition is derived from freshmen that completed TPS longitudinal surveys at freshman registration (T-1). However, the data that could have denoted any change in family composition at the time of senior graduation (T-2) was not available.

Table 1

Demographic Characteristics of The Putney School longitudinal study participants, (N=65)

	Frequency	Percent
Gender		
Female	44	68
Male	21	32
Boarding	42	65
Day Student	23	35
Born in U.S.	57	88
Born Abroad	8	12
Parent(s)		
Mother & Father	36	55
All other	26	40
Unreported	3	5

A little more than two-thirds of the individuals are female (n=44, 68%). Sixty-five percent are boarding students. Only 12% of students who engaged in the longitudinal study were born outside of the United States. Thirty-six participants reported having both a mother and a father living at home when they registered as freshman at The Putney School.

Paired T-Test

A paired T-test was conducted to determine whether there was a difference between each score (self-esteem, self-control, and resilience) between T-1 (registering freshman) and T-2 (graduating seniors) and no significant difference was found for any variable. There were an average of 4.3 missing data points at T=1, possibly reflecting avoidance around the topic, an absence of desire to self-reflect, or a lack of understanding for the questions being asked. There are an average of 20.6 missing data points at T=2, a little less than four times the amount of missing data points from T=1. There could be several explanations for the attrition rate at T-2. The individuals selected for the data set have been at The Putney School for four years and T-2 is very close to graduation time, when “senioritis” potentially interrupts the sense that TPS longitudinal study is important or needs to be prioritized. There are between 1 and 3 participants who didn’t answer the survey instruments at either T-1 or T-2 – self-esteem has 1, self-control has 3, and resilience has 2, possibly reflecting a feeling of disconnect to the instrument’s type of questions.

Due to missing data points across all three instruments, the n for each variable differed, and was considerably reduced from the beginning where N was 65. At T=2, self-esteem’s N was 43, self-control’s N was 45, and resilience’s N was 45. An additional note to be made is that the first 19 participants in wave 1 completed the self-control survey instrument their sophomore year due to a delay in permission to utilize the “Brief Self-Control Scale” instrument in the TPS

longitudinal study. Therefore, for the first wave (cohort) of survey-takers, the time between T-1 and T-2 for self-control is 3 years rather than four. Waves (cohorts) 2 and 3 had four years between T-1 and T-2.

Change Scores

“Change scores” were created for each of the three scales. “Change scores” look at the difference between students’ scores from T-1 to T-2, allowing for an alternative way to describe what is happening with scores. There are three possibilities: observable improvement (positive change score), stasis (change score=0), and decrease (negative change score). Self-esteem’s “change scores” showed only a marginal improvement, where self-control’s “change scores” highlighted a significant decrease. Resilience was the only aspect of positive identity development that showed an increase in “change scores.” In the next paragraphs these scores will be discussed by section, beginning with self-esteem.

Self-esteem. The Rosenberg Self-Esteem Scale (RSES) is included in The Putney School’s longitudinal study and is used by many for assessing measurements of self-esteem. From a theoretical standpoint, according to Erikson (1980), “self-esteem, confirmed at the end of each major crisis, grows to be a conviction that one is learning effective steps toward a tangible future, that one is developing a defined personality within a social reality which one understands” (p. 95). An instrument developed in 1965, Rosenberg’s Self-Esteem Scale includes an equal amount of negatively framed and positively framed questions, equaling 10 with an added two questions about stress levels. The “change scores” for self-esteem as reflected by the participants in the (TPS) longitudinal study, demonstrated that 49% of students showed observable improvement in self-esteem over the four-year period between T-1 and T-2. Forty-four percent showed a decline in self-esteem and 7% displayed no change.

Table 2

Self-Esteem Change Scores, (N=43)

	# Student Participants	Percent
Self-Esteem “Change Scores”		
Increase	21	49
Stasis	3	7
Decrease	19	44

Self-control. The Putney School longitudinal study includes the Brief Self-Control Scale within its survey as a means to measure potential change in an individual’s self-control. The instrument includes 13 statements that need to be ranked on a scale of 1, “Not at all” to 5, “Very much.” Casey and Caudle (2013) stated, “the challenges of adolescence [with]in the context of self-control [are] the ability to suppress inappropriate emotions, desires, and actions” (p. 82). The “change scores” for students’ self-control demonstrated a 58% decrease between T-1 and T-2, a time span of 3 verses 4 years. Over this three-year period, another 9% of survey participants presented no change, where the remaining 33% indicated an increase in self-control.

Table 3

Self-Control Change Scores, (N=45)

	# Student Participants	Percent
Self-Control “Change Scores”		
Increase	15	33
Stasis	4	9
Decrease	26	58

Resilience. Resilience is a developmental asset, which can be gained through resources found in learning environments, and it can also support an adolescent’s capacity to overcome exposure to risk. In this thesis, the definition of resilience will be grounded by the concept of positive youth development (PYD), which emphasizes resilience as the mutually beneficial

exchange ($\leftarrow \rightarrow$) between a learning environment (context) and the adolescent, where the thriving relationship enhances positive outcomes for both (Lerner et al., 2011). The Resilience Scale was the instrument chosen to measure and assess change in the TPS longitudinal study. The instrument asks an individual to rate 26 different questions on a scale that ranges from 1, “strongly disagree” to 7, “strongly agree.” The “change score” calculated for resilience was significantly higher than those of self-esteem and self-control, demonstrating observable improvement in 65% of students between T-1 and T-2, 4 years later. Students who conveyed a decline in resilience counted at 33% and only 2% reported no change at all.

Table 4

Resilience Change Scores, (N=45)

	# Student Participants	Percent
Resilience “Change Scores”		
Increase	29	65
Stasis	1	2
Decrease	15	33

Learning environments. Learning environments are the ecological contexts within which adolescents can engage in activities led by peers, adult mentors, teachers, and/or community leaders. The goal is to foster a good match where there exists a mutually beneficial exchange between an ecological context (learning environment) and participating/contributing adolescents. Positive youth development (PYD) and the 4-H Study of PYD define this mutually beneficial exchange as “thriving” (Bowers et al., 2014). Thriving is, in turn, defined by the 5 C’s (developmental assets), or more specifically, competence, confidence, character, connection, and caring. The Putney School engages its students/community members in a rigorous schedule of

activities that reach far beyond traditional academics, what might be referred to as developmental assets-building extra-curricular activities.

Summary

In short, out of the three instruments chosen to measure positive identity development in adolescence, self-esteem's change scores had only a slightly higher observable improvement rate (49%) compared to the 44% whose change scores decreased. In contrast, self-control showed a significant decrease in its change scores standing at fifty-eight percent. Resilience, on the other hand, highlighted an observable improvement of 65% for its change score. The discussion chapter that follows will offer reflections on the findings outlined in this chapter, providing possible insights on the resulting data analysis.

CHAPTER V

Discussion

The question, “What aspects of a learning environment foster positive identity development in adolescents?” has guided this thesis through a pertinent investigation. This research has delved into better understanding the relationship between the adolescent and the learning environment (ecological context) and the positive effects a mutually beneficial exchange can have on the two (individual $\leftarrow \rightarrow$ context) (Bowers et al., 2010). Embarking on this research led to the discovery of a recently terminated and very relevant data set gathered through the 4-H Study of Positive Youth Development (Lerner et al., 2013), which established a model that measures the developmental assets gained through this individual $\leftarrow \rightarrow$ context exchange.

4-H Study of Positive Youth Development and the 5 C’s Model

The 5 C’s model was established through the analysis of the 4-H Study of PYD’s 8-wave data set gathered, in collaboration with the 4-H Council, by Lerner and his colleagues (2013) at Tuft’s University’s Institute for Applied Research in Youth Development (IARYD). The original intention of these researchers was to determine what thriving means in the life of an adolescent (Bowers et al., 2010). According to Geldhof, Bowers & Lerner (2013), “thriving is seen as the growth of attributes that mark a flourishing, healthy young person, for example, the characteristics termed the ‘Five C’s’ of PYD—competence, confidence, character, connection, and caring” (p. 2). The 5 C’s are developmental assets an adolescent can move with into

adulthood and feel confident about his/her identity and who he/she is as contributing citizens in his/her ecological context and community.

The 4-H Study of PYD lays the foundation for analyzing self-esteem, self-control, and resilience as key aspects that demonstrate positive identity development in adolescents. There was current literature reviewed that discussed the meaning and implication of all three and the instruments used to measure them. However, the discrepancy between what the literature highlighted for self-esteem, self-control, and resilience and what the “change scores” showed based on the data analysis of The Putney School’s data set was unexpected. The “change scores” derived for self-esteem, self-control, and resilience will be discussed in the following paragraphs.

Self-esteem. Rosenberg’s Self-Esteem Scale and the concept of global self-esteem, the overall evaluation of an individual’s sense of self, “suggests that high self-esteem is positively, though not necessarily causally, associated with goals, expectancies, coping mechanisms, and behaviors that facilitate productive achievement and work experiences” (Bachman et al., 2011, p. 445). Gaining self-esteem is a process, and though self-esteem is a mostly stable trait that increases from adolescence into adulthood, levels are not immune to fluctuations from one stage of life to the next (Orth et al., 2014). The Self-esteem “change scores” demonstrated by the students engaged in TPS’ longitudinal study reflected a 49% increase compared to 44% who reported a decrease in self-esteem. Seven percent who completed the survey communicated no change at all.

Considering TPS’ inclusion of extra-curricular activities and the positive value placed on them, one might have expected a greater increase in positive “change scores.” As Erikson’s (1980) theory on adolescent identity development highlights, learning environments where mentors hold skillsets shared by an adolescent are more likely to foster the re-integration of self-

esteem gained during childhood stages of development. However, if an adolescent is encouraged to go outside the familiarity of this skill-set and engage in new skills development, then the opportunity for self-esteem to completely solidify as Erikson (1980) theorized it could, might not happen in its fullness until a student leaves the setting of The Putney School. In addition, because diversification of skills is encouraged at TPS, the mutually beneficial exchange ($\leftarrow \rightarrow$) between a learning environment (ecological context) and the individual may not be concentrated enough in the skillset gained and integrated during childhood, thus delaying the re-integration of self-esteem in the adolescents until after they have graduated. After graduating from TPS, an individual is free to direct his/her focus toward subjects and activities, which most reflect his/her original skillset. What the individual may not comprehend until they leave TPS' ecological context (learning environment) is how the diversity of experiences gained while there, though perhaps not preferred in the moment, have enhanced their original skillset without them realizing it. Often enough, once one has been able to step outside of a context and into another, the ability to self-reflect on skills gained becomes heightened, easier to see, and more appreciated.

Because it is difficult to gain perspective on what skill sets a student has gained while engaged in the learning environment at TPS, self-esteem feels compromised, in turn affecting a student's capacity for self-control.

Self-control. As defined by Casey and Caudle (2013), self-control is “the ability to suppress inappropriate emotions, desires, and actions” (p. 82), while making decisions in the midst of influential peer groups. As Erikson (1980) highlighted, the power of peer relationships in adolescence can overwhelm the ability to maintain a sense of self, especially since developmentally there is an overwhelming desire to coalesce with the social trends of the time they are living in.

Self-control change scores showed the lowest percentage of increase in the three aspects of positive identity development measured for this thesis—self-esteem, self-control, and resilience. Self-control “change scores” determined by data measurements derived from The Brief Self-Control Scale demonstrated a 58% percent decrease. Positive “change scores” were only 33%, where 9% reflected change=0.

The 58% decrease in “change scores” for self-control was unexpected. On the other hand Meldrum and colleagues’ (2012) study concluded self-control remains malleable and “provides evidence of both stability and change in self-control during adolescence” (p. 460). What then, is it about The Putney School that does not promote a higher rate of positive change in self-control?

One might imagine that having to navigate an intense schedule such as the one at TPS would enhance a student’s capacity to develop self-control over a four-year period of time. However, what may happen for many adolescents at TPS is a “push back” phenomenon where in the face of having to have heightened levels of self-control in order to meet daily requirements, students actually rebel and their ability to gain a sense of individual self-control becomes negatively (inversely) affected. The Putney School leaves little time for self-reflection and internal engagement as each moment is filled with human interaction. During times where there is no human interaction, the student is expected to be studying, reading, and completing homework assignments.

Much of the research conducted on self-control has looked at how individuals react to external factors. In contrast, little has been done to study how a person handles reactions to their own thoughts and emotions, which come in response to a reaction to external stimuli, what Schel and colleagues (2014) refer to as “intentional inhibitions” (p. 236). As Schel et al. (2014) explain, “intentional inhibition differs from stimulus- or externally driven inhibition in that it is

driven by an internally generated process, rather than an external stimulus which tells you to stop a behavior” (p. 236). Because adolescence is an emotionally turbulent time and TPS leaves little time to process either daily interactions with peers and adults or the awkwardness of engaging with new and unfamiliar learning material, self-control may become progressively compromised.

Although levels of self-control appear to decrease over the four years between freshman registration (T-1) and senior graduation (T-2), resilience scores demonstrate the opposite.

Resilience. Resilience in this thesis is grounded in the concept of positive youth development, which highlights the benefits of the mutually beneficial exchange (\leftrightarrow) between a learning environment (ecological context) and the adolescent, where this thriving relationship enhances positive outcomes for both (Lerner et al., 2011). Masten (2014) explains that “perhaps the most salient shared feature of PYD and resilience scholarship is the focus on positive aspects of development, function, resources, and strengths, both in the individual and in the context” (p. 1019). In other words, the adolescent who is able to gain developmental assets otherwise referred to as skills, competencies, and values (Lerner et al., 2013) has a higher propensity for surviving risk and adversity without developing pathological behaviors (Zimmerman et al., 2013). Zimmerman et al. (2013) discusses the importance of adolescent involvement in “prosocial” learning environments promoting healthy development in order to acquire “promotive factors” such as skills, values, and competencies. Because TPS keeps its students busy, the opportunities for learning and gaining developmental assets abound.

For the most part, The Putney School fosters a mutually beneficial exchange (\leftrightarrow) between the learning environment (ecological context) it offers and the students who engage and participate in its diverse facets. Perhaps, for this reason, the resilience “change scores” reflect the highest percentage of positive change out of the three instruments utilized to measure

positive identity development -- self-esteem, self-control, and resilience. Positive “change scores” indicated a 65% increase in resilience in contrast to the 33% decrease or the 2% who showed no change.

Although the “change scores” calculated for self-esteem and self-control reflect lower scores than resilience, the fact that resilience scores came out the highest is a positive reflection of the interdisciplinary and value-driven environment fostered by The Putney School.

Learning environments. The Putney School is unique in that its ecological context (learning environment) values art, music, and manual labor equally as much as academics. Due to the inclusion of all of these learning environments into one school day, TPS maintains a rigorous schedule in which students are responsible for adhering to attendance. Although for most students the schedule is helpful for staying engaged and on course, for others the discipline of participating in a work job, a dorm job, academic classes, manual labor, sports (team and casual), art, music, community meetings, and meals feels like too much. Although the structured days provide a lot of control, learning one’s own self-control within this framework may be challenging, which could explain the “change scores” reflecting a decrease in self-control.

Limitations and Strengths

Limitations. Limitations presented in this research rested, for the most part, in the low N, which equaled 45 after accounting for missing data points occurring mostly at T-2 (senior graduation). When the data analyst for Smith School for Social Work ran a paired t-test to see if there was a difference between each score (self-esteem, self-control, and resilience) between T-1 (registering freshmen) and T-2 (graduating seniors), she found no significant difference. In order to look at the difference between scores at T-1 and T-2, she created “change scores” for each of these scales, allowing for the observation of differences between scores taken at T-1 and T-2.

These “change scores” delineated positive change, change=0, and negative change. These scores are explained in the Findings and utilized in the Discussion chapters of this thesis.

There has been an on-going conversation between Dr. Petry and Director of The Putney School, Emily Jones regarding when to have graduating seniors take their final survey. Senioritis is a very real experience at TPS and there is a lot of chaos, excitement, and wrapping up of senior projects and other academic requirements, leaving little emotional space or time for seniors to complete longitudinal surveys before they leave. The person in charge of rounding up seniors to have them complete the surveys is the Dean of Students. The relationship the Dean of Students has with any given cohort might affect attrition rates at T-2 (graduating seniors). There have been attempts to mail incomplete surveys to parents/caregivers for individuals to complete after graduation, but the success rate of these attempts has been low. Alternatively, there has been discussion around the possibility of having graduating seniors (T-2) complete the surveys before the end-of-year chaos ensues.

Strengths. The literature on positive youth development (PYD), self-esteem, self-control, and resilience is all very current, demonstrating the emergent interest and need for research on adolescents and the learning environments that foster their positive identity development.

Implications for Social Work

With the concept of PYD and the 5 C's in mind, it is important that policies are put in place to support secondary schools in the inclusion of a case management piece in their counseling departments. The role case management would hold, would be to support students in finding and engaging in the types of extra-curricular activities that would foster growth in the 5C's. Because some secondary schools do not have the resources to provide a diversity of

choices in extra-curricular activities, the idea would be to create a community network of additional opportunities for youth to engage in out of school activities.

Historically, social work began as case management and wasn't as focused on therapeutic interventions as it is now. Therefore, there would likely be great benefits in balancing the role of the social worker in the secondary school setting into a combination of case manager and guidance counselor. If this were implemented, there would be increased support for students to find and commit to extra-curricular activities outside of academics, creating a network of learning environments in support of PYD and the 5 C's.

Recommendations for Future Research

First and foremost, research on how to reconstruct the public education system to reflect the needs of adolescents struggling to become contributing and participating members of society is essential. In order to make adjustments in adolescent learning environments, research on cost-effective plans to create these ecological contexts for assets development would be helpful in creating change during an economically strained time where military and other resources are prioritized over the education of youth, the future members of society.

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