Perceptions and Well-Being:

The Relationship between Perceived Social Acceptance and Perceived Self-Worth

in Late Adolescence

A thesis submitted by

Kathleen N. Greenman

in partial fulfillment of the requirements for the degree of

Master of Arts

in

Child Development

TUFTS UNIVERSITY

May 2014

© 2014, Kathleen Greenman

ADVISOR: Richard M. Lerner

Table of Contents

Abstract

Contemporary models of human development emphasize that humans are not

fixed entities but rather are relatively plastic individuals who develop as a result of the

mutually influential interactions between the person and his or her various contexts and

experiences. In addition, more recent findings indicate that a person's *perceptions* of his

or her social experiences, as compared to the objective features of the experience, are just

as, if not more, influential in affecting a person's biological function and psychological

well-being. One recognized indicator of well-being is a person's sense of personal value,

or self-worth. Accordingly, this study examined the relation between perceived social

acceptance and perceived self-worth. Given the marked changes in both self and social

context that occur during adolescence, the relationship between perceived social

acceptance and perceived self-worth in late adolescent students will be assessed. Results

were presented, and both limitations of the research and implications for future research

and for application were discussed.

Recent models of human development are beginning to expand our conceptions of what contributes to a person's development. Known as relational developmental systems theories (RSDT), these models take an integrative and multidisciplinary approach that emphasizes how all components of human ecology must be taken into account to understand any aspect of the human experience (Lerner, 2012; Overton, 2013). Thus, it is no longer nature or nurture, but both. Moreover, from this perspective, people are not only the products of their environments, but as well active agents within the various mutually influential relationships between the self and the context (Lerner, 2006). These relations are represented as individual $\leftarrow \rightarrow$ context relations. When they are mutually beneficial to both person and context, these relations are termed adaptive developmental regulations (Brandtstädter, 1998).

These models on human development also include temporality, or history, as a contributor to the developmental system. The inclusion of temporality, along with the understanding that humans can actively affect their contexts, highlights the possibility of constant change within the individual and his/her context (Lerner, 1984). This potential for systemic change is termed plasticity and constitutes one of the key strengths of human development (Lerner, 2006). While it has long been known that social and environmental conditions have an effect on a person's development, in recent years, the emerging field of epigenetics has expanded on these ideas and included findings that a person's interaction with the social environment can influence even basic biological processes, such as the expression of genes (Slavich & Cole, 2013). As Tobach and Schneirla (1968) emphasized, humans are social beings and there is no form of life that exists independent of other life. Thus, this new evidence highlighting how social relationships may be even

more influential brings an important focus to the study of positive human development.

These biological linkages may also explain why social isolation or other negative social

experiences is often associated with increased risk for mortality (e.g., Berkman &

Kawachi, 2000) and why individuals who are subject to social adversity tend to have

long-term mental and physical health problems across the life-span (Slavich & Cole,

2013).

Given the RDST idea that humans are subject to change (i.e., have relative

plasticity), along with the increasing evidence to support these models, this outlook

provides an optimistic perspective on human life. RDST encourage the exploration of

individual ← → context relations in order to identify which relations we can modify to

positively affect human development.

In this exploration of how individual ← → context relations may positively

influence human development, recent studies have uncovered that it is not only the

objective features of a person's social context (e.g., living in urban versus rural areas)

that affect these biological processes and well-being but, as well, the person's subjective

experience of these contexts (e.g., feeling poor or safe) (Slavich & Cole, 2013). Slavich

and Cole state that human genes can actually be turned on or off by a person's subjective

perceptions of different social or environmental conditions (2013). For example,

individuals who reported feeling lonely, rejected, or socially isolated − regardless of their

marital status, network size, or number of indicated friends − showed suppressed immune

systems and complex susceptibility to disease (Cacioppo & Hawkley, 2009; Cohen,

Janicki-Deverts, & Miller, 2007). Even purely imagined or symbolic cognitive

representations of social conditions (i.e., just thinking about being lonely)may trigger

broad shifts in a person's physiological health, affecting both mental and physical well-being (Slavich & Cole, 2013). Moreover, more than actual social acceptance reported by one's peers, variations in perceived social acceptance reported by the individual predicted maladjustment and well-being (Vanhalst, Luyckx, Scholte, Engels, & Goossens, 2013; Zimmer-Gembeck, Hunter, & Pronk, 2007).

If it is not only the measurable and objective features of one's social contexts and experiences, but also one's subjective perceptions that affect well-being, it is important to further investigate the processes underlying this phenomenon (Slavich & Cole, 2013; Zimmer-Gembeck et al., 2007). By understanding the underlying processes of social perceptions, interventions and prevention efforts can guide individuals to be aware of and change their perceptions in order to, ultimately, positive understand and affect their own well-being and development across the life span. Moreover, in line with RDST, it is not simply the subjective experience of the social context that influences well-being, but rather the interaction between that perception, the person, and the multiple layers of his/her experience (e.g. genetic pre-disposition, social support, situational context, etc.) that contribute to its effects on one's health. Thus, exploring and understanding the many levels of individual ← → context relations that may affect perceptions may be a uniquely powerful method of promoting positive development based on within-the-person variables.

In an effort to explore this relationship between social perceptions and well-being, this paper will assess the relation between perceived social acceptance and a person's sense of self-worth. Self-worth is a major indicator of well-being and, because the self is both a cognitive and social construction, it is expected that a person's sense of self-worth

is affected by his/her perceived and actual social experiences (Harter, 1999; 2006). Major

theorists on the development of self-worth posit that social interactions profoundly shape

the self (Baldwin, 1897; Cooley, 1902; Mead, 1934). Among the most influential early

theorists, Cooley (1902) presented the "looking glass self" theory, which proposes that

the self is a social construction and that self-worth is largely a reflection of what the

person detects from the opinions of the people around him or her. Mead (1934) later

discussed the "generalized other," the idea that the opinions of others are somehow

weighted into a collective opinion that produces a person's overall sense of worth.

Given this emphasis on the role of internalized opinions of others in evaluating

self-worth, it is appropriate to hypothesize that a person's perceived social acceptance

will relate to his or her level of self-worth. In an effort to further understand the influence

of perceptions on well-being, this study used self-worth as a measure of well-being and

explored how one's perception of social acceptance was related to one's sense of global

self-worth, specifically during late adolescence. Accordingly, it is useful to discuss self-

worth as the indicator of well-being and the value of investigating the relation between

self-worth and perceptions during adolescence.

Self-worth as an indicator of well-being

Self-worth is the "evaluation of one's value or worth as a person" (Harter, 2006,

pg. 509). While also referred to as self-esteem (Rosenberg, 1995), self-evaluation

(Deilman et al., 1989), or general self-concept (Marsh, 1986), the shared focus in these

concepts is on the overall value that one places on the self. There are two types of self-

worth: specific and global (Harter, 2006; Marsh, 1990; Rosenberg, 1995). Specific self-

worth refers to particular facets of the self (e.g. intellectual ability, athletic competence);

these attributes are more predictive of behavioral outcomes in specific contexts (Harter, 2006; Marsh, 1990). Conversely, global self-worth is the general evaluation commonly associated with overall psychological well-being (Harter, 2006; Marsh, 1986; Rosenberg, 1995).

Global self-worth shapes a person's expectations, energizes the pursuit of goals, fosters self-regulation, and fuels self-respect and self-acceptance (Harter & Whitesell, 2003; Rosenberg, 1995). Having low global self-worth is associated with delinquency (Bynner et al., 1981; Rosenberg et al., 1989), substance abuse (Deilman et al., 1989; Stacy et al., 1992) and poor academic outcomes (Barnes & Welte, 1986; Hawkins et al., 1992). Low levels of self-worth have also been linked with self-reported depressive symptomatology that can, for some adolescents, lead to suicidal thoughts and actions (Harter, 2006). Moreover, the desire to feel valued and worthy is so pervasive in human beings, that many believe that it is a universal and fundamental human need (Allport, 1955; Maslow, 1968; Rosenberg, 1979).

Research on the stability of global self-worth has varied findings across studies. Studies have shown that it is both stable (Epstein, 1991), unstable (DuBois et al., 2002), and varies in level depending on the social context (Harter et al., 1998). Across adolescence especially, when a major developmental task is to discover one's identity, self-worth has been shown to be exceptionally variable, with both drops (McCarthy & Hoge, 1982) and gains in levels of self-worth (Harter, 2006), and differences between genders and among ethnic backgrounds (Harter, 2006). Nonetheless, there is general agreement that there is a baseline sense of global self-worth that tends to be shared among all individuals and stays relatively consistent with only gradual change across

time (Harter & Whitesell, 2003; Savin-Williams & Demo, 1993; Zimmerman, 1997).

Adolescence and the study of the self

This study was aimed at exploring how perceptions of social experiences might influence self-worth, and consequently well-being across the life span. During adolescence, which spans the second decade of life, a person undergoes biological, social, and cognitive changes that affect both one's cognition, and ultimately perception ability, and social experiences (Harter, 2006; Lerner & Steinberg, 2004; Steinberg, 2011). Moreover, during adolescence, individuals develop more complex and sophisticated ways of reasoning about the world (Kuhn, 2009). As a result, they begin to think abstractly about their own and others' sense of self as well as consider hypothetical situations (Eccles, Wigfield, & Byrnes, 2003; Piaget & Inhelder, 1973). In addition, adolescents begin to process both intellectual and social information more strategically, while also considering multiple dimensions- and opinions-around a situation (Eccles, Wigfield, & Byrnes, 2003).

At the same time that these cognitions develop, adolescents also experience major changes in their self-concepts as they begin to consider who they are and what they can do (Eccles, Wigfield, & Byrnes, 2003). According to Erikson's theory of psychosocial development, these changes all contribute to an adolescent's ability to fulfill the key developmental task of developing a sense of identity (Erikson, 1968).

Simultaneously, the social context around adolescents changes (Steinberg & Morris, 2001). Over the course of this period, an adolescent is no longer seen as a child and, as a result, is faced with new rights and responsibilities (Steinberg, 2011). Moreover, and perhaps in an effort to explore the self, adolescents begin to spend progressively less

time with parents and more time with peers (Brown & Larson, 2009). Whereas parents

remain important sources of support, peer groups, dating, and romantic relationship

become increasingly significant parts of adolescents' experiences and sources of

exploration (Brown & Larson, 2009; Brown, 2004).

Due to the increasing understanding of others and the quest for understanding the

self, this time of life provides a "natural developmental laboratory" to explore the relation

between perceived social acceptance and self-worth (Petersen, 1988). Furthermore,

research has demonstrated that early social experiences play a major role in shaping one's

development (e.g., Harter & Whitesell, 2003; Pelham & Swann, 1989). In particular,

socialization experiences in adolescence shape the content of self-evaluations and sense

of worthiness, which contributes to one's psychopathology and self-view going forward

(Epstein, 1973; Rosenberg, 1995). Thus, exploring the relation between perceptions and

self-worth at this time of life may provide insight into how and when developmental

scientists can help ensure and promote positive outcomes across the life span.

The present study investigated the relation between perceived social acceptance

and perceived self-worth in adolescents in order to further identify optimal ways to

promote positive human development. Previous research on self-esteem has focused

extensively on early adolescents when individuals show heightened concern with how

others view them (Harter, 2006). But, given that cognitive advancements continue

through the twenties (Steinberg, 2011), and it is not until late adolescence that individuals

begins to fully interpret the complexity of the self and claim their identities and values

(Damon & Hart, 1998; Harter, 2006), it is important to examine this relation in late

adolescence as well. This research focused on youth in the tenth through the twelfth

grade of high school. This next section will present previous research on the relation

between perceived social acceptance and perceived self-worth, and the gaps in the

literature that this study will address.

Perceived social acceptance and global self-worth

Previous studies have found that global self-worth is a driving force in shaping

how people see themselves, others, and the events in their lives (e.g., Crocker, 2002;

Leary & Baumeister, 2000). Given the egocentric features of adolescent functioning

(Elkind, 1967), it is expected that, even in late adolescence, the relation between

perceived social acceptance and perceived self-worth may be strong due to their tendency

to focus on their internal states rather than those of the people around them (Schwartz et

al., 2008).

In one study similar to the present one, findings showed that perceived, more than

actual, social acceptance, was a mediator for loneliness and self-esteem (Vanhalst et al.,

2013). In other similar studies, however, measures focused on more quantity, quality, and

length of actual friendship and supports, as compared to self-perceptions of these

relationships (e.g. Bishop & Inderbitzen, 1995; Dubois, Reach, Tevendale, & Valentine,

2001; Roberts, Seidman, & Pederson, 2000).

The present study focused specifically on perceived social acceptance and

perceived self-worth, and proposed that there would be a positive relation between a

person's perceived social acceptance and his or her sense of self-worth in adolescence.

This expectation is based on past research that demonstrated the links between social

experiences and self-esteem, especially in adolescence (Harter, 1989, 2006; Hudson,

1982). As noted, previous research has focused mostly on early adolescence (Crocker,

2002) and very rarely on the *perceived* experiences compared to objective features of these social experiences. Thus, this study aimed to add to the literature by focusing on later periods of adolescence and, as well, on the importance of perceptions.

In sum, I hypothesized that higher levels of perceived social acceptance are associated with higher levels of perceived self-worth. To test these ideas, I used data from the 4-H Study of Positive Youth Development (e.g., Lerner, 2005). This data set allowed me to obtain a sample of youth across several grades (10th, 11th, and 12th) who responded to measures of self-perceived social acceptance and self-worth. Using multiple regression analyses, I assessed if there were links between social acceptance and self-worth. In addition, I examined if covariates identified in the literature (e.g. gender and socioeconomic status) moderate these relations.

Method

The current study was part of a larger, ongoing longitudinal investigation of youth development in the United States that began in 2002. The 4-H Study of Positive Youth Development is a longitudinal investigation that began by assessing 5th grade youth in the United States and their parents. The methodology of the overall study is not directly relevant to the cross-sectional sample used in the present research. However, full details of the overall method of the 4-H Study have been presented in earlier reports (e.g., Lerner et al., 2005, 2009, 2010; Bowers et al., in press). Accordingly, I present here only the features of the method relevant to the present research.

Participants

In an effort to examine participants in late adolescence, the present study used data from adolescent participants who were surveyed in Wave 7 of the 9 waves of data

collection. We selected this wave because the majority of participants who were surveyed were in grades 10, 11, or 12 and thus in late adolescence between the ages of 15 and 18. In the original data collection for this wave, 1336 youth were surveyed, but only a portion of youth surveys met the criteria to be included in these analyses in that they were in my age range of interest (15-18 years old) and completed all the measures of interest for this study (e.g., social acceptance, self-worth, family income, gender). Thus, for purposes of this study's focus on late adolescents, only 411 youth were included in this study. Of the 411 youth, 68% were female and the mean age was 17.09 years (SD = .75). As for grade level, 61 participants were in the 10th grade, 124 participants were in the 11th grade, and 226 participants were in the 12th grade. Self-reported race for these youth was 83.3% European American, 3.8% African American, 4.8% Hispanic or Latino, 3.6% Asian/Asian American or Pacific Island, 0.8% American Indian/Native American, and 3.7 % multi-ethnic or multi-racial or other. Socioeconomic status (SES), ranged from a reported $10,000 to $217,500 annual income; the mean was $70,636 (SD = $38,388).

Measures

To address the links between perceived social acceptance and perceived self-worth in late adolescence, the present study used measures of Perceived Social Acceptance and Perceived Self-Worth. In addition, gender and SES were included in the analyses as control variables.

Family per Capita Income (SES). Family per Capita Income is an indicator of the youth participants' socioeconomic background/status (SES). The item used in this research was taken from the parent-survey that was distributed with the youth survey at each Wave of the 4-H Study. This SES item asks about the household's approximate total

level of income. SES is then calculated for each wave using variables that ask about the

number of children and adults living in the household and the annual household income.

Family per Capita Income is the family annual income divided by number of people in a

particular household. Higher values indicate higher income level.

Perceived Social Acceptance. This study used the six items of the Perceived

Social Acceptance subscale from the Self-Perception Profile for Adolescents (SPPA;

Harter, 1988; Harter, 1986) to measure perceived social acceptance. Harter (1988)

developed a structured alternative response format to assess perceived competence in a

domain. Participants are asked to choose between two types of teenagers. Once they have

selected which person they are most like, they are asked to decide if it is ''really true for

me'' or ''sort of true for me.'' The items are counterbalanced so that half begin with a

positive sentence, reflecting high competence, while half begin with a negative sentence,

reflecting low competence. Each item is scored from 1 to 4, with 4 reflecting higher

perceived competence. Examples of the items from the perceived social acceptance scale

include, "Some teenagers find it hard to make friends but for other teenagers it's pretty

easy" and "Some teenagers feel that they are socially accepted but other teenager's

wished that more people their age accepted them." Appendix A includes the full measure.

This scale has historically been shown to have good reliability and validity (Vanhalst et

al., 2013). Cronbach's alpha for this dataset was 0.84.

Perceived Self-Worth. The measure for Global Self-Worth included six items

that were also derived from the Self-Perception Profile for Adolescents (SPPA; Harter,

1988; Harter, 1986). Similar to the scale for perceived social-acceptance, participants are

asked to choose between two types of teenagers. Once they have selected which person

they are most like, they are asked to decide if it is ''really true for me'' or ''sort of true

for me.'' The items are counterbalanced so that half begin with a positive sentence,

reflecting high competence, while half begin with a negative sentence, reflecting low

competence. Each item is scored from 1 to 4, with 4 reflecting higher perceived

competence. Examples of the items from the perceived social acceptance scale include,

"Some teenagers are often disappointed with themselves," and "Some teenagers are very

happy being the way they are." Appendix B includes the full measure. This scale has

historically been shown to have good reliability and validity (Harter, Stocker, &

Robsinon, 1996). Cronbach's alpha for this data set was 0.86.

Procedure

For Wave 7, youth were surveyed in their schools or youth programs. Teachers or

program staff gave each child an envelope to take home to the parent or guardian. The

envelope contained a letter explaining the study, two consent forms (one that was

returned to the school and one that could be kept for the records of the parent or

guardian), a parent questionnaire, and a self-addressed stamped manila envelope for

returning the parent questionnaire and consent form. Youth who were absent on the day

of the survey or were from schools that did not allow on-site testing were contacted by e-

mail, mail, or phone, and were asked to complete and return the survey to us. Beginning

in Grade 9, youth could go online to complete the survey if they chose. Youth tested at

4-H clubs were either tested with the paper survey or used club computers to complete

the survey online.

Results

This study tested the hypothesis that perceived social acceptance and perceived

self-worth are related in youth aged 15 to 18 years. Gender and socioeconomic status

were also explored to determine if these predictors affected this relationship. As

mentioned above, the original Wave 7 dataset in the 4-H Study contained information for

1,336 youth. However, I eliminated all participants who a. were not between 15 and 18

years of age; b. did not complete the measures on self-worth and perceived social

acceptance; and c. did not have information on gender and family income. Thus, the

analyses below were conducted with the 411 youth who remained in the dataset

following this process.

Exploratory Data Analysis

Prior to the main analyses, preliminary descriptive analyses were conducted. Data

from all measures were considered normally distributed upon examination of histograms,

means, standard deviations, skew, and kurtosis for all items. Table 1 presents the means,

standard deviations, and correlations. The range of self-worth and perceived social

acceptance scores was 1 to 4, with the lower score representing a lower sense of

competence in that area. In this sample, the mean level of self-worth was 3.17 and the

mean level of perceived social acceptance was 3.14.

Analysis of the scatterplot of residual values versus predicted values magnifies

the homoscedasticity in the relationship, and through the observation of frequency

distributions (e.g., scatterplots and boxplots) no univariate outliers were detected that

biased the sample. Correlation analyses also revealed no significant difference in self-

worth scores of males and female, or in regard to SES.

Item correlations were also examined. As expected, findings indicated positive

correlations between the main predictor, perceived social acceptance, and the outcome

variable, self-worth ($r(407) = .58, p < .001$). As shown in Table 1, results also indicated

no significant correlation between self-worth and family income ($r(407) = .03, p = .26$)

or gender ($r(407) = -.03, p = .25$).

Insert Table 1 about here

Multiple Regression Analysis

To examine the unique contribution of perceived social-acceptance to self-worth,

a hierarchical multiple regression analysis was performed. Two sets of multiple

regression analyses were conducted to determine whether perceived social-acceptance

would predict self-worth. The initial model (Model 1) included the control variables;

Model 2 added perceived social acceptance as a predictor (See Table 2). Before the

hierarchical multiple regression analysis was performed, the independent variables were

examined for collinearity. After scanning the correlation matrix and noting no high

correlations, I assessed the variance inflation factor (all less than 10) and collinearity

tolerance (all greater than 0.2) and found no cause of concern, thus suggesting that the

estimated βs are well established in the following regression model.

Because of literature indicating gender differences in the level of self-worth

during adolescence (Gray-Little & Hafdahl, 2000; Harter, 2006), in the first model,

gender was the first variable entered followed by SES. However, as shown in Table 2,

results from Model 1 indicated that gender and socioeconomic status were not significant

predictors of self-worth ($p = 0.64$).

In Model 2, I introduced perceived social-acceptance as a predictor for self-worth

after controlling for gender and socioeconomic status. As expected from the first model

and from previous findings (Vanhalst et al., 2013), the analyses of this model indicated

that perceived social acceptance was the only significant predictor of self-worth in these

analyses, $t(407) = 14.36$, $p < .001$. While the controls were not significantly related to

self-worth (see Table 2), perceived social acceptance accounted for 34% of the variance

in self-worth scores among adolescents 15 to 18 years old. This change in R^2 was

significant. $F(3, 407) = 69.26$, $p < .001$, $R^2 = .34$. Overall, perceived social acceptance was

a significant predictor of self-worth and confirmed the main hypothesis that the higher

one's perceived social-acceptance, the higher one's sense of self-worth ($B = .60$, p

$< .001$). This model suggests that, as perceived social-acceptance increases by one

standard deviation (SD $= .67$), self-worth will increase by .411 of a point. With the

highest score of self-worth being 4.0 in this study, a .411 point increase translates into an

almost 10% change in self-worth. Implications of these findings are discussed in the next

section.

Insert Table 2 about here

Discussion

This study investigated the relation between perceived social acceptance and

perceived well-being in late adolescents, using self-worth as an indicator of well-being

(Harter, 2006). Based on previous research, I hypothesized that higher levels of perceived

social acceptance would be related to higher levels of self-worth. In addition, I examined

whether this relation differed between male and female youth or between individuals of different socioeconomic levels.

The adolescent population is of particular importance for this research because of the numerous cognitive and social changes that influence one's perceptions and social experiences during this time of life (Petersen, 1988). The importance of such perceptions is underscored by recent studies that have indicated how people's subjective interpretations of their social experiences, even more than the objective features of their experiences, may influence their well-being (Slavich & Cole, 2013).

It is also important to specifically examine how perceived social acceptance may relate to self-worth because of its centrality to a person's self-acceptance and respect (Rosenberg, 1995). Moreover, individuals with high levels of global self-worth tend to demonstrate adaptive behavior in adolescence (e.g., Bynner et al., 1981) and have better academic outcomes (e.g., Hawkins et al., 1992). Adolescents with low levels of self-worth also have self-reported depressive symptomatology that can, for some youth, lead to suicidal thoughts and actions (Harter, 2006). In turn, individuals with higher levels tend to be happier and show higher levels of respect to one's self and others (Harter, 2006). Last, a person's sense of global self-worth develops in the formative years of childhood and adolescence, and tends to stabilize across the life span (Harter & Whitesell, 2003). Thus, examining how social perception may affect adolescent self-worth can help inform the literature on potential bases of positive outcomes for young people.

As hypothesized, higher levels of perceived social acceptance were significantly related to higher levels of self-worth, accounting for approximately 34% of the variance

in self-worth. These findings were consistent with the literature that emphasizes that subjective experiences can affect one's psychological health (Slavich & Cole, 2013). Moreover, this study also replicated similar findings that found that perceived social acceptance was linked to self-esteem more so than actual acceptance (Vanhalst et al., 2013).

However, analyses exploring whether there were differences between men and women, found that there was no gender difference in the present sample. Moreover, the relation between perceived self-worth and perceived social acceptance did not differ based on socioeconomic class.

Implications

Overall, the findings in this study support the idea that perceptions of one's social experiences may affect one's self-worth in late adolescence (e.g., Harter, 2006). Although I cannot conclude from this study that perceived social acceptance causes increased self-worth, based on previous research that relates social experiences with self-worth, it reasonable to suggest that interventions designed to foster a sense of social connectedness and acceptance within youth groups can promote an increase in self-worth and, consequently, an improvement in overall well-being of these youth. Moreover, given previous research (Vanhalst et al., 2013) and the present findings that demonstrate a relation between perceived social acceptance and perceived self-worth, this study encourages future exploration of the processes underlying social perceptions and how they may affect the development of the self and, in turn, inform interventions aimed at enhancing positive youth development.

Interventions and programs in childhood and adolescence typically focus on topics such as social skills training, emotional expression skills, or the development of character attributes (e.g., honesty, respect, etc.). However, findings from this study and other similar studies point to the importance of offering tools and skills to enhance self-perceptions and social perceptions *in addition* to enhancing the objective quality of the interactions. Such interventions can take place in early childhood, as well as later childhood and adolescence. Regardless of when the interventions take place, if social perceptions are related to self-worth, and possibly as well even basic biological processes (as discussed in Slavich & Cole, 2013), then it is important to address and develop social cognitions skills in addition to the monitoring of external social experiences and skill-sets (Masi et al., 2011). Moreover, if social perceptions can harm youth, then fostering positive social perceptions and cognitions may help prevent negative maladaptive thinking that can lead to subsequent health issues. Thus, interventions may consider focusing on building cognitive skills to promote positive views of the self, to encourage more pro-social awareness and behavior towards others, and to enhance positive cognitions and perceptions about the self. In sum, the findings from this study indicate the need for applied developmental programs and interventions to extend efforts beyond external social and emotional skill training in order to foster social acceptance among youth and improve social cognitions and self-perceptions within youth.

Limitations

Although the results support my hypothesis and support previous findings, this study has several important limitations that need to be addressed in future research. First, the analyses in this study were correlational and cross-sectional, and therefore cannot be

interpreted as reflecting developmental change. RDST models emphasize the need for

multi-level data and multi-method research designs to examine the various levels of

individual ← → context relations that may affect an outcome. In this study, a person's

perceptions were the individual ← → context relation under investigation; however, this

focus is only one of the many variables one may examine. This study used very basic

measures for very few variables, and does not claim to have demonstrated directionality

nor change in the effects of the relations between perceived social acceptance and

perceived self-worth. Future studies should employ longitudinal analyses to examine

directionality of these relations and explore the use of experimental methodologies for

more accurate measures of perceptions and well-being. In this study I used perceived

self-worth as the sole indicator of well-being. However, perceptions and well-being are a

complex constructs. In order to better understand the link between a person's perceptions

and his or her well-being, different scientific fields of study may consider collaboration to

create a more nuanced picture that features objective measures of one's well-being (e.g.,

depression, immune symptomology) and perceptions (e.g., reports from the self-vs.

reports from others to measure objective features of that experience).

Another limitation is the lack of diversity in the sample. Over 80% of the sample

population were European American and at least 75% made more than $45,000 in annual

family income. Moreover, 68% of the sample was female. Thus, the results of this study

are primarily applicable to white female youth from middle-class backgrounds. Studies

have shown that females report lower levels of self-worth consistently across adolescence

(e.g., Major et. al., 1999). Therefore, future research should include a more gender-

balanced sample in order to examine the differences more closely .Moreover, by using

family income as the measure of SES in this study, my sample was limited. The family

per capita income report was taken from the   4-H Study parent survey, while all the other

measures in this study were reported in the youth survey. In the 4-H Study, fewer than

half of the parent population completed and submitted the survey (see Lerner et al., 2005,

2009), thus limiting the number of youth participants for this study. Future research

should include other SES measures to assess socioeconomic status.

In addition, previous research has demonstrated differences between levels of

perceived self-worth among African American and European American youth (Gray-

Little & Hafdahl, 2000; Twenge & Crocker, 2000) and between male and female youth

(Kling et al., 1999; Major et al., 1999). Therefore, future research examining the relations

between perceived self-worth and perceived social acceptance should use diverse samples

in order to better assess gender, ethnic, and socioeconomic differences. A particular

framework to consider using in future research is Spencer's (2006) PVEST model that

integrates individuals' subjective experiences based on the diverse cultural contexts that

the person may experience. Whereas the Harter (1988) Self-Perception Profile for

Adolescents measure used in this study was appropriate for the present sample, future

studies that involve more diverse samples should consider using more culturally-

sensitive instruments and frameworks, such as the PVEST framework.

Conclusions

The intention of this study was to further explore how social perceptions may

relate to well-being among late adolescents. Despite the limitations of the study, the

findings demonstrated a positive, and significant relation between perceived social

acceptance and perceived self-worth (as an indicator of well-being; Harter, 2006). As

such, it is possible to conclude that if developmental scientists want to ensure the best

possible outcomes for young people, then scholars need to understand the various

processes that may influence well-being across the life span. Given the findings that

perceived social acceptance is related to perceived self-worth, the present study's results

can help inform future research and guide interventions to better elucidate the roles of

self-perceptions and social cognition in promoting positive youth development.

References

Allport, G. W. (1955). *Becoming.* New Haven, CT: Yale University Press.

Baldwin, J.M. (1897). *Social and ethical interpretations of mental development.* New York, NY: Macmillan.

Barnes, G. M., & Welte, J. W. (1986). Patterns and predictors of alcohol use among 7-12th grade students in New York State. *Journal of Studies on Alcohol, 47,* 53-60.

Berkman, L.F., & Kawachi, I. (2000). *Social Epidemiology.* New York, NY: Oxford University Press.

Bishop, J. A., & Inderbitzen, H. M. (1995). Peer acceptance and friendship: An investigation of their relation to self-esteem. *The Journal of Early Adolescence*, *15*(4), 476-489.

Brandtstädter, J. (1998). Action perspectives on human development. In W. Damon & R. M. Lerner (Eds.), *Handbook of Child Psychology, Volume 1: Theoretical Models of Human Development* (5th ed.). Editor-in-chief: W. Damon. (pp. 807–863). New York, NY: Wiley.

Bowers, E. P., Geldhof, G. J., Johnson, S., Lerner, J. V., & Lerner, R. M. (In press). Elucidating the developmental science of adolescence: Lessons learned from the 4-H Study of Positive Youth Development. *Journal of Youth and Adolescence*.

Brown, B. B. (2004). Adolescents' relationships with peers. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology* (2nd ed.) (pp. 363–394). Hoboken, NJ: John Wiley & Sons, Inc.

Brown, B.B., & Larson, J. (2009). Peer relationships in adolescence. In R. M.

      Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology,*

      Volume 2: Contextual Influences on Adolescent Development (3rd ed.). (pp. 74-

      103). Hoboken, NJ: John Wiley & Sons Inc.

Bynner, J. M., O'Malley, P. M., & Bachman, J. C. (1981). Self-esteem and

      delinquency revisited. *Journal of Youth and Adolescence, 10,* 407-441.

Cacioppo, J. T., & Hawkley, L. C. (2009). Perceived social isolation and

      cognition. *Trends in Cognitive Sciences*, *13*(10), 447-454.

Cohen S., Janicki-Deverts, D. & Miller, G.E. (2007). Psychological stress and

      disease. *JAMA, 298*(14), 1685-1687.

Cooley, C. H. (1902). *Human nature and the social order*. New York: Scribners.

Crocker, J. (2002). Contingencies of self-worth: Implications for self-regulation

      and psychological vulnerability. *Self and Identity, 1*, 143-149.

Damon, W., & Hart, D. (1988). *Self-understanding in childhood and*

      adolescence. New York, NY: Cambridge University Press.

Dielman, T. E., Shope, J. T., Butchart, A. T., Campanelli, P. C., & Caspar, R. A.

      (1989). A covariance structural model test of antecedents of adolescent alcohol

      misuse and a prevention effort. *Journal of Drug Education, 19*, 337-361.

DuBois, D. L., Burk-Braxton, C., Swenson, L. P., Tevendale, H. D., Lockerd, E.

      M., & Moran, B. L. (2002). Getting by with a little help from self and others:

      Self-esteem and social support as resources during early adolescence.

      Developmental Psychology, *38*(5)*,* 822-839.

DuBois, D. L., Reach, K., Tevendale, H., & Valentine, J. (2001, April). *Self-*

esteem in early adolescents: Trait, state, or both? Paper presented at the biennial

meeting of the Society for Research in Child Development, New Orleans, LA.

Eccles, J. S., Wigfield, A., & Byrnes, J. (2003). Cognitive development in

adolescence. In R.M. Lerner, M.A. Easterbrooks, & J. Mistry (Eds.)

Handbook of Psychology, Volume 6: Developmental Psychology. (pp. 325-350).

Hoboken, NJ: Wiley

Elkind, D. (1967). Egocentrism in adolescence. *Child Development, 38(4),* 1025–

1034.Epstein, S. (1973). The self-concept revisited: Or a theory of a theory.

American Psychologist, 28, 404-416.

Epstein, S. (1991). Cognitive-experiential self-theory: Implications for

developmental psychology. In M. Gunnar & L. A. Sroufe (Eds.), *Minnesota*

Symposium on Child Development: Vol. 23. Self-processes and development (pp.

111–137). Hillsdale, NJ: Erlbaum.

Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.

Gray-Little, B., & Hafdahl, A.R. (2000). Factors influencing racial comparisons

of self-esteem: A quantitative review. *Psychological Bulletin, 126,* 25-54.

Harter, S. (1986). Processes underlying the construction, maintenance, and

enhancement of the self-concept in children. In J. Suls & A.G. Greenwald

(Eds.), *Psychological Perspectives on the Self* (Vol. 3, pp. 136-182). Hillsdale,

NJ: Erlbaum.

Harter, S. (1988). Manual for the Self-Perception Profile for Adolescents. Denver,

CO: University of Denver.

Harter, S. (1989). Causes, correlates, and the functional role of global self-worth:

A life span perspective. In J. Kolligian and R. Stennberg (Eds.),

Perceptions of competence and incompetence across the life span (pp. 67-97).

New Haven, CT: Yale University Press.

Harter, S. (1999). The construction of the self. New York, NY: Wiley.

Harter, S. (2006). The self. In W. Damon & R.M. Lerner (Series Eds.) *Handbook*

of Child Psychology, Volume 3: Social, emotional, and personality

development (6th ed.). Editor-in-chief: N. Eisenberg. (pp. 505-570).

Hoboken, NJ: Wiley.

Harter, S., Stocker, C., & Robinson, N. (1996). The Perceived Directionality of

the Link Between Approval and Self-Worth: The Liabilities of a Looking

Glass Self-Orientation Among Young Adolescents. *Journal of Research on*

Adolescence, 6(3), 285-308.

Harter, S., Waters, P., & Whitesell, N. R. (1998). Relational self-worth:

Differences in perceived worth as a person across interpersonal contexts

among adolescents. *Child Development*, *69*(3), 756-766.

Harter, S., & Whitesell, N. R. (2003). Beyond the debate: Why some adolescents

report stable self-worth over time and situations, whereas others report changes in

self-worth. *Journal of Personality, 71*(6), 1027-1058.

Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors

for alcohol and other drug problems in adolescence and early adulthood:

Implications for substance abuse prevention. *Psychological Bulletin, 112,* 64-105.

Hudson, W. W. (1982). Index of Self-Esteem. In J. Fischer & K. Corcoran

(Eds.), *Measures for clinical practice and research: A sourcebook* (Vol. 2,

4th ed.) (pp. 188-189). New York: Oxford University.

Kling, K. C., Hyde, J. S., Showers, C. J., & Buswell, B. N. (1999). Gender

   differences in self-esteem: A meta-analysis. *Psychological Bulletin, 125,* 470–

   500.

Kuhn, D. (2009). Adolescent thinking. In R.M. Lerner & L. Steinberg (Eds.),

   Handbook of Adolescent Psychology (Vol. 1, 3rd ed.). (pp. 152-186). Hoboken,

   NJ: Wiley.

Leary, M.R., & Baumeister, R.F. (2000). The nature and function of self-esteem:

   Sociometer theory. In M. Zanna (Ed.), *Advances in Experimental Social*

   Psychology (Vol. 32, pp.1-62). San Diego, CA: Academic Press.

Lerner, R. M. (1984). *On the nature of human plasticity*. New York: Cambridge

   University Press.

Lerner, R. M. (2005, September). *Promoting Positive Youth Development:*

   Theoretical and Empirical Bases. White paper prepared for the Workshop

   on the Science of Adolescent Health and Development, National Research

   Council/Institute of Medicine. Washington, D.C.: National Academies of

   Science.

Lerner, R. M. (2006). Developmental science, developmental systems, and

   contemporary theories of human development. In R. M. Lerner (Ed.), *Handbook*

   of Child Psychology, Volume 1: Theoretical Models of Human Development. (6th

   ed.) (pp. 1-17). Editors-in-chief: W. Damon & R. M. Lerner. Hoboken, NJ:

   Wiley.

Lerner, R. M. (2012). Essay review: Developmental science: Past, present, and

future. *International Journal of Developmental Science, 6* (1-2)*, 29-36.*

Lerner, R. M., Abo-Zena, M., Bebiroglu, N., Brittian, A., Doyle, A., & Isaac, S. (2009). Positive youth development: Contemporary theoretical perspectives. In R. DiClemente, R. Crosby, & J. Santelli (Eds.). *Adolescent Health: Understanding and Preventing Risk Behaviors.* (pp. 115-128). San Francisco: Jossey-Bass.

Lerner, R. M., Almerigi, J., Theokas, C., & Lerner, J. V. (Eds.). (2005). Positive youth development. *Journal of Early Adolescence, 21*(1), 10-16.

Lerner, R. M., & Steinberg, L. (Eds.). (2004). *Handbook of Adolescent Psychology* (2nd ed.). Hoboken, NJ: John Wiley & Sons Inc.

Lerner, R.M., von Eye, A., Lerner, J.V., Lewin-Bizan, S., & Bowers, E.P. (Eds.). (2010). The meaning and measurement of thriving in adolescence: Findings from the 4-H Study of Positive Youth Development. *Journal of Youth and Adolescence, 39*(7), 707-719.

Major, B., Barr, L., Zubek, J., & Babey, S. H. (1999). Gender and self-esteem: A meta-analysis. In W. Swann & J. Langlois (Eds.), *Sexism and stereotypes in modern society: The gender science of Janet Taylor Spence* (pp. 223– 253). Washington, DC: American Psychological Association .

Marsh, H.W. (1986). Global self-esteem: Its relation to specific facets of self-concept and their importance. *Journal of Personality and Social Psychology, 51,* 1224-236.

Marsh, H.W. (1990). Influences of internal and external frames of reference on the formation of math and english self-concepts. *Journal of Educational*

*Psychology, 82,*107-16.

Masi, C. M., Chen, H. Y., Hawkley, L. C., & Cacioppo, J. T. (2011). A meta-analysis of interventions to reduce loneliness. *Personality and Social Psychology Review*, *15*(3), 219-266.

Maslow, A. H. (1968). *Motivation and personality*. New York, NY: Harper & Row.

McCarthy, J., & Hoge, D. (1982). Analysis of age effects in longitudinal studies of adolescent self-esteem. *Developmental Psychology, 18,* 372–379.

Mead, G. H. (1934). *Mind, self, and society*. Chicago: University of Chicago Press.

Overton, W. F. (2013). A new paradigm for developmental science: Relationism and relational-developmental systems. *Applied Developmental Science*, *17*(2), 94-107.

Pelham, B. W., & Swann, W. B. (1989). From self-conceptions to self-worth: on the sources and structure of global self-esteem. *Journal of Personality and Social Psychology*, 57(4), 672.

Petersen, A. C. (1988). Adolescent development. In M.R. Rosenzweig (Ed.), *Annual Review of Psychology* (Vol. 39, pp. 583-607). Palo Alto, CA: Annual Reviews.

Piaget, J., & Inhelder, B. (1973). *Memory and intelligence.* London: Routledge and Kegan Paul.

Roberts, A., Seidman, E., & Pedersen, S. (2000). Perceived family and peer transactions and self-esteem among urban early adolescents. *Journal of*

Early Adolescence, 20, 68–92.

Rosenberg, M. (1979). *Conceiving the self.* New York: Basic Books.

Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different

concepts, different outcomes. *American Sociological Review, 60*, 141–

156.

Rosenberg, M., Schooler, C., & Schoenbach, C. (1989). Self-esteem and

adolescent problems: Modeling reciprocal effects. *American Sociological*

Review, *54*, 1004-18.

 Savin-Williams, R. C., & Demo, P. (1993). Situational and transitional

determinants of adolescent self-feelings. *Journal of Personality and Social*

Psychology, 44, 820–833.

Schwartz, P. D., Maynard, A. M., & Uzelac, S. M. (2008). Adolescent

egocentrism: A contemporary view. *Adolescence*, *43*(171).

Slavich, G. M., & Cole, S. W. (2013). The emerging field of human social

genomics*. Clinical Psychological Science, 1,* 331–348.

Spencer, M.B. (2006) Phenomenology and ecological systems theory:

Development of diverse groups. In W. Damon & R.M. Lerner (eds),

Handbook of Child Psychology, Volume 1: Theoretical Models of Human

Development. (6th ed.)(pp. 829–893). New York, NY: Wiley.

Stacy, A. U., Newcomb, M. D., & Bentler, P. M. (1992). Interactive and higher-

order effectsof social influences on drug use. *Journal of Health and Social*

Behavior, 33, 226-241.

Steinberg, L. (2011). *Adolescence.* New York: McGraw Hill.

Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Journal of*

   Cognitive Education and Psychology, *2*(1)*,* 55-87.

Tobach, E., & Schneirla, T.C. (1968). The biopsychology of social behavior of

   animals. In R.E. Cooke & S. Levin (Eds.), *Biological basis of pediatric practice*

   (pp. 68-82). New York: McGraw-Hill.

Twenge, J.M., & Crocker, J. (2002). Race and self-esteem: Meta-analysis

   comparing Whites, Blacks, Hispanics, Asians, and American Indians and

   comment on Gray-Little and Hafdahl (2000). *Psychological Bulletin, 128,*

   371-408.

Vanhalst, J., Luyckx, K., Scholte, R. H., Engels, R. C., & Goossens, L. (2013).

   Low self-esteem as a risk factor for loneliness in adolescence: Perceived –

   but not actual – social acceptance as an underlying mechanism. *Journal of*

   Abnormal Child Psychology, 41(7)*,* 1067-1081.

Zimmer-Gembeck, M.J., Hunter, T.A., & Pronk, R. (2007). A model of behaviors,

   peer relations and depression: perceived social acceptance as a mediator

   and the divergence of perceptions. *Journal of Social and Clinical*

   Psychology, 26, 273-302.

Zimmerman, M. A., Copeland, L. A., Shope, J. T., & Dielman, T. E. (1997). A

   longitudinal study of self-esteem: Implications for adolescent development.

   Journal of Youth and Adolescence, *26*(2), 117-141.

Appendix A.

Perceived Social Acceptance Items: *The five items used to measure Perceived Social*

Acceptance that were taken from the Harter (1988) Self-Perception Profile for Adolescents.

	Really True for Me	Sort of True for Me				Sort of True for Me	Really True For Me
1.			Some teenagers find it hard to make friends.	**BUT**	For other teenagers it's pretty easy.		
2.			Some teenagers have a lot of friends.	**BUT**	Other teenagers don't have very many friends.		
3.			Some teenagers are very hard to like.	**BUT**	Other teenagers are really easy to like.		
4.			Some teenagers are popular with others their age.	**BUT**	Other teenagers are not very popular.		
5.			Some teenagers feel that they are socially accepted.	**BUT**	Other teenagers wished that more people their age accepted them.		

Appendix B.

Perceived Self-Worth: *The five items used to measure Perceived Self-Worth that were taken from*

the Harter (1988) Self-Perception Profile for Adolescents.

	Really True for Me	Sort of True for Me				Sort of True for Me	Really True For Me
1.			Some teenagers are often disappointed with themselves.	**BUT**	Other teenagers are pretty pleased with themselves.		
2.			Some teenagers don't like the way they are leading their life.	**BUT**	Other teenagers do like the way they are leading their life.		
3.			Some teenagers are happy with themselves most of the time.	**BUT**	Other teenagers are often not happy with themselves.		
4.			Some teenagers like the kind of person they are.	**BUT**	Other teenagers often wish they were someone else.		
5.			Some teenagers are very happy being the way they are.	**BUT**	Other teenagers wish they were different.		