

# **Buffering the Negative Impact of Poverty on Youth: The Power of Purpose in Life**

Kyla A. Machell · David J. Disabato · Todd B. Kashdan

Accepted: 22 February 2015/Published online: 28 February 2015 © Springer Science+Business Media Dordrecht 2015

Abstract Adolescent poverty is associated with increased antisocial and decreased prosocial behaviors. Attenuating these negative effects is relevant for both individual and societal well-being. Research exploring how youth in poverty can escape antisocial behaviors and move toward prosocial behaviors has been limited primarily to risk factors. From a strengths perspective, we sought to understand how a potential resiliency factor—purpose in life—could protect youngsters from the deleterious effects of poverty. We conceptualized purpose in life as a central, future-oriented, goal-organizing framework that provides adolescents reasons to resist antisocial behavior and engage in prosocial behaviors. In moderation analyses, purpose in life mitigated the effects of poverty on antisocial behavior (i.e., disobedience and bullying), but failed to boost prosocial traits and behaviors for youth in poverty. We emphasize the importance of developing a sense of purpose in economically disadvantaged youth for bettering their lives and communities.

**Keywords** Purpose in life · Positive youth development · Poverty

## 1 Introduction

In 2013, approximately 20 % of youth under the age of 18 in the United States lived in poverty (Census 2014), and the number of U.S. children living in poverty has been on an upward trend since 2000 (Moore et al. 2009). Youth raised in poverty are at increased risk for numerous negative outcomes (Bradley and Corwyn 2002; Brooks-Gunn and Duncan 1997), including academic difficulties and high school dropout (Teachman et al. 1997; Youngblade et al. 2007), behavioral and emotional problems (McLoyd 1997), and a greater likelihood of living in poverty as adults (Corcoran and Chaudry 1997; Vartanian 1999).

K. A. Machell · D. J. Disabato · T. B. Kashdan (⋈) Department of Psychology, George Mason University, MS 3F5, Fairfax, VA 22030, USA e-mail: tkashdan@gmu.edu



<sup>&</sup>lt;sup>1</sup> Poverty is defined as an income of \$23,283 or less in 2012 for a family of four with two children.

Furthermore, adolescents living in poverty are more likely than their middle or upper class peers to engage in risk-taking and antisocial behaviors (Moore and Glei 1995; Sampson and Laub 1994). This body of research supports the notion that youth poverty is a major concern for psychosocial development.

Given the substantial literature demonstrating the negative impact of poverty on youth development, it is essential that we identify factors that might mitigate these deleterious effects. The emerging positive youth development (PYD) model emphasizes strength-based approaches (Sesma et al. 2005). If we want to understand how to promote well-being and support the optimal development of young people, research has to include healthy as well as unhealthy outcomes (Lippman et al. 2011). Not all children and adolescents growing up in poverty engage in antisocial behaviors or befall the negative effects outlined above (Conger et al. 1997). Identifying and understanding the resiliency factors against poverty is one way to promote the well-being of disadvantaged youth.

Purpose in life could be one such factor by insulating youth against the risks associated with living in poverty and supporting PYD. Much like the adult literature on purpose in life (McKnight and Kashdan 2009), youth purpose researchers have yet to agree on the definition of the construct (Burrow et al. 2010). However, much of the emerging literature on youth purpose converges on purpose in life as a "stable and generalized intention to accomplish something that is at once meaningful to the self and of consequence to the world beyond the self" (Damon et al. 2003, p. 121). A purpose in life creates an overarching, future-oriented framework for youth to organize and focus their goals (Damon 2008). In addition, the drive to make a difference and contribute to the world is central to purpose in life.

A purpose is future-oriented and thus distinct from the short-term, low-level aims that might comprise daily life (Bronk and Finch 2010). A global sense of purpose can motivate the efforts of everyday living and give meaning to daily activities by connecting them to an overarching life goal (Kashdan and McKnight 2013; Kashdan and Steger 2007). To give a broad example, an adolescent might have the lower-level goal of practicing piano every day. On a higher level, the adolescent's larger purpose motivating this daily activity may be the drive for continued musical self-improvement.

# 1.1 Purpose in Life and Antisocial Behavior

Adolescents living in poverty who do not have a broad purpose to motivate their goals might struggle to engage in effortful, future-oriented activities. Instead, some adolescents may resort to actions that provide only temporary benefits. One poignant example is that of a teenage boy who, when asked about his future, stated, "I don't try to have long term goals. I don't think too far in the future. It's not important to have goals" (Damon 2008, p. 62). The environmental risks and challenges associated with living in poverty are an obstacle to future-oriented thinking and instead promote, and may even necessitate, a short-term, self-focused frame of mind (Nurmi 1991; Nurmi et al. 1994). Short-term goals might help youth survive the daily challenges associated with poverty, but will do little to move youth forward toward a meaningful future.

Teens living in poverty who do think about their future tend to feel hopeless about their prospects. Youth in poverty without a sense of purpose in life are more likely to experience hopelessness, and in turn, engage in deviant and risky behaviors including violence, substance use, early sexual activity, and even accidental injury (Bolland 2003; Damon 1995). Persistent poverty in childhood is linked with increases in antisocial behavior over



time, suggesting that chronically poor youth become further and further detached from appropriate social behavior (McLeod and Shanahan 1996).

Purpose in life may attenuate the relationship between economic disadvantage and antisocial behaviors in adolescence. Adolescents who have meaningful purposes toward which to direct their efforts may be less likely to engage in antisocial behaviors because they have greater hope for a meaningful future. For example, teens dedicated to a life goal of getting an education may choose to work a minimum wage job. This activity might provide little meaning and satisfaction on its own, but if connected to the larger purpose of putting oneself through college, could be quite rewarding and motivating. Alternatively, teens that lack this same sense of purpose might be less likely to endure the temporary displeasure of a low-wage job. Instead they may resort to antisocial actions motivated by momentary gains, such as stealing.

This proposed function of purpose in life is consistent with existential theory, which suggests that purpose in life provides a sense of potentiality, and instills possibilities for a future life (May 1975). A belief in the possibility of a bright future may be the active resiliency ingredient in a sense of purpose (Benard 1995). Adolescents with a concrete image of future potential that they are working towards may motivate them to relinquish interest in antisocial behaviors. This hypothesis aligns with early theorists' characterization of purpose as an asset that helps people endure, instead of relinquish to, life's hardships (Frankl 1959). Purpose in life may be particularly relevant for impoverished youth, who experience more adversity than their financially stable peers.

## 1.2 Purpose in Life and Prosocial Traits

The majority of research on youth poverty focused on the increased risk for antisocial behaviors while less attention has been given to how growing up in a disadvantaged environment affects the positive aspects of youth development (Moore and Glei 1995). At the individual level, prosocial traits facilitate greater well-being in both youth and adults (e.g., Eisenberg 2003; Weinstein and Ryan 2010). Living in poverty as a young person is associated with lower overall well-being (Bradley and Corwyn 2002; Moore and Glei 1995), life satisfaction (Diener et al. 2010) and happiness (Amato and Zuo 1992). At the societal level, prosocial acts facilitate the reciprocity and cohesion necessary for a community to function. Childhood and adolescence are critical times to nurture these values because this prosocial disposition tends to formalize before adulthood (Eisenberg 1992). Youth poverty is associated with fewer prosocial acts (Lichter et al. 2002), and low income during adolescence predicts less charitable giving and volunteering in young adulthood (Bandy and Ottoni-Willhelm 2012). Given the number of low-income children and adolescents, identifying ways to promote prosocial traits even in the context of poverty is essential for supporting healthy functioning at both the individual and societal level.

Purpose in life may be one path toward the promotion of prosocial attitudes and behaviors. After all, purpose involves an intention to contribute to meaningful causes outside the self. These causes may involve "acting in the larger world on behalf of others" (Cotton Bronk et al. 2009, p. 501). Purpose predicts altruism among teens of all economic backgrounds (Noblejas de la Flor 1997; Shek et al. 1994), but could be especially beneficial for disadvantaged youth. According to Maslow (1958), the insecurity associated with living in poverty threatens adolescents' immediate physiological and safety needs making it difficult to have prosocial aspirations or plans (Wyman et al. 1993). However, greater purpose in life could work against this process by providing the sense of hope necessary for youth to envision and act upon other-oriented goals (Burrow et al. 2010; Cotton Bronk et al. 2009).



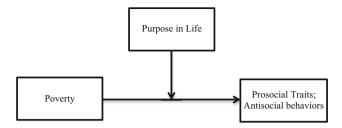


Fig. 1 Proposed theoretical model of purpose in life moderating the negative effects of poverty

For example, a teen in poverty may be so concerned about whether she will have food tomorrow, she may not consider volunteering at a local homeless shelter or boys and girls club. Yet if the teen has a life purpose to decrease poverty in her community, she may be more likely to become involved in community service and volunteering activities. Not only can purpose in life help impoverished youth adapt to the challenges of their environment, but it can also serve as a "motivator of good deeds and galvanizer of character growth" (Damon et al. 2003, p. 119) that may be otherwise missing for teens living in poverty.

# 1.3 The Current Study

The present study explored whether a sense of purpose in life can serve as a resiliency factor for adolescents living in poverty. Specifically, we were interested in understanding how a sense of purpose in life might impact the effects of poverty on both antisocial behaviors (unhealthy outcomes) and prosocial behaviors (healthy outcomes). Antisocial and prosocial behaviors served as our primary dependent variables to be predicted by poverty and purpose in life. Our first hypothesis was that poverty would be negatively related to prosocial traits, and positively related to antisocial behaviors. Our second hypothesis was that purpose in life would moderate these relationships, such that purpose in life would attenuate the negative effect of poverty on both antisocial and prosocial behaviors. We also expected an independent effect of purpose in life on prosocial traits and antisocial behaviors, regardless of poverty status. Figure 1 illustrates the hypothesized relationships.

#### 2 Method

#### 2.1 Data Collection

This study is based on pilot data from The Flourishing Children Project conducted by Child Trends, a nonprofit research center dedicated to understanding the well-being of children and youth<sup>2</sup>. The Flourishing Children Project contains a nationally representative sample of U.S. adolescents in both middle and high school. Data were collected from adolescents aged 12–17 and one of their parents via web-based surveys. Four different survey batteries were used, with dyads randomly assigned to each battery. The full pilot sample consisted of 2,421 parents and 1,915 adolescents, with 1,846 complete parent-adolescent pairs. We

<sup>&</sup>lt;sup>2</sup> ChildTrends bears no responsibility for the current analysis or interpretation by the authors of this paper.



Variable	Relative frequency (%)		
Gender			
Male	52.5		
Female	47.5		
Race			
White	74.6		
Hispanic	13.8		
Black	9.2		
Other/mixed	2.5		
Grade			
High school	50.4		
Middle school	49.6		
Annual family income			
Mid-upper class	65.6		
Lower class	21.3		
Poverty	13.2		

only used data from the two survey batteries that included our constructs of interest. This led to a sample of 1,256 adolescents with a mean age of 14.49 years (SD = 1.68). Table 1 displays other relevant demographic characteristics of the final sample.

#### 2.2 Measures

All scales were created by Child Trends for use in this study. Child trends conducted literature and web reviews for existing measures of their constructs of interest. Following these initial reviews, an expert consensus panel (including the third author) constructed items for the scales through an iterative process. Next, three rounds of cognitive interviews were conducted with adolescents and parents across 15 U.S. cities, and problem items were then adapted for the current pilot survey. Additional information on the development of measures, as well as the cognitive interview protocols for the Flourishing Children project, can be found on the Child Trends website (www.childtrends.org).

The psychometrics of the scales have been established by Child Trends (Lippman et al. 2014). Confirmatory factor analyses supported the unidimensionality of each scale as each model achieved satisfactory fit by conventional standards (Bentler 1990). Cronbach's alphas supported the reliability of each scale by surpassing the cut-off value of .70 (except for purpose in life—see below). Significant correlations between adolescent-reported smoking, depression, and GPA provided evidence for each scales theoretical position within the nomological network of constructs (Cronbach and Meehl 1955). We present the reliability estimates observed in our particular sample below.

Besides demographic and single-item measures, unless stated otherwise, scale constructs of interest were measured on a five point Likert response scale ranging from 1 = not at all like me (my child), to 5 = exactly like me (my child), 1 = strongly disagree, to 5 = strongly agree, or 1 = none of the time, to 5 = all of the time. Total scale scores were created by averaging the items.



# 2.2.1 Purpose in Life—Adolescent Report

Purpose in life was measured with the following three adolescent reported items: (1) *I am doing things now that I feel I am meant to do in my life*, (2) *My life has no meaning* (reverse scored), and (3) *My life will make a difference in the world*. In the current sample, reliability was in the marginally acceptable range (alpha = .58). Although this is below conventional standards, the small numbers of items in the scale likely deflate the estimate (Cortina 1993).

## 2.2.2 Annual Household Income—Parent Report

Annual household income was used as a proxy for poverty status of the adolescent participants. Although Child Trends categorized each adolescent based on poverty status (a function of annual household income, the number of individuals in the household, and the number of children under 18 in the household) into one of three ordinal categories: below the poverty line, between the poverty line and two times the line, and above two times the poverty line, trichotomizing the continuous construct of poverty decreases statistical power, attenuates effect size, decreases reliability, and does not allow for several nonlinear relationships (MacCallum et al. 2002). Therefore, rather than this three-level ordinal variable, we elected to instead use the continuous variable of annual household income to measure poverty. Annual household income was measured by directly asking parents to report their household income before taxes. Parents responded to one of 18 income ranges from less than \$5,000 to more than \$175,000 with variable intervals. Household incomes were then rounded to the median of each response interval. For example, any parent who reported their household income to range from \$35,000 to \$39,999, received an estimated value of \$37,500. Incomes of the current sample formed a normal distribution with slight negative skew. The average income for the current sample was  $$67,548 \text{ (SD} = $38,838).}$ 

## 2.2.3 Prosocial Traits

Adolescent prosocial traits were assessed by creating a composite variable that was comprised of three separate scales: altruism, generosity, and empathy (individual scales described below). Altruism involves a tendency to be motivated to increase others' welfare, and is linked to prosocial behaviors (Batson and Powell 2003). Generosity is a personality trait characterized by willingness to give time, attention, or resources to others without necessarily expecting benefits to the self (Child Trends 2014), and represents another facet of a prosocial disposition (Grusec et al. 2002). Finally, a vast body of literature suggests that empathy, an affective motivational component of helping behavior (Hoffman 2008), is linked with prosocial acts (for reviews, see Dovidio et al. 2006; Eisenberg and Miller 1987) and is thought to be an integral component of a "prosocial personality" (Penner et al. 2005). We considered these three constructs to represent a cluster of prosocial traits. Details on the creation of this composite variable are described in the results section.

2.2.3.1 Altruism—Parent and Adolescent Report Altruism was measured with the following four items in response to the stem "I (My child) go out of my way to help others...": (1) Only when it is easy for me (reverse scored), (2) Even if it requires a lot of time, (3) Even if the person is a total stranger, (4) Even if it is hard for me. We used both the adolescent and parent reported versions of the scale. In the current sample, the



adolescent and parent reported measure both demonstrated acceptable reliability (alpha = .72 and .85, respectively).

2.2.3.2 Generosity—Parent and Adolescent Report Generosity was measured with six items. The following three items contained no stem: (1) I (My child) enjoy sharing My things with others, (2) When I (My child) help out a friend, I (My child) expect something in return (reverse coded), (3) I (My child) do nice things for others without being asked. The following three items contained the stem "If needed, I (My child) am willing to help My family by...": (1) Buying fewer things for myself, (2) Giving up activities and trips that cost money, (3) Giving up free time to help around the house. We used both the adolescent and parent reported versions of the scale. In the current sample, the adolescent and parent reported measure both demonstrated acceptable reliability (My child) enjoy sharing My things My the My child) expect something in return (My child) expect something in return (My child) expect something in return (My child) expect something in My child) expect something My child) expect someth

2.2.3.3 Empathy—Parent and Adolescent Report Empathy was measured with the following five items: (1) I feel bad when someone gets their feelings hurt, (2) I am happy when others succeed, (3) I understand how those close to me feel, (4) It is important for me to understand how other people feel, (5) I am not happy when others succeed (reverse coded). We used both the adolescent and parent reported versions of the scale. In the current sample, the adolescent and parent reported measure both demonstrated marginal (alpha = .59) and acceptable (alpha = .72) reliability, respectively.

## 2.2.4 Prosocial Behavior—Parent Report

In addition to considering adolescent prosocial traits, we also included a behavioral indicator of prosocial tendencies. Volunteering was measured with the following parent reported item: "During the past 12 months, how often has your child been involved in any type of community service or volunteer work at school, church, or in the community?" Parents responded on a four point likert count scale ranging from 1 = never, to  $4 = once\ a$  week or more. In the current subsample, the item demonstrated concurrent validity with significant positive relationships between gratitude, spirituality, and life satisfaction, and significant negative relationships between smoking and depression symptoms.

# 2.2.5 Antisocial Behavior

Antisocial behaviors are actions that harm or lack consideration for the well-being of others and go against social norms (Berger 2015). To measure antisocial behaviors in the present study, we used single-item measures of disobedience, bullying, and fighting. Many studies have operationalized antisocial behavior similarly, including aggressive (e.g., fighting) and non-aggressive (e.g., lying) acts (e.g., Donnellan et al. 2005). We separated antisocial behaviors by informant (parent vs. adolescent) due to issues of commensurability.

2.2.5.1 Parent Report Parent perceptions of antisocial behavior were measured with the following two parent reported items in response to the stem "During the past month, how often have the following been true for your child": (1) was disobedient, and (2) bullied or was cruel or mean to others. In the current sample, the measure demonstrated marginal reliability (alpha = .59).



Table 2 Zero-order correlations, means, and standard deviations for observed measures

	-	2	3	4	5	9	7	~	6	10	Ξ
1. Income	ı										
2. Purpose	*20.	ı									
3. Altruism (A)	.04	.25***	ı								
4. Generosity (A)	02	.40***	.53***	ı							
5. Empathy (A)	.03	.48***	.43***	.61***	ı						
6. Altruism (P)	**80'-	.31***	.50***	.47**	.37***	ı					
7. Generosity (P)	*90'-	.24***	.31***	.48***	.29***	.58***	I				
8. Empathy (P)	01	.37***	.34***	<u>*</u> *	.53***	***09"	.48***				
9. Antisocial (P)	05	28	16***	27***	20***	31***	41***	42***	I		
10. Fighting <sup>pb</sup>	11**	12**	05	13**	16***	07*	16***	16***	.22***	ı	
11. Volunteering	.10**	.23***	.19***	.18***	.10**	.22***	.17***	.16***	12**	00.	ı
Mean	$6.75^{\dagger}$	3.94	3.28	3.60	3.87	3.31	3.46	3.75	16.6	0.16	1.18
SD	$3.88^{\dagger}$	0.76	0.79	0.72	0.65	0.83	0.46	3.42	3.14	0.37	0.94
Cronbach's α	ı	.58	.72	69:	.59	77.	.70	.72	.59	ı	ı

\* p < .05, \*\* p < .01, \*\*\* p < .001, A adolescent report, P parent report, † 10,000 s, pb point-biserial correlation



2.2.5.2 Adolescent Report Adolescent perceptions of antisocial behavior were measured with the following adolescent reported item: During the past 12 months, how many times were you in a physical fight? Adolescents responded on an eight point likert count scale ranging from 1 = 0 times, to 8 = 12 or more times. Because most of the variance was represented as either zero or any times, the responses were dichotomized for ease of interpretation.

#### 3 Results

To examine how poverty (estimated using a continuous measure of annual household income) and purpose in life impact prosocial traits and antisocial behaviors, three primary analyses were conducted. First, we confirmed the initial validity of the measurement scales of interest by testing relationships between gratitude, spirituality, and life satisfaction, depression, and smoking. Second, correlations were run to assess the relationships between annual family income, purpose in life, and our outcomes of interest. Second, we tested whether purpose in life attenuated the negative effects of poverty on adolescent prosocial and antisocial outcomes. We followed the procedures of Aiken and West (1991) to test interaction effects via multiple regression. We centered both the predictor (i.e., annual household income) and moderator (i.e., purpose in life) to have a mean of zero, but kept the standard deviations constant. We performed simultaneous multiple regressions where with the main effects interaction term entered together. If a significant interaction was found, simple slope analyses were conducted to determine the strength and significance of the annual household income and outcome relationship at various levels of purpose in life.

# 3.1 Preliminary Analyses

## 3.1.1 Descriptive Statistics

A summary of descriptive statistics and bivariate correlations can be found in Table 2.

Annual household income was unrelated to both parent and adolescent reports of antisocial behaviors, but was positively related to purpose in life and negatively related to parent reported altruism and generosity. Purpose in life was negatively related to parent reports of antisocial behavior, and positively related to parent and teen reported altruism, generosity, and empathy.

#### 3.1.2 Prosocial Traits Composite Variable

We created the composite variables of both adolescent and parent reported prosocial traits by conducting exploratory factor analyses (EFA). The principle axis factoring estimation method was used in order to minimize measurement error when capturing a latent construct (Fabrigar et al. 1999). The total altruism, generosity, and empathy scale scores were used in the EFAs. The correlations between the adolescent and parent reported scales are bolded in Table 2. Only one factor was extracted without rotation as we were only interested in the communalities between the three manifest indicators. Over half of the variance was extracted for both the adolescent reported ( $\lambda = 1.62$ ; 54.0 %) and parent reported ( $\lambda = 1.69$ ; 56.5 %) factors. Table 3 reports the factor loadings for each EFA. Standardized factor scores were saved via Bartlett's method



Indicator	Adolescent report	Parent report
Altruism	.61	.86
Generosity	.86	.68
Empathy	.71	.70

**Table 3** Factor loadings for prosocial traits composite variable

because it is shown to create unbiased estimates of a participant's score on a latent variable (DiStefano et al. 2009).

## 3.2 Primary Regression Analyses

We tested the hypotheses that purpose in life would moderate the relationship between annual household income and the outcomes of interest. We transformed annual household income using the natural logarithm to model the stronger influence of lower income rates of change compared with higher income rates of change. Table 4 shows the results from the multiple regression analyses. Ordinary least squares (OLS) regression was used for the outcomes of prosocial traits, prosocial behavior, and parent reported antisocial behaviors. The t-values indicate statistical significance, while the squared semi-partial correlations indicate effect size. Binary logistic regression was used for the outcome of adolescent reported antisocial behaviors. Wald Z statistics indicate statistical significance, while the odds ratios and McFadden's pseudo r squared indicate effect size. Annual household income had main effects on parent reported prosocial behavior and adolescent reported antisocial behavior. There was a main effect of purpose in life on all outcomes. Purpose in life only moderated the effect of annual household income on parent reported antisocial behavior, which is bolded in Table 4.

# 3.3 Simple Slope Analyses

To better understand the significant interaction between income and purpose in life predicting parent-reported antisocial behavior, we conducted simple slopes analyses according to Aiken and West (1991). Simple slopes analyses test whether the annual household income and antisocial behavior slopes are significantly different than zero at various levels of purpose in life; more specifically, at one standard deviation above and below mean purpose in life. At one standard deviation below mean purpose in life, the household income and antisocial behavior slope was significantly different from zero (Beta = -.161; b = -.13; t = -2.94; p < .01). The nonsignificant main effect of annual household income in the primary regression analysis states that the annual household income and antisocial behavior slope does not significantly differ from zero at the mean of purpose in life (Beta = -.058; b = -.047; t = -1.69; p = .095). At one standard deviation above mean purpose in life, the household income and antisocial behavior slope was not significantly different from zero (Beta = .045; b = .037; t = 1.04; p = .231). Although annual household income did not have a significant effect on antisocial behavior when purpose in life was moderate to high, it did have a significant effect when purpose in life

 $<sup>^3</sup>$  The squared semi-partial correlation for the interaction term is equal to the change in  $R^2$  from a hierarchical regression analysis where the main effects are entered in step 1 and the interaction effect, after controlling for the main effects, is entered in step 2.



Table 4 Multiple regression results

	В	b	t	$sr^2$
Prosocial traits (A)				
Income	020	024	-0.69	.000
Purpose	.45	.54	15.3***	.200
Interaction	043	067	-1.46	.002
Prosocial traits (P)				
Income	020	023	-0.63	.000
Purpose	.35	.43	11.3***	.125
Interaction	.016	.026	0.50	.000
Prosocial behavior (P)				
Income	.086	.10	2.56*	.007
Purpose	.23	.29	6.86***	.051
Interaction	.00	.00	.04	.000
Antisocial behavior (P)				
Income	057	047	-1.69	.003
Purpose	28	24	-8.55***	.078
Interaction	.096	.011	2.87**	.009
	OR	b	Wald Z	Pseudo-∆R <sup>2</sup>
Antisocial behavior (A)				
Income	0.77	026	-2.36*	.006
Purpose	0.67	40	-3.56***	.015
Interaction	1.11	.11	0.76	.001

<sup>\*</sup> p < .05, \*\* p < .01, \*\*\* p < .001, B standardized beta weight, b unstandardized regression weight, t value,  $sr^2$  squared semi-partial correlation, OR odds ratio, Pseudo- $\Delta R^2$  McFadden's pseudo r squared

was low. Figure 2 displays the simple slopes with annual household income transformed back into its original units.

# 4 Discussion

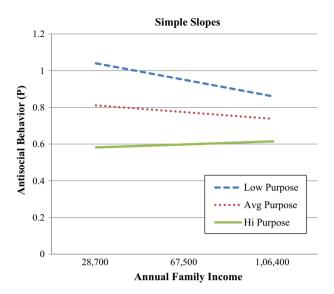
The current study examined purpose in life as a potential resiliency factor for low-income adolescents. We considered how purpose in life might moderate the relationships between poverty, prosocial traits, and antisocial behaviors. Purpose in life did not influence the relationship between poverty and prosocial traits, behaviors or adolescent-reported antisocial fighting behaviors. Purpose in life did, however, attenuate the relationship between poverty and parent-reported antisocial disobedience and bullying behavior. Youth in poverty engaged in fewer instances of disobedience and bullying behaviors when they had a greater sense of purpose in life.

# 4.1 Purpose in Life and Antisocial Behavior

Purpose in life might reduce antisocial behavior among impoverished youth because a sense of purpose creates hope for a better future. Purpose in life allows youth to envision



Fig. 2 The moderating effect of purpose in life on the relationship between household income and parent reported antisocial behaviors



and produce effort toward a more idealized version of themselves (compared with their current sense of self or trajectory) such as going to college or reaching the upper social class (Oyserman and Markus 1990). Other research has linked positive expectations for the future with better adjustment, even in the face of high stress (Wyman et al. 1993). Youth may disincentive behaviors that put these potential ideal selves at risk of never developing. But without these potential ideal selves and the hope that they can become a reality, adolescents might look to other sources of information to guide their behavior. For example, low-income adolescents who lack a sense of purpose might instead look to the normative potential selves in their communities, which may be characterized by antisocial behaviors ranging from school bullying to more serious criminal activity (Hurd et al. 2009).

Furthermore, purpose in life may generate feared potential selves that motivate teenagers to steer clear of delinquent behaviors by preventing a bad outcome, rather than creating a good one (Oyserman and Markus 1990). For example, a disadvantaged youngster may have the life purpose to not end up like one of his or her parents (e.g., jail inmate). While positive purposes and potential selves can be thought of as approach purposes, their feared versions can be thought of as avoidance oriented purposes, analogous to the literature on approach/avoidance motivation (Elliot 2006). Although avoidance oriented purposes tend to predict lower well-being (Coats et al. 1996; Kashdan et al. 2010), they may be helpful in the specific context of preventing adolescent antisocial behaviors.

The protective effect of purpose in life was only significant for the parent-reported antisocial behaviors of disobedience and bullying. Purpose in life did not significantly influence the relationship between poverty and the adolescent-reported antisocial behavior of fighting. Although physical fighting overlaps with bullying behavior, most bullying involves nonviolent teasing and rumor spreading (Craig and Edge 2008). One explanation for this discrepancy may be that disobedience and bullying are qualitatively different from fighting. While disobedience and bullying are initiated by the individual, a fight can be started by an aggressive peer even when the individual has nonviolent intentions. Thus, while teens may be able to use strengths such as purpose in life to steer clear of



disobedience and bullying, this may not be possible for all fights. Another potential explanation is whether the behavior was reported by parents (i.e., disobedience, bullying) versus adolescents (i.e., fighting). Parents may be quicker to report antisocial behaviors compared with adolescents due to social desirability of self-enhancement biases. This could have led to attenuated reliable measurement variance (unfortunately, with a single-item measure, an estimate of internal consistency is not possible). We are unable to fully explain why our results differed across type of antisocial behavior; however future research should further explore this area to illuminate alternative explanations.

# 4.2 Purpose in Life and Prosocial Traits and Behaviors

Although there was a main effect of purpose in life on prosocial traits and behavior for all the teens in our sample, we did not find that purpose in life uniquely predicted increases in these outcomes for teenagers in poverty. It may be that youngsters in poverty do not have more prosocial purposes than their middle to upper class peers. In general, teenagers have the same number of purposes related to the self as they do related to others (Bronk et al. 2010). Self-oriented purposes may reflect high school life (e.g., academics, sports, music, social status) or future adult life (career, wealth, fame) and be unrelated to the domain of prosocial activity (Kashdan and McKnight 2009, 2013; McKnight and Kashdan 2009). Purpose in life may still promote prosocial values and behavior when the content of the purpose is otheroriented (e.g., purposes related to family, romantic relationships, or social justice) for teenagers in poverty; however, the non-significant interaction suggests that this benefit is no greater than for their more financially secure peers. This does not diminish the importance of encouraging prosocial purposes for adolescents in poverty. The literature clearly demonstrates the benefits of prosocial purposes, with positive links to academic motivation and achievement and healthy identity formation in adolescence (Damon 2008). While we did not measure these outcomes in the present study, future adolescent purpose research should consider these potential benefits of prosocial purposes for low-income youth.

#### 4.3 Practical Implications

This research highlights the importance of helping youth in poverty develop a sense of purpose in life. Youth in poverty engaged in fewer instances of disobedience and bullying behaviors when they had a greater sense of purpose in life, suggesting that purpose may be an important protective factor for disadvantaged adolescents. How might parents or teachers help teens cultivate this protective factor? Emphasizing a future-oriented time perspective may be one way to increase the number of youth who feel a sense of purpose. A general future time perspective is linked to greater achievement of future goals, more desire for consistency, and fewer risk behaviors and impulsivity (Zimbardo and Boyd 1999). Teachers and parents should focus on helping youth see beyond short-term gains (i.e., a score on a single exam) to focus on long-term goals (i.e., finding a passion to build a career with) that have the potential to provide fulfillment and meaning (Damon 2008). School-based interventions should include conversations about what adolescents find meaningful and important; parents should seek to help their children identify goals and commitments that are consistent with their larger life aspirations (Wong and Wong 2012). Caregivers and educators alike must work against the "culture of short horizons" (Damon 2008, p. 105) to steer youth away from temporary, short-lived endeavors and toward a purpose-driven life.



#### 4.4 Limitations and Future Directions

The current findings should be interpreted with several caveats. Direction of causality cannot be inferred from the current study because constructs of interest were measured at the same time point. While we found a moderating effect of purpose in life, we cannot determine whether purpose in life influences a decrease in antisocial behavior *over time* for adolescents living in poverty. Notably, it is possible that the effect may strengthen over time. Adolescents who are just beginning to discover a purpose may commit to more purposeful behaviors as time goes on. Future research should examine how these relationships function longitudinally or at the minimum, examine within-person behavioral changes over time.

Another important limitation is the possibility that several measures lack sufficient construct validity. All measures in our study were created by Child Trends for The Flourishing Child Project, meaning that these measures have not been previously used in other samples. Although the measures demonstrated sufficient unidimensionality and convergent and divergent validity, it is unclear whether similar results would be obtained using different methods of assessment. The observed relationships should be replicated using alternative measures of purpose in life, antisocial behaviors, and prosocial traits and behaviors.

A relevant direction for future research on adolescent purpose is to examine the specific types of purposes that adolescents create. This would advance our efforts to understand what types of purposes are healthiest to aim for. Do self-oriented or prosocial, approach or avoidance oriented, family or career oriented purposes, result in greater well-being and optimal functioning? Which type of purpose is most protective for adolescents living in poverty? These questions could be addressed by research that includes assessments of the types of purposes adolescents create, in addition to whether or not they feel they have a sense of life purpose (e.g., Bronk et al. 2010). More sophisticated methodology could also enhance our understanding of the potential benefits of youth purpose. Daily diary studies can investigate whether adolescents might engage in fewer antisocial behaviors on days when they feel a greater sense of purpose in life (for an example of this within-person approach in adults, see Kashdan and McKnight 2013). Finally, if purpose in life is a robust resiliency factor, the next stage of work will need to focus on the mechanisms that account for when and why.

# 5 Conclusion

The current study demonstrated the potential of purpose in life to serve as a resiliency factor for adolescents living in poverty. Purpose in life diminished the relationship between poverty and antisocial behaviors for the youth in our study. It may be especially important to consider purpose in life for adolescents, as many researchers consider adolescence a critical period for developing and committing to identity and goals for the future (Hill and Burrow 2012). Theories of personality development have suggested that it is during the teenage years when it is critically important for healthy identity development to become a fully functioning adult (Erikson 1950; Maslow 1958; May 1975)—and thus, an ideal period to dedicate time and effort toward the identification of a sense of purpose, and experimentation with ways in which to devote effort toward a purpose. Antisocial behavior in adolescence is associated with a wide range of individual and community problems (Farrington 2005). This highlights the necessity of identifying and



promoting resiliency factors, such as purpose in life, that can reduce adolescent antisocial behavior.

#### References

- Aiken, L. S., & West, S. G. (1991). Multiple regression: testing and interpreting interactions. Newbury Park, CA: Sage Publications.
- Amato, P. R., & Zuo, J. (1992). Rural poverty, urban poverty, and psychological well-being. The Sociological Quarterly, 33, 229–240.
- Bandy, R., & Ottoni-Wilhelm, M. (2012). Family structure and income during the stages of childhood and subsequent prosocial behavior in young adulthood. *Journal of Adolescence*, 35, 1023–1034.
- Batson, C. D., & Powell, A. A. (2003). Altruism and prosocial behavior. In T. Millon & M. J. Lerner (Eds.), Handbook of psychology: Personality and social psychology (pp. 463–484). Hoboken, NJ: Wiley.
- Benard, B. (1995). Fostering resilience in children. ERIC Digest, Retrieved from http://eric.ed.gov/
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238–246. Berger, K. S. (2015). *The developing person through childhood and adolescence* (10th ed.). New York: Worth Publishing.
- Bolland, J. M. (2003). Hopelessness and risk behaviour among adolescents living in high-poverty inner-city neighbourhoods. *Journal of Adolescence*, 26, 145–158.
- Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. Annual Review of Psychology, 53, 371–399.
- Bronk, K. C., & Finch, W. H. (2010). Adolescent characteristics by type of long-term aim in life. *Applied Developmental Science*, 14, 35–44.
- Bronk, K. C., Finch, W. H., & Talib, T. L. (2010). Purpose in life among high ability adolescents. *High Abilities Studies*, 21, 133–145.
- Brooks-Gunn, J., & Duncan, G. J. (1997). The effects of poverty on children. *The Future of Children*, 7, 55–71.
- Burrow, A. L., O'dell, A. C., & Hill, P. L. (2010). Profiles of a developmental asset: Youth purpose as a context for hope and well-being. *Journal of Youth and Adolescence*, 39, 1265–1273.
- U. S. Census Bureau (2014). Income and poverty in the United States: 2013. Retrieved 14 Dec 2014 from http://www.census.gov/hhes/www/poverty/data/index.html
- Child Trends (2014). Positive indicators project. Child Trends. Retrieved from http://www.childtrends.org/our-research/positive-indicators/positive-indicators-project/
- Coats, E. J., Janoff-Bulman, R., & Alpert, N. (1996). Approach versus avoidance goals: Differences in self-evaluation and well-Being. Personality and Social Psychology Bulletin, 22, 1057–1067.
- Conger, R. D., Conger, K. J., & Elder, G. H. (1997). Family economic hardship and adolescent adjustment: Mediating and moderating processes. In G. J. Duncan & J. Brooks-Gunn (Eds.), Consequences of growing up poor (pp. 288–310). New York: Russell Sage Found.
- Corcoran, M., & Chaudry, A. (1997). The dynamics of childhood poverty. The Future of Children, 7, 40–54.
  Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. Journal of Applied Psychology, 78, 98–104.
- Cotton Bronk, K., Hill, P. L., Lapsley, D. K., Talib, T. L., & Finch, H. (2009). Purpose, hope, and life satisfaction in three age groups. The Journal of Positive Psychology, 4, 500–510.
- Craig, W., & Edge, H. M. (2008). Bullying and fighting. In W. F. Boyce, M. A. King & J. Roche (Eds.), Healthy settings for young people in Canada (pp. 91–104). Ottawa: Public Health Agency of Canada.
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. Psychological Bulletin, 52, 281–302.
- Damon, W. (1995). Greater expectations: Overcoming the culture of indulgence in our homes and schools. New York: Free Press.
- Damon, W. (2008). The path to purpose: Helping our children find their calling in life. New York: Simon and Schuster.
- Damon, W., Menon, J., & Cotton Bronk, K. (2003). The development of purpose during adolescence. Applied Developmental Science, 7, 119–128.
- Diener, E., Kahneman, D., & Helliwell, J. (2010). *International differences in well-being*. Oxford: Oxford University Press.
- DiStefano, D., Zhu, M., & Mindrila, D. (2009). Understanding and using factor scores: Considerations for the applied researcher. *Practical Assessment, Research*, & Evaluation, 14, 1–11.
- Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., Moffitt, T. E., & Caspi, A. (2005). Low self-esteem is related to aggression, antisocial behavior, and delinquency. *Psychological Science*, 16, 328–335.



Dovidio, J. F., Piliavin, J. A., Schroeder, D. A., & Penner, L. A. (2006). The social psychology of prosocial behavior. Hillsdale, NJ: Erlbaum.

- Eisenberg, N. (1992). The caring child. Cambridge, MA: Harvard University Press.
- Eisenberg, N. (2003). Prosocial behavior, empathy, and sympathy. In M. H. Bornstein, L. Davidson, C. L. M. Keyes, & K. A. Moore (Eds.), *Well-being: Positive development across the life course* (pp. 253–267). Mahwah, NJ: Lawrence Erlbaum.
- Eisenberg, N., & Miller, P. (1987). Empathy and prosocial behavior. *Psychological Bulletin*, 101, 91–119. Elliot, A. J. (2006). The hierarchical model of approach-avoidance motivation. *Motivation and Emotion*, 20, 111–116.
- Erikson, E. H. (1950). Childhood and society. New York: Norton.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4, 272–299.
- Farrington, D. P. (2005). Childhood origins of antisocial behavior. Clinical Psychology & Psychotherapy, 12, 177–190.
- Frankl, V. E. (1959). Man's search for meaning. Boston, MA: Beacon Press.
- Grusec, J. E., Davidov, M., & Lundell, L. (2002). Prosocial and helping behavior. In C. H. Hart & P. K. Smith (Eds.), Blackwell handbook of childhood social development (pp. 457–474). Malden, MA: Blackwell.
- Hill, P. L., & Burrow, A. L. (2012). Viewing purpose through an Eriksonian lens. *Identity*, 12, 74-91.
- Hoffman, M. L. (2008). Empathy and prosocial behavior. Handbook of Emotions, 3, 440-455.
- Hurd, N. M., Zimmerman, M. A., & Xue, Y. (2009). Negative adult influences and the protective effects of role models: A study with urban adolescents. *Journal of Youth and Adolescence*, 38, 777–789.
- Kashdan, T. B., Breen, W. E., & Julian, T. (2010). Everyday strivings in war veterans with posttraumatic stress disorder: Suffering from a hyper-focus on avoidance and emotion regulation. *Behavior Therapy*, 41, 350–363.
- Kashdan, T. B., & McKnight, P. E. (2009). Origins of purpose in life: Refining our understanding of a life well lived. *Psychological Topics*, 18, 303–316.
- Kashdan, T. B., & McKnight, P. E. (2013). Commitment to a purpose in life: An antidote to the suffering by individuals with social anxiety disorder. *Emotion*, 13, 1150–1159.
- Kashdan, T. B., & Steger, M. F. (2007). Curiosity and pathways to well-being and meaning in life: Traits, states, and everyday behaviors. *Motivation and Emotion*, 31, 159–173.
- Lichter, D. T., Shanahan, M. J., & Gardner, E. L. (2002). Helping others? The effects of childhood poverty and family instability on prosocial behavior. Youth and Society, 34, 89–117.
- Lippman, L. H., Moore, K. A., Guzman, L., Ryberg, R., McIntosh, H., & Ramos, F. (2014). Flourishing children: Defining and testing indicators of positive development: Pilot study and psychometric analyses. New York: Springer.
- Lippman, L. H., Moore, K. A., & McIntosh, H. (2011). Positive indicators of child well-being: a conceptual framework, measures, and methodological issues. *Applied Research in Quality of Life*, 6, 425–449.
- MacCallum, R. C., Zhang, S., Preacher, K. J., & Rucker, D. D. (2002). On the practice of dichotomization of quantitative variables. *Psychological Methods*, 7, 19–40.
- Maslow, A. H. (1958). A dynamic theory of human motivation. Cleveland, OH: Howard Allen Publishers. May, R. (1975). The courage to create. New York: W. W. Norton & Company.
- McKnight, P. E., & Kashdan, T. B. (2009). Purpose in life as a system that creates and sustains health and well-being: an integrative, testable theory. *Review of General Psychology*, 13, 242–251.
- McLeod, J. D., & Shanahan, M. J. (1996). Trajectories of poverty and children's mental health. *Journal of Health and Social Behavior*, 37, 207–220.
- McLoyd, V. C. (1997). The impact of poverty and low socioeconomic status on the socioemotional functioning of African-American children and adolescents: mediating effects. In R. D. Taylor & M. Wang (Eds.), Social and emotional adjustment and family relations in ethnic minority families (pp. 7–34). Mahwah, NJ: Erlbaum.
- Moore, K. A., & Glei, D. (1995). Taking the plunge an examination of positive youth development. *Journal of Adolescent Research*, 10, 15–40.
- Moore, K. A., Redd, Z., Burkhauser, M., Mbwana, K., & Collins, A. (2009). Children in poverty: Trends, consequences and policy options. Washington, DC: Child Trends.
- Noblejas de la Flor, M. A. (1997). Meaning levels and drug abuse therapy: An empirical study. *International Forum for Logotherapy*, 20, 46–51.
- Nurmi, J. E. (1991). How do adolescents see their future? A review of the development of future orientation and planning. *Developmental Review*, 11, 1–59.



- Nurmi, J., Poole, M., & Kalakoski, V. (1994). Age differences in adolescent future-oriented goals, concerns, and related temporal extensions in different sociocultural contexts. *Journal of Youth and Adolescence*, 23, 471–488.
- Oyserman, D., & Markus, H. R. (1990). Possible selves and delinquency. *Journal of Personality and Social Psychology*, 59, 112–125.
- Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005). Prosocial behavior: Multilevel perspectives. *Annual Review of Psychology*, 56, 365–392.
- Sampson, R., & Laub, J. (1994). Urban poverty and the family context of delinquency: A new look at structure and process in a classic study. Child Development, 65, 523–540.
- Sesma, A., Mannes, M., & Scales, P. C. (2005). Positive adaptation, resilience, and the developmental asset framework. In S. Goldstein & R. B. Brooks (Eds.), *Resilience in children* (pp. 281–296). New York: Kluwer Academic/Plenum.
- Shek, D. T. L., Ma, H. K., & Cheung, P. C. (1994). Meaning in life and adolescent antisocial and prosocial behavior in a Chinese context. *Psychologia: An International Journal of Psychology in the Orient, 37*, 211–218.
- Teachman, J. D., Paasch, K. M., Day, R. D., & Carver, K. P. (1997). Poverty during adolescence and subsequent educational attainment. In G. J. Duncan & J. Brooks- Gunn (Eds.), Consequences of growing up poor (pp. 382–418). New York: Russell Sage Foundation.
- Vartanian, T. P. (1999). Adolescent neighborhood effects on labor market and economic outcomes. *Social Service Review*, 73, 142–167.
- Weinstein, N., & Ryan, R. M. (2010). When helping helps: Autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psy*chology, 98, 222–244.
- Wong, P. T., & Wong, L. C. (2012). A meaning-centered approach to building youth resilience. In P. T. P. Wong (Ed.), The human quest for meaning: Theories, research, and applications (2nd ed., pp. 585–617). New York: Routledge.
- Wyman, P., Cowen, E., Work, W., & Kerley, J. (1993). The role of children's future expectations in self-system functioning and adjustment to life stress: A prospective study of urban at-risk children. *Development and Psychopathology*, 5, 649–661.
- Youngblade, L. M., Theokas, C., Schulenberg, J., Curry, L., Huang, I. C., & Novak, M. (2007). Risk and promotive factors in families, schools, and communities: A contextual model of positive youth development in adolescence. *Pediatrics*, 119, S47–S53.
- Zimbardo, P. G., & Boyd, J. N. (1999). Putting time in perspective: A valid, reliable individual-differences metric. *Journal of Personality and Social Psychology*, 77, 1271–1288.



Copyright of Social Indicators Research is the property of Springer Science & Business Media B.V. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.