

Indicators of Positive Youth Development: Prosocial Orientation and Community Service*

Peter C. Scales, Ph.D. & Peter L. Benson, Ph.D.**

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**Senior Fellow in the Office of the President, and President, respectively, Search
Institute, Minneapolis, MN

Correspondence to Peter C. Scales, Ph.D., Search Institute, 940 Chestnut Ridge Road,
Manchester, MO 63021; scalespc@search-institute.org

Abstract

A number of constructs have been of interest for decades in exploring young people's connection to the wider community, including prosocial orientation, civic engagement, participation in organized youth activities, and volunteerism/community service. There is a need for adequate measurement of all forms of youth connection to community, but the focus of this paper is on the measurement of young people's prosocial orientation and their commitment to community service. There is a need for both measures of youth as helpers—engagement in the sense of reaching out to others—and youth as social activists. But current measures of youth even as helpers, a broader construct than that of youth as social activists, have some significant weaknesses. These considerations have led us to focus on young people's prosocial orientation and service, and not on their civic knowledge, competence, or political or collective action. We suggest that two kinds of measures are needed to get comprehensively but briefly at this particular dimension of connection to community:

1. the “hours of service” type of measure common in studies of youth community service (*retrospective* behavior report)
2. a measure of broader prosocial orientation that taps both helping attitudes and behavioral intentions to volunteer (attitudes and *prospective* behavior report).

In this paper, we review a number of existing measures of prosocial orientation and community service, and examine an alternative 7-item measure of prosocial orientation that includes attitudes about helping others and behavioral intentions to volunteer in the coming year. In a large and diverse sample of 6th-12th graders, the measure has acceptable internal consistency and evidence of concurrent validity. In combination with developing consensus language for retrospective assessment of community service, this prosocial orientation measure may help provide a better continuum of retrospective and prospective data on an important aspect of youth connection to community than currently exists.

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Search Institute

Introduction

A number of constructs have been of interest for decades in exploring young people's connection to the wider community, including prosocial orientation, civic engagement, participation in organized youth activities, and volunteerism/community service. For example, many of the themes of the current discussion about youth civic engagement are found in the youth participation/youth as resources movement of late 1960s-early 1980s (Kleinbard, 1997). Youth participation then was defined as the chance for young people to engage in "responsible, challenging action that meets genuine needs, with opportunity for planning and decision making affecting others..." (Kleinbard, 1997, p. 7). Youth engagement in the life of the community traditionally has been seen as a critical aspect of healthy development. Such engagement may be expressed in terms of "unselfish acts of caring and kindness" (Haynes & Comer, 1997, p. 79), or described as civic activism that addresses societal problems and works toward social change (Wheeler, 2002).

Contributing to community betterment through helping others may be a sign of young people's emerging civic competence. At the same time, however, it is an important means for "youth to develop their identity...not as a self-enclosed individual achievement, but rather as a social identification that transcends a given moment in time" (Youniss, Bales, Christmas-Best, Diversi, McLaughlin, & Silbereisen, 2002, p. 132). That is, in helping to meet the needs of others than themselves, young people start to think of

themselves as “partners and stakeholders in society” (Bell, 2002), with an interest in the common good that involves the promotion of democratic values and well-being.

Developmental scholars argue too that the bidirectional impact of young people’s shaping of society through civic engagement and the shaping of young people by that civil society is an indispensable criterion for youth to be considered thriving and not merely developing adequately (Lerner, Brentano, Dowling, & Anderson, 2002). Ultimately, such thriving youth not only are contributing to society currently, but through their later adult civic involvements and modeling to the next generations, are key actors in the cultural transmission of the norms and values of civil society.

There is a need for adequate measurement of all forms of youth connection to community, but the focus of this paper is on the measurement of young people’s prosocial orientation and their commitment to community service. The current paper does not focus on connection to community as expressed through participation in school clubs or community youth groups, because such activities may, but do not necessarily, involve the nurturing of helping behaviors. Nor do we focus on civic engagement in the sense of young people contributing to collective actions to address social issues. Volunteer and service activities certainly may involve such activist efforts, but need not (Note 1). Our focus is on the young “citizen as helper.” Walker (2002) notes that a potential problem with this approach is its individualistic bias. Reading to a child, befriending an elderly person, and serving food to the hungry may benefit the recipients and the givers of such help, but not necessarily address the broader social and institutional issues that create “needy” persons in the first place. We think that there is a need for both measures of youth as helpers—engagement in the sense of reaching out to others—and youth as social activists. But our current measures of youth even as helpers, a broader construct than that of youth as social activists, have some significant weaknesses. These considerations have led us to focus on young people’s prosocial orientation and service, and not on their civic knowledge, competence, or political or collective action.

We will suggest that two kinds of measures are needed to get comprehensively but briefly at this particular operationalization of connection to community:

1. the “hours of service” type of measure common in studies of youth community service (*retrospective* behavior report)
2. a measure of broader prosocial orientation that taps both helping attitudes and behavioral intentions to volunteer (attitudes and *prospective* behavior report).

Background/Review of Literature

Community service and service-learning in U.S. schools has grown in popularity over the last two decades, in part as a response to beliefs about the importance of civic engagement, and in part as a means of engaging students more fully in the academic curriculum (Billig, 2002). About half of all U.S. public high schools now include service-learning in the curriculum (National Center for Education Statistics, 1999), and about half of students say they have contributed some volunteering over the last year (Youniss, et al., 2002).

The effort to provide such service experiences is, in a more general sense, an effort to promote young people’s prosocial orientation. Prosocial development has been well-studied for nearly 75 years (Penner, Craiger, Fritzsche, & Freifeld, 1995). However, except for a number of early studies on the effects of community service or service-learning (e.g., Conrad & Hedin, 1981; Hamilton & Fenzel, 1987), studies of prosocial behavior in *adolescents* were few until the early the 1990s (Eisenberg, Miller, Shell, McNalley, & Shea, 1991).

Several components of prosocial orientation have been identified, including empathy and prosocial moral reasoning (Eisenberg, et al., 1991), and helpfulness (Penner, et al., 1995). Empathy itself has been described as multidimensional, including perspective taking, empathetic concern, personal distress, and fantasy components (Davis, 1983). Penner et al. (1995) described two main elements of prosocial orientation, other-oriented empathy (which measures cognition and affect), and helpfulness (which

measures behavioral tendencies). Using their Prosocial Personality Battery (PSB), the researchers suggested that helpfulness may be a better predictor of prosocial behavior because of its relation to self-confidence and self-efficacy. Their results suggested there may be two kinds of helpers—those who help to assist others in need (more empathy motivated), and those who help because of what helping does for themselves (more self-efficacy or mastery motivated). Although the PSB results were obtained only with adults, it is possible that similar differences in helping motivation occur among adolescents.

The results of studies are generally consistent with the theorizing of developmental scholars in that attitudes and behaviors that support and reflect helping others are associated with a host of positive correlates and outcomes. Caring, helpful attitudes and behaviors are examples of young people's interpersonal competencies which have generally been found to be related to numerous indicators of well-being, such as: friendship-making ability (Vernberg, Ewell, Beery, and Abwender, 1994), perceived self-competence (Cauce, 1986), decreased loneliness (Inderbitzen-Pisaruk, Clark, & Solano, 1992), higher levels of helpfulness, sharing, and cooperation (Litvack-Miler, McDougall, & Romney, 1997) and lower levels of aggression and behavior problems (Hastings, Zahn-Walker, Robinson, Usher, & Bridges, 2000). With only a few exceptions (e.g., Rodkin, Farmer, Pearl, & Van Acker, 2000), the literature consistently shows that children with behavior problems tend to be more socially isolated, and that children with prosocial orientations involving generosity, empathy, and being helpful are more popular, well-adjusted, and connected (Rydell, Hagekull, & Bohlin, 1997).

A recent report from the National Commission on Service-Learning (2001) also summarized the weight of evidence from scientific studies on more formal helping behavior, such as youth service and volunteering. The commission noted that children who participated in volunteer activities, such as tutoring younger children, talking with senior citizens, and joining neighborhood revitalization projects, experienced an increased sense of civic engagement and the ability to make a difference, an enhanced motivation to learn, and a moral understanding of service. Participation in community service, volunteering, or service-learning is associated with maintained or increased personal and social responsibility among adolescents, such as:

concern for others' welfare (Scales, Blyth, Berkas, & Kielsmeier, 2000; Melchior, 1997), increased social skills (National Crime Prevention Council, 1995), and higher levels of school achievement (Shumer, 1994; Melchior, 1997). Opportunities to help younger children are frequently a part of service-learning programs for adolescents and elementary school children (Billig, 2002), and studies of tutoring, perhaps the most common form of young people helping children younger than themselves, consistently have found positive effects of tutoring on the young tutors, even more so than among those tutored (Cohen, Kulik, & Kulik, 1982; Yogeve & Ronen, 1982). There is also evidence that participation in volunteer service activities in adolescence is related to subsequent higher importance given to community involvement (Johnson, et al., 1998), and to engaging in similar civic engagement in adulthood (Independent Sector & Youth Service America, 2002; Youniss, et al., 1999; Youniss, et al., 2001).

Some groups of adolescents are more likely than others to engage in helpful behavior, especially formal volunteering. Females, those from intact families, and those with higher family incomes have generally been found to report more service (Johnson, et al., 1998; Youniss, et al., 1999; Eberly & Montemayor, 1998). In a review of 155 studies conducted between 1974-1994, Eisenberg and Fabes (1998) found: 1) prosocial behavior generally increases as children get older; 2) moral reasoning generally becomes less self-oriented and more principle-based as children age; and 3) females generally display more prosocial behavior. However, they cautioned that sex differences are greater for kindness/considerateness than for instrumental help or sharing, and greater when using self-report data. Gender differences in self-reported helping behavior may then reflect conceptions of stereotypes and expectations more than actual behavior..

The social networks young people construct and experience affect the likelihood of volunteering or community service. Research conducted among samples of older children and adolescents confirms that a strong predictor of young people's involvement in community service and volunteering is the degree to which their parents engage in those activities (Stukas, Switzer, Goycoolea, & Simmons, 1999). Moreover, Youniss et al. (2001) found that adolescents' crowd membership was significantly related to service and civic engagement. The "school" crowd, which endorsed studying, getting good grades, and belonging to

school clubs, reported the most social service and the most service of all kinds overall, whereas the “party” crowd did least. School, all-around, and average crowds had more future service intentions than the party crowd, as did school compared to disengaged. Youniss et al. concluded that “service is less a spontaneous outcome of personal motivation and more the result of network and organizational resource availability” (p. 465) in which some youth are more surrounded by like-minded peers and adults than others.

Similarly, in a national study of U.S. adults and adolescents ages 12 to 17, Scales, Benson, and Mannes (in press) found support for Youniss et al’s (2001) contention that network support and prosocial behavior may be linked. Scales et al. reported that the more young people thought helping younger children and being religious was important, and the more often they attended religious services, volunteered in general, and actually helped younger children, the more they reported positive engagement with adults outside their own families. The researchers suggested the results probably reflected bidirectional processes, with prosocial youths’ selecting activity settings in which like-minded adults are a common presence, with the direct and indirect psychosocial influences of those adults further reinforcing the young people’s prosocial attitudes and behaviors.

Overview of Measures of Adolescent Prosocial Orientation and Community Service

Given the strong positive role that prosocial attitudes and behavior, including volunteering, play in both individual development and the strengthening of civil society, it is important to assess their incidence among American adolescents. Ideally, both the attitudinal and behavioral components of prosocial orientation would be assessed. For a variety of reasons, however, existing measures may not be suitable.

Prosocial Orientation

For example, with regard to prosocial orientation, one of the more widely used measures is Conrad and Hedin’s (1981) Personal and Social Responsibility Scale. The total scale had a reported alpha reliability of .83 with 7th graders in the original study, but the full scale includes 12 items across three subscales (Social Welfare, Duty, and Efficacy). The Social Welfare (concern for others) and Duty (felt responsibility to help

others) subscales are perhaps the most relevant for the present purposes, each comprised of four items, but neither alpha reliabilities nor much validity information have been published on the subscales. One study of more than 1,100 6th through 8th graders (Scales, Blyth, Berkas, & Kielsmeier, 2000) did report that, over the course of a school year, students participating in service-learning programs maintained their Social Welfare scores while the control group students declined significantly; no such differences were noted on the Duty subscale. However, in addition to limited psychometric information, the items also use a question and response format that may be insufficiently precise. For example, a sample Social Welfare item is “Some kids are interested in doing something about the problems in their community. Are you like those kids?” The response options are yes, sort of, and no. The general phrasing and limited response options may produce too little variability to be useful in many research settings. Moreover, the SSPRS measures only attitudes.

The Altruistic Behavior Scale was adapted by researchers at the Developmental Studies Center from the original measure of Rushton, Chrisjohn, and Fekken (1981). The 9-item measure has been used with students as young as 4th grade, and has reported alpha reliabilities in the .80s. Students are asked whether they have done specific helping acts, such as helping someone who “fell down,” or stopping someone from “hurting an animal.” Students also are asked if they have done each helping act never, once, a few times, or many times, “since the start of this school year.” Although the alpha reliability is good, and the items are concrete, making the measure useful with younger children as well as adolescents, it too has a number of drawbacks, the most important being that only behavioral reports are measured, not attitudes. The concreteness of the items can also be a drawback, because some may be quite low frequency occurrences for most children, contributing to relatively poor variability of response. Finally, the time referent of “since the start of this school year” is problematic. Clearly, students administered the measure earlier in the school year have less likelihood of having done each act, especially ones that would be low frequency in any case, than students taking the survey more toward the end of the school year.

Penner et al.'s (1995) Prosocial Personality Battery measures "helpfulness," operationally defined as the sum of Personal Distress and Self-Reported Altruism. The 5-item Self-Reported Altruism scale has an alpha of .73 with an adult sample. Respondents are asked how often they have done this action "in the past," on a 1 to 5 scale from Never to Very Often. Sample actions include "I have allowed someone to go ahead of me in line (e.g., supermarket, copying machine, etc.)," and "I have let a neighbor whom I didn't know too well borrow an item of some value (e.g., tools, a dish, etc.)." Although there is a good amount of psychometric information available on this measure, it clearly was intended for adults, not the adolescents or pre-adolescents of interest in the current positive indicators project.

More recently, Carlo, Hausmann, Christiansen, and Randall (2003) reported on the development of the Prosocial Tendencies Measure-Revised, based on a study of 138 middle and high school students. The total measure includes 25 items across six subscales assessing different kinds of prosocial behavior (public, anonymous, helping in dire situations, helping in response to high emotions, being compliant, and altruism). The 6-item altruism scale includes items such as "I often help even if I don't think I will get anything out of it." The altruism scale has acceptable 2-week test-retest reliability and internal consistency, for middle adolescents, but the reported alpha reliability for early adolescents was not acceptable (.59). The PTM-R generally was related in predicted ways to measures of empathy, aggression, and ascription of personal responsibility, suggesting acceptable validity. However, the altruism scale was not significantly related to global prosocial behavior. Thus, although the PTM-R has some promising qualities to be explored in future research, there may also be questions about its use with middle school students, and its validity as a predictor of self-reported prosocial behavior.

Community Service

Identifying a suitable measure of prosocial orientation for youth is important for measuring contribution to community, because current measures directly asking youth about their community service do not appear adequate to use alone. Most current measures of youths' community service or volunteering consist of a single item. For example, in the ongoing Monitoring the Future study of about 16,000 high school seniors

(Bachman, Johnston, & O'Malley, 1993), youth are asked how often they have participated in community service or civic affairs: Not at all, a couple of times a year, weekly, monthly, or daily. In one study using this dataset (Youniss, McLellan, Su, & Yates, 1999), researchers reported that service, together with demographics, and hours of part-time work, could explain 4%-13% of several outcomes, such as intention to vote, marijuana use, and attendance at religious services. When all background characteristics were accounted for, only being Catholic, female, in an intact family, and a higher socioeconomic status predicted service. A moderate amount of part-time work (1-10 hours per week) also predicted service.

Similarly, in the Youth Development Study, a panel study conducted in late 1980s and early 1990s of 1,000 9th graders in St. Paul who were followed for 4 years, Johnson, Beebe, Mortimer, & Snyder (1998) reported that participation in volunteer work was measured with this item: “do you currently do any volunteer work (without pay)? If respondents answered yes, then they were asked for how many hours per week they volunteered and what kind of work it was (later coded to be face-to-face contact with recipients or not). Johnson, et al. found that 68% of both genders did no volunteering in any of the study years; the great majority of volunteers reported 1-5 hours per week. Among both boys and girls, those with higher educational plans and aspirations, GPAs, and intrinsic motivation toward school were more likely to volunteer. Those volunteering subsequently had higher scores on the anticipated importance of community involvement, and expressed more intrinsic than extrinsic work values.

The national evaluation of Learn and Serve America service-learning programs (Melchior, 1997) was a study of 17 programs, and included about 1,000 middle and high school students, with approximately 60% in service-learning programs and 40% in a comparison group). The measure of volunteering in this study was “during the past six months, how often did you do some volunteer or community service work?

*I volunteered _____ days a week.

*On average, I volunteered _____ hours each day.

*I did this for _____ of the 26 weeks during the last 6 months.

Melchior reported that, at the high school level, the comparison group averaged 29 hours volunteering in the last 6 months, versus 57 hours for the service-learning participants. At the middle school level, the comparison group averaged 53 hours versus 71 for the service-learning participants.

In an analysis of the 1996 National Household Education Survey (Nolin, Chaney, and Chapman, 1997), 6th through 12th grade students were asked if they had participated in any community service activity during the current school year. If they responded yes, they were asked if the activity happened once, twice, or more regularly. About half (49%) of students said they had done any service, split roughly evenly between those who participated just once or twice and those who served more regularly. Those most likely to contribute service were female, white, high achieving students, students whose parents had at least a college degree, and those from homes in which an adult also participated in community service.

One of the few studies to use a multi-item measure of service or volunteering was Youniss, McLellan, & Mazer (2001). In their study, 389 suburban Catholic school juniors were asked if they did any voluntary community service during the preceding year that was not done for school credit. If they said yes, they were asked what kind: Social service, working for a cause, tutoring, coaching, child care, or “functionary” work. “Civic engagement,” however, was measured with four factors. *Service intentions* was comprised of several items assessing the reported likelihood of doing service in the upcoming summer, in college, and after college. *Political intentions* measured future intentions to work on a political campaign, boycott a product or service, and demonstrate publicly for a cause. *School clubs* asked about students’ frequency of participation in the past year in school music, drama, art, or school spirit organizations, and participation in other clubs or student government. Finally, *youth groups* measured students’ frequency of participation in church-related youth groups, and in community groups such as 4-H.

Youniss et al. found that students’ “crowd” membership significantly related to service and civic engagement. The “school” crowd, which endorsed studying, getting good grades, and belonging to school clubs, did more social service than other crowds, and the most service overall, and the “party” crowd did

least. School, all-around, and average crowds had more future service intentions than did the party crowd, as did the school crowd compared to the disengaged crowd. The researchers concluded that “service is less a spontaneous outcome of personal motivation and more the result of network and organizational resource availability” (p. 465). They noted that adolescents whose daily routines “put them in touch with the normative adult social world” are connecting to like-minded peers, and “most probably, adults” (similar findings are reported in a national study of adolescents by Scales, Benson, & Mannes, in preparation). These are youth are “steeped with an ethos that is reinforced at almost every turn” (p. 466) in their school and out-of-school peer and adult networks.

In a number of states and cities, single items on volunteering have been added at local discretion to the U.S. Centers for Disease Control and Prevention’s Youth Risk Behavior Survey (YRBS) (Grunbaum, Kann, Kinchen, Williams, Ross, Lowry, & Kolbe, 2002), in order to build a more national database on protective factors. For example, in the 2001 YRBS, Massachusetts youth were asked “In an average month, how many hours do you spend on volunteer work, community service, or helping people outside of your home without getting paid? (0 hours, 1 to 4 hours, 5 to 9 hours, 10 or more hours).” Similarly, North Carolina’s YRBS asked young people “During the past 30 days, how many times did you perform any organized community service as a non-paid volunteer (for example, serving meals to elderly, picking up litter, helping out at a hospital, building homes for the poor, etc.)? (0 times, 1 time, 2 or 3 times, 4 or 5 times, 6 or more times).

Finally, Vermont adolescents were asked “During an average week, how many hours do you spend helping other people without getting paid (such as helping out at a hospital, daycare center, food shelf, youth program, community service agency, or doing other things) to make your community a better place for people to live? (0 hours, 1 hour, 2 hours, 3-5 hours, 6-10 hours, 11 or more hours). Vermont used the identical wording as the measure of the “service to others” asset included in the *Search Institute Profiles of Student Life: Attitudes and Behavior* survey (Benson, Scales, Leffert, & Roehlkepartain, 1999). In an aggregate study of about 100,000 6th through 12th graders who responded to the question in the 1996-1997 school year, 50% said they contributed at least one hour per week of volunteer service, with girls and

middle school students more likely to report doing so (Benson, et al., 1999). Almost identical results were obtained three years later in an aggregate sample of more than 217,000 students surveyed during the 1999-2000 school year (Developmental assets: A profile of your youth, 2001). Similarly, 49% of Vermont high school students said they contributed an average one hour per week of service (Centers for Disease control and Prevention 2002, p. 110).

Summary

This brief review shows that current measures of adolescent service or volunteering largely consist of single items, but service is operationalized in a wide variety of ways that cover a gamut of definitions and time frames. There is still a need for such an item or items in a national system of positive indicators of youth development, but there are several problems with using only that self-report of frequency of service. First, what is the best time frame for such recall? All these referents are in use in current service/volunteering items: Currently, over the last month, during the last year, or during an average week. “Currently” would be the most fresh in respondents’ minds, but since youth volunteering is typically short-lived and sporadic, may be a poor measure of actual volunteer levels. “Average week” gets around that but requires the respondent to determine what constitutes an “average” week. Although arguments can be made for any of these, to our knowledge there is no empirical evidence to suggest one referent over another, and quite different results are obtained depending on the referent. For example, 48.5% of Vermont high school students said they did an average hour or more per week of helping others without getting paid, but 35% of North Carolina high school students said they had done community service one or more times in the last 30 days (Centers for Disease Control and Prevention, 2002, p. 73).

Second, and related to the first issue, how reliable and valid are the measures of recalled hours per week, especially for periods such as the “last year?” With single items predominating, internal consistency reliability is not applicable, and again, to our knowledge, test-retest reliabilities for the single items we have discussed here have not been reported, nor have studies examined the association of these self-reports with actual records of service or volunteer hours.

Equally and perhaps more important, current measures of service/volunteering do not tap prosocial orientation very comprehensively. Differences in students' self-reported hours of service/volunteering may arise from opportunity differences rather than differences in desire to volunteer, or altruistic attitudes. For example, much volunteering/service may be in the context of required school programs (nearly 20% of 6th through 12th graders in one national survey said their schools required community service—Nolin, et al., 1997). But young people required to contribute service may not have the same attitudinal or value-based perspective on helping others as those who do so voluntarily, nor the same commitment to future service. Nor do most existing measures of prosocial orientation seem appropriate. Most are intended for adults, with the language and actions inquired about seeming unsuitable for today's youth. Others use problematic formats or have uncertain psychometric quality, or measure either attitudes or retrospective behavior, but not both.

Ultimately, as Youniss et al. (2002) noted, it is not only current connection to the community that is of interest, but even more whether young people are developing a life-long commitment to community contribution: "putting in hours toward...a service activity has only limited meaning unless the changes within individuals and groups that lead to *continued* commitment and participation are understood (p. 129, emphases added).

Consensus needs to be established on how best to inquire retrospectively about young people's community service, but a measure that combined items tapping adolescents' prosocial attitudes, and their behavioral intentions to contribute volunteer service may conceptually add a more useful supplement to such measures than has as yet been reported. A considerable research literature demonstrates that expressed intentions to do a behavior have generally been found to be significant predictors of the actual subsequent behavior (Ajzen, 2001). If a combined attitude-behavioral intention measure of helping others were also found to strongly predict whether an adolescent contributes volunteer service, it might provide more evidence than current measures about that young person's likely *continued* commitment to this form of community

connection. It also likely would have fewer methodological drawbacks than the current modal approach of simply asking a single item about past service frequency. Used together with a newly accepted standard wording for eliciting retrospective reports of service, this might provide a better continuum of tracking data on adolescent helping attitudes and behavior, as elements of connection to community, than currently exists.

Sample(s)/Database(s)

The measure of prosocial orientation we discuss in this paper is taken from the *Youth Supplement Survey* (YS2). The YS2 was developed as a companion survey to the *Search Institute Profiles of Student Life: Attitudes and Behavior* survey (A&B). The A&B survey is the primary research instrument used by Search Institute for collecting data on youths' reports of experiencing developmental assets. Developmental assets are relationships, opportunities, values, self-perceptions, and skills that help young people develop positively. In the YS2, a number of those developmental assets, and seven thriving outcomes, including "helping others," are measured with more reliable, multi-item measures than they are in the A&B (Scales, Leffert, & Vraa, in press).

We utilized a matched sample of 5,136 6th-12th grade students from Colorado Springs who were administered both the A&B and YS2 in winter 1999. The eligible population was the 15,739 students in grades 6-12 in the district's certified count the fall prior to the survey administration. A "passive" parental consent procedure was used for student participation. Parents were notified prior to the survey administration that they or their children could request that the student not participate and 781 students or their parents declined (5% of the eligible population). Schools were allowed to either sample all students whose parents gave permission or use a random sample of those students in their building, based on their concerns about how best to administratively minimize the impact of the surveying on instructional time. Other students were absent for the survey administration, yielding a total of 9,233 surveys for processing. Data quality controls (e.g., more than 40 responses missing, answering "yes" to use of a fictitious drug) eliminated another 1,000 surveys. Numerous other surveys had to be eliminated because identification

numbers on each of the 2 surveys did not match or because grade and gender on each survey did not match. The final sample was the 5,136 students in grades 6-12 who 1) completed both surveys, 2) had matching identification numbers on each survey, and 3) whose surveys were successfully matched on grade and gender.

A comparison of these 5,136 students with the 4,097 who had to be eliminated because of various survey matching problems showed that the students eliminated were more likely to be males, students of color, and in 9th or 10th grades (they were also more likely to be older, but this age difference was due to the strong correlation between age and grade). A series of ANOVAs (available from authors) showed that the eliminated students reported a lower total number of developmental assets, fewer thriving indicators, and more risk-behavior patterns and developmental deficits than did the final study sample.

The sample comprised 16% each of 6th, 7th, and 9th graders, 17% of 8th graders, 13% each of 10th and 11th graders, and 8% of 12th graders. Ages of students ranged from 11 to 19 years, with a mean age of 14. There was a greater proportion of female than of male students (55% versus 45%). The sample was racially and ethnically diverse, with two-thirds being white and the next 2 largest groups being multiracial (16%) and Latino/Latina youth (8%). Parental education levels were used as proxies for socioeconomic status, with frequencies indicating a diverse sample. Although 47% of mothers and 52% of fathers were reported to have a college degree or graduate school experience, 29% of mothers and 28% of fathers were reported to have only a high school diploma or less.

Measure(s)

Principal components factor analysis with varimax rotation was used to illuminate the empirical structure of the asset exposure and thriving measures. All items with eigenvalues greater than 1 were allowed to enter, and, for this exploratory construction of the YS2, all items with factor loadings of .30 or greater were retained (Kim & Mueller, 1978).

Prosocial orientation was comprised of seven items. The 7-item scale had an acceptable alpha reliability of .72, with no significant difference among males and females.

Table 1 here

Prosocial orientation is a combination of 4 items that assess a young person's attitudes and values about helping others, and 3 items that tap their behavioral intention over the next year to volunteer to help those in need, work to improve their school, or help younger children in formal ways such as by tutoring or coaching them. These intention items clearly do not capture the limitless range of activities in which young people can behave prosocially. But they do seem to reflect some common ways in which young people can be connected to society in a "transcendent way" that helps them "participate in a system of meaning" and promotes their long-term civic identity (Note 2).

Unless otherwise noted, all analyses in this paper use the continuous version of this construct. A binary version was also created for selected analyses. In order to be scored as having a prosocial orientation, students needed to average an "agree" (4 on a 5-point scale) across the 4 attitude items, and had to respond at least "quite likely" (4 on the 5-point scale) to any one of the 3 behavioral intention items. On this basis, 20% of the sample reported a prosocial orientation (Note 3).

Table 2 here

Across the total sample, one attitude item and the 3 behavioral intention items showed good variability. However, as expected, most of the attitude items were skewed to the positive, with from 3-9 times as many

youth saying they agree or strongly agreed as said they disagreed or strongly disagreed. On 3 of the attitude items, about one-third of the sample said they were not sure.

The positive skewness of the YS2 prosocial orientation or “helping others” attitude items is similar to that found among this same sample on the A&B survey for an asset measuring the value of “caring.” On a 5-point scale from not- to extremely important, students rated the importance of several things “to you in your life:” Helping other people, helping to make the world a better place in which to live, and giving time or money to make life better for other people. For each of those “caring” items, as for most of the attitude items, about 2-6 times as many youth said the values were quite or extremely important as said they were not or only somewhat important. Similar skewness on the “caring” asset was observed in a different sample, an aggregate of more than 217,000 6th-12th graders from more than 300 U.S. communities, who took the A&B survey in the 1999-2000 school year (Developmental assets: A profile of your youth, 2001).

Comparisons were made of frequency distribution by gender, grade, race/ethnicity, and mother’s and father’s education by item, as well as by differences in the binary construct of prosocial orientation. These crosstabulations showed that prosocial responses were more likely from females, White and “Other” students, and students whose parents had successively higher levels of education (not displayed; available from authors on request). The source of the differences appeared to be in the behavioral intention items more so than in the items measuring attitudes toward helping others.

Evidence of Concurrent Validity

Demographic Trends in Prosocial Orientation

Demographic patterns generally are consistent with both theory and previous research. For example, females in this sample more frequently said they had positive attitudes and intentions to help others than did males ($F(1,4980)=69.80, p \leq .0001$). Moreover, for each successive rise in the level of mother’s or father’s education, there was a corresponding significant increase in reported prosocial orientation. Young people whose mother ($F(2,4462)=26.37, p \leq .0001$) or father ($F(2,4227)=40.74, p \leq .0001$) had graduated

from college had higher levels of prosocial orientation than those whose parents had just some college, or who had a high school diploma or less; and those whose parents had just some college reported more prosocial orientation than those with only a high school diploma or less. There were sufficient subgroup cell sizes only to compare white, Latino, multiracial, and “other” students (the latter largely comprising Asian, African American, and Native American students). White and “other” students reported somewhat higher levels of prosocial orientation than Latino students, but not multiracial students ($F(3,5068)=7.79$, $p \leq .0001$).

Relation of Prosocial Orientation to Overall Level of Developmental Assets

Developmental assets theory predicts that young people who report experiencing more assets should also report less risk-taking behavior and more thriving dimensions, such as prosocial orientation. Following the procedure in Benson, et al. (1999), students were divided into quartiles based on how many of 12 asset domains they reported experiencing (9-12, 6-8, 3-5, or 0-2). Variables were standardized to a mean of 0 and an SD of 1. For each successive increase in asset level, there was a corresponding significant increase in the mean score for prosocial orientation ($F(3,4625)=250.83$, $p \leq .0001$).

Relation of Prosocial Orientation to Risk Behavior Patterns and Thriving Outcomes

As is the case for risk behaviors, positive thriving outcomes also tend to cluster (Benson, Scales, & Mannes, 2002). Thus, prosocial orientation should be positively correlated with other measures of thriving. On the other hand, prosocial orientation also should be negatively correlated with measures of risk behavior.

The continuous version of the prosocial orientation variable was correlated with other thriving outcomes and asset exposure domains from the YS2, as well as with the single-item thriving outcomes and risk-behavior patterns from the A&B survey administered at the same time to the same sample of youth. Table 3 shows that all the correlation coefficients were significant and in the predicted direction.

Table 3 here

Prosocial orientation was positively correlated at moderate levels (.33 to .52) with multi-item, reliable (in the .70s) YS2 measures of positive orientation to schoolwork, belonging to school, valuing diversity, being seen as a leader, active coping, and overcoming adversity. Only for feelings about personal health, a less reliable measure (in the low .60s), was the correlation negligible, albeit in the predicted direction.

As expected, correlations with the single-item thriving measures from the A&B survey were somewhat lower, given the lesser variance likely in using single-item variables. Thus, prosocial orientation was correlated at relatively low to moderate levels (.16 to .36) with resisting danger, valuing diversity, maintaining physical health, delaying gratification, informal helping of friends, exhibiting leadership, overcoming adversity, and succeeding at school.

Also as predicted, prosocial orientation was negatively correlated with all risk behavior patterns measured on the A&B survey. Coefficients ranged from low to moderate (-.14 to -.25) between helping others and problem alcohol use, use of illicit drugs, use of tobacco, gambling, anti-social behavior, violence, school problems, and sexual behavior risk. Only for depression/suicide was the correlation negligible, although in the predicted direction.

To further clarify the predictive validity of the prosocial orientation construct, we included it in stepwise regression analyses predicting a variety of thriving outcomes and risk behavior patterns. Because of the significant differences in the prosocial orientation construct by gender, regressions were run separately for boys and girls. Results for thriving outcomes are displayed in Table 4 (results for risk behavior patterns show similar trends, albeit with lesser amounts of variance explained).

Table 4 here

The amounts of variance explained range from negligible to moderate. However, there were no predictors other than a small number of demographic variables and prosocial orientation. Thus, the contribution of prosocial orientation was notable.

More important than total amount of variance explained, however, is that prosocial orientation adds a meaningful proportion of explanation, typically more than do demographic variables, to most of the thriving and risk behavior outcomes. Among boys, prosocial orientation adds from 2% (boys' feelings about personal health) to 29% of variance (boys' positive orientation to schoolwork) across the thriving outcomes, and 1% (depression) to 14% (school problems) across the risk behavior patterns. Among girls, prosocial orientation adds 6% (girls' feelings about personal health) to 24% (girls' positive orientation to schoolwork) across the thriving outcomes, and 1% (depression, and gambling) to 18% (sexual behavior risk) across the risk behavior patterns. Among both genders, prosocial orientation seems to be particularly important in explaining a positive orientation to schoolwork, belonging to school, valuing diversity, and active coping. These proportions of variance explained by prosocial orientation in various adolescent outcomes are generally equal to or more than the proportion of variance "community service" explains in similar outcomes in the Monitoring the Future study (Youniss, et al., 1999). Moreover, in both of the current analysis (prosocial orientation) and the Youniss et al. study (service), the service and prosocial orientation predictors typically explain significantly more of those outcomes than do demographics.

Relation of Prosocial Orientation to Reports of Community Service

Prosocial orientation comprises an attitudinal and behavioral intention component. It should therefore show at least moderate correlations with reports of actual community service, and with known predictors of service, such as parents' service activities (Yates & Youniss, 1996). These correlations are all significant and in the predicted direction. Helping others is correlated .36 with students' reported average hours per week of service, as measured on the A&B survey. It is also correlated .33 with student reports of their *parents'* involvement in service ($\alpha = .73$), and .48 with reports of their own participation during the last year in formal service-learning programs or other leadership activities ($\alpha = .72$), as measured on the YS2.

Because the measure of actual service was highly skewed (with half the students reporting 0 hours, and most of the rest just one or two hours per week), it was dichotomized. Prosocial orientation was also constructed as a binary variable for this analysis. Students who averaged an "agree" (4 on the 5-point scale) to the four attitude items, and who said it was either "quite" or "extremely" likely that they would do any one of the three potential kinds of volunteering over the next year (help the needy, help younger children, work to improve their school), were counted as "having" the helping others indicator.

Logistic regressions were then run, separately for boys and girls, to determine the relation of the prosocial orientation construct, which combines attitudes and behavioral intentions, to the self-report of actual service. We examined three different models. Model 1 included demographics and only prosocial orientation. Model 2 included demographics, parents' service activities, and prosocial orientation. Model 3 included demographics, parents' service activities, student reports of exposure over the last year to formal -learning programs and other leadership activities, and the prosocial orientation variable.

Table 5 shows that, in Model 1, with grade, race/ethnicity, and mother's and father's education entered first, both boys and girls who had prosocial orientations were nearly *four times* more likely to report actual service than those who did not, by far the most differential variable in the analysis.

Table 5 here

Because service is also more likely among those whose parents model service and volunteering, we also examined the role of prosocial orientation in predicting service over and above parental modeling of service. In Model 2, demographics were again entered first, followed by parents' service activities, and then prosocial orientation. As expected, students whose parents volunteer are themselves more likely to do so (boys whose parents volunteer are 2 ½ times more likely to report service, and girls are nearly 3 times more likely). But for both boys and girls, their attitudes and behavioral intentions around helping others are even stronger predictors of service than are parents' service activities. For each, having these prosocial attitudes and behavioral intentions makes it at least 3 times more likely that they report contributing service during an average week.

Finally, on the YS2, we had also asked about young people's frequency during the last year in participating in a community service or service-learning "program," their participation in groups of youths that helped to plan events or activities, or their membership on committees or task forces. Because much of students' reported average weekly service likely comes from participation in formal programs (as contrasted with individual volunteering outside a program context), we wondered if the role of prosocial orientation in predicting service would lessen once we accounted for differences in exposure to formal service and other leadership activities.

Students were divided into those who said their participation in these kinds of leadership and service roles totaled at least "a few weeks" over the last year, and those whose participation averaged less. In Model 3, demographics were entered first, then parental modeling of service, then student exposure to service and leadership programs for at least a few weeks, and finally, prosocial orientation. Table 5 shows that for both

genders the expected relation was confirmed of those service and leadership opportunities to reports of “average week” service, but the effect is more profound for girls than boys. Boys are 2.7 times more likely to report average weekly service if they had at least a few weeks of formal service/leadership experiences in the last year, and 3 times more likely to report service if they had prosocial attitudes and behavioral intentions. Girls also were 3.3 times more likely to report service if they had prosocial attitudes and intentions, but were 5 ½ times more likely to report service if they had at least a few weeks of service/leadership programs.

The exposure to service/leadership programs variable contained three items, one asking about formal community service or service-learning programs, one asking about youth planning groups, and one asking about task forces or committee membership. We conducted a logistic regression among girls, using as predictors only the service/leadership program item, entered after demographics, and followed by prosocial orientation. Girls who had at least a few weeks of such exposure were half again as likely as other girls to report average weekly service, but prosocial orientation made a far bigger difference, with girls having prosocial attitudes and intentions nearly 3 times more likely to report weekly service. Thus, the gender differences in how exposure to formal service/leadership opportunities relates to average weekly service seems less to do, specifically, with community service or service-learning programs, and more to do with the impact that occurs if girls average significant participation across a range of leadership roles that include youth event planning groups and issue task forces. That more comprehensive leadership experience seems more impactful for girls than boys in affecting their typical weekly frequency of service.

Summary and Recommendations

Overall, the results of these analyses suggest that the 7-item prosocial orientation variable, comprised of both prosocial attitudes and behavioral intentions, is an acceptably reliable measure that demonstrates consistent concurrent validity for both male and female adolescents. It may therefore warrant additional examination as a potential measure for inclusion in a system of positive youth development indicators.

Despite those strengths, there are several significant limitations to this measure of young people's prosocial orientation, related to psychometrics, conceptualization, and the politics of social change and diversity.

There are three psychometric cautions. First, these results come from a single study of students in one urban school district, who had received parental permission to participate in the study. Although the sample was large, and ethnically and socioeconomically diverse, the non-participants generally had higher risk behavior profiles, and so it is not clear how well the prosocial orientation measure would have captured this aspect of connection to community for such relatively more vulnerable youth.

Second, both the prosocial orientation measure and all the dependent variables used to examine its validity were student self-reports. Thus, although prosocial orientation consistently showed the expected theoretical relation to risk behavior patterns, thriving indicators, and student service experience, we would expect these relations to be less significant if more objective measures of those dependent variables were used. In addition, all the data are concurrent; we have no prospective validity data, and so longitudinal studies are needed to fill this gap. Moreover, several of the attitude items appear skewed with a positive bias, suggesting that perhaps some rewording would be needed to lessen the likelihood of socially desirable responses and improve the item-level variability.

Most importantly, the prosocial orientation measure would not replace but only supplement a measure of young people's "actual" amount and kind of community service contributed. Indeed, behavioral intention, although a reasonable proxy for many behaviors, may ultimately prove to be less suitable for assessing connection to community, because youth may not well predict their volunteering much in advance of a personal opportunity to do so. For example, data from Independent Sector surveys on youth volunteering show that youth are four times more likely to volunteer if they are asked to do so than if no one requests their help (Hodgkinson & Weitzman, 1996). In the absence of a current request or opportunity, many youth might not be aware of volunteer opportunities they would in fact enjoy and be likely to do. They also might be reluctant to take the initiative and offer themselves for volunteer service, but be quite willing to accept an invitation to do so. Specific examination of how well these behavioral intentions predict actual

service in a prospective study are needed to be more confident that this behavioral intention dimension of prosocial orientation has good utility.

Perhaps more fundamentally, this measure, although strong in some traditional respects, still may not validly capture the variety of ways in which young people in differing cultural groups or settings develop and exhibit their “prosocial” orientation. For example, on our surveys done in Minneapolis, Hmong youth typically respond that they contribute no hours of service in a typical week, and perhaps their intention to do so also would be low. Yet in focus groups they indicate they are working at jobs to give their families extra income, and that they are helping aunts and uncles take care of the family’s younger children. They clearly are engaged in community, but they are not tutoring children through a formal program. For them, we might ask, which is the more important developmental experience? The challenge for researchers and policymakers is how to capture such rich variety in young people’s expression of prosocial orientation. Our present measure captures only one kind of prosocial orientation.

Moreover, our interest as applied developmental scientists is to create good science that facilitates social change that helps individuals, organizations, communities, and systems more intentionally and effectively build young people’s ability to thrive, in this case, specifically to build their connections and contributions to society. Thus, the process by which we develop indicators of youth well-being and thriving becomes especially relevant. Our measure of prosocial orientation, despite the strengths that may recommend it, has been developed through the scholarly dialogue of the academy. To promote the widespread adoption and influence of this and other indicators of youth well-being, it would be helpful to have evidence of consensus across the diversities of the American public that this way of thinking about youth connection to society made good sense.

We have argued that youth reports of their “actual” service carry a number of problems that suggest against relying solely upon those measures to assess adolescent helping behaviors. Those problems range from reliability and validity issues, to questions about the most appropriate time referent to use in such recall, to

masking of motivational differences in the likelihood of continued commitment to community contribution. We believe that supplementing that approach with this prosocial orientation variable, even with its own conceptual, psychometric, and political weaknesses, may provide a better continuum of attitudinal, retrospective, and prospective behavior measures. With this continuum, we may better understand not just the current status of contribution to community among the nation's youth, but its possible trajectory as well.

Notes

1. In fact, a recent national telephone survey of Americans age 15 years and older concluded that “political and social goals do not drive most volunteer efforts” (Keeter, Zukin, Andolina, & Jenkins, 2002, p. 19). The main rationale most people reported for volunteering was simply the desire to help others.

2. Remarks of James Youniss at Indicators of Positive Youth Development Conference, convened by Child Trends, Washington, DC, March 12-13, 2003.

3. On the YS2, only 20% of the youth met the binary criterion for the thriving domain “helping others.” However, Search Institute has reported that 50% of 6th-12th grade youth in its large aggregate sample from 213 U.S. communities said that they serve others “without pay” for at least an average one hour per week (Benson, Scales, Leffert, & Roehlkepartain, 1999). Similarly, 49% of the current sample of youth also reported on the A&B survey that they serve others at least one hour per week. The YS2 asked youth a form of behavioral intention, i.e., how likely it was that they would do such volunteering in the next year. Responding “quite” or “very” likely met the criterion (31% did so). However, in addition, youth also had to have an average “agree” on several statements about one’s felt responsibility to help others; the two criteria together brought the total who satisfied both parts of the definition of “helping others” down to 20%. If youth who thought it was only “somewhat” likely they would volunteer were included, then 53% would have satisfied that half of the definition, thus considerably raising the proportion who “had” a prosocial orientation. Clearly, the particular operational definitions used to create a binary “prosocial orientation” variable yield quite different *frequency* results. But analyses done using either criterion show similar concurrent validity results, suggesting the robustness of this prosocial orientation construct.

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Table 1Prosocial Orientation OverviewAlpha Reliability

Definition	Number of Items	All	Male	Female
Students feel a responsibility to help others and improve the community, as well as express a behavioral intention to volunteer in the next year to help others in need (e.g., in a food or clothing drive), be a tutor or mentor, or work to improve their school.	7	.72	.71	.70

Table 2

Prosocial Orientation Items and Frequencies

	SA	A	NS	D	SD	
Strongly Agree-Agree-Not Sure-Disagree-Strongly Disagree						
• A15--Helping others without being paid is not something people should feel they have to do.	A15: 10	28	32	21	9	
• R18--Taking care of people who are having difficulty caring for themselves is everyone's responsibility, including mine.	R18	15	35	35	12	4
• R51--Participation in activities that help improve the community is an important job for everyone, even beginners.	R51	17	42	32	7	4
• A60--Doing things for other people when they need help is not important to me.	A60	3	5	15	44	33
Not at all Likely-A Little-Somewhat-Quite-Very Likely						
In the next year, how likely is it that you will...		Not	Little	Some	Quite	Very
• A68--Volunteer in programs to help others in need (like food or clothing drives, working at a homeless shelter).	A68	20	26	22	16	15
• A69--Actively work to improve your school.	A69	24	26	23	15	11
• A70--Volunteer to tutor kids, be a mentor, or coach a team.	A70	31	25	19	14	12

Table 3

Correlation of Prosocial Orientation with Thriving Outcomes and Risk Behavior Patterns

<u>Thriving Outcome/Risk Behavior Pattern</u>	<u>Correlation Coefficient</u>
YS2 Survey Multi-Item Measures	
Positive orientation to schoolwork	.52
Valuing diversity	.47
Feelings about personal health	.09
Being seen as a leader	.33
Active coping	.46
Belonging to school	.47
Overcoming adversity	.44
A&B Survey Single-Item Measures	
Resisting danger	.17
Valuing diversity	.30
Maintaining physical health	.24
Delaying gratification	.16
Informal helping of friends, neighbors	.24
Exhibiting leadership	.28
Overcoming adversity	.15
Succeeding in school	.25
Problem alcohol use	-.17
Anti-social behavior	-.25
Driving and alcohol use	-.15
Depression and suicide	-.06
Illicit drug use	-.16
Gambling	-.14
School problems	-.24
Sexual behavior risk	-.16
Tobacco use	-.14
Violence	-.23

*All coefficients significant at $p \leq .0001$. N = 4989-5119.

Table 4
Prosocial Orientation as a Predictor of Thriving and Risk Behavior Patterns

Outcomes/Predictors	R ²		Beta	
	Males	Females	Males	Females
Positive orientation to schoolwork:				
Demographics	.029	.031		
Grade			-.031	-.023
Race/ethnicity			-.008	-.006
Mother education			.016	.049
Father education			.085	.053
Helping others	.286	.244	.513	.472
Valuing diversity:				
Demographics	.011	.006		
Grade			-.011	.048
Race/ethnicity			.070	-.008
Mother education			.038	-.026
Father education			-.005	-.016
Helping others	.186	.175	.424	.419
Feelings about personal health:				
Demographics	.018	.044		
Grade			-.072	-.193
Race/ethnicity			-.026	-.019
Mother education			.109	.041
Father education			-.006	.047
Helping others	.022	.061	.071	.136
Being seen as a leader:				
Demographics	.012	.009		
Grade			.074	.003
Race/ethnicity			-.008	.011
Mother education			.083	.015
Father education			-.017	.027
Helping others	.125	.117	.340	.336
Active coping:				
Demographics	.005	.015		
Grade			.038	.037
Race/ethnicity			-.005	-.009
Mother education			.026	.003
Father education			-.005	.030
Helping others	.225	.181	.475	.416
Belonging to school:				
Demographics	.023	.027		
Grade			.079	.021
Race/ethnicity			-.004	-.031
Mother education			.070	.027
Father education			.034	.050
Helping others	.230	.210	.460	.438
Overcoming adversity:				
Demographics	.013	.014		
Grade			.032	.009
Race/ethnicity			.060	-.008
Mother education			.010	.038
Father education			.436	.426

Helping others	.199	.188	
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Table 5
Contribution of Prosocial Orientation to Prediction of Average Weekly Service

	Boys			Girls		
	Coefficient	SE	Odds Ratio	Coefficient	SE	Odds Ratio
Model 1						
Intercept	-.58	.26		-.10	.22	
Demographics						
Grade	-.11	.10	.89	-.22	.09	.80**
Race	-.14	.05	.87**	-.03	.05	.97
Mother's Education	-.04	.07	.96	.07	.06	1.07
Father's Education	.25	.07	1.28***	.07	.06	1.07
Prosocial Orientation	1.34	.15	3.81****	1.32	.11	3.73****
Model 2						
Intercept	-.80	.26		-.06	.23	
Demographics						
Grade	-.06	.10	.94	-.15	.09	.86
Race	-.13	.06	.88*	-.04	.05	.96
Mother's Education	-.08	.07	.92	.06	.06	1.06
Father's Education	.24	.07	1.27****	-.00	.06	.99
Parents' Service Activities	.90	.11	2.47****	1.04	.11	2.82****
Prosocial Orientation	1.14	.15	3.11****	1.19	.12	3.30****
Model 3						
Intercept	-.84	.27		.00	.23	
Demographics						
Grade	-.05	.10	.95	-.18	.09	.83*
Race	-.13	.06	.88*	-.04	.05	.96
Mother's Education	-.90	.07	.91	.04	.06	1.04
Father's Education	.25	.07	1.29****	-.00	.06	.99
Parents' Service Activities	.85	.12	2.35****	.99	.11	2.70****
Service/Leadership Programs	1.00	.38	2.71****	1.70	.36	5.49****
Prosocial Orientation	1.10	.15	3.02****	1.12	.12	3.10****

N = 5,136 students in 6th through 12th grades

**** = $p \leq .0005$

*** = $p \leq .008$

** = $p \leq .01$

* = $p \leq .05$