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Positive youth development profiles of cross-age peer mentors

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ABSTRACT

To engage more youth in service, we require further research on the characteristics of youth who serve, particularly disadvantaged youth with limited access to formal service opportunities. This study investigated the positive youth development characteristics of New Zealand youth who decided to mentor younger peers in the Stars program for the first time ($n = 109$), those who returned to mentor for a subsequent year ($n = 48$), and similar youth not involved in Stars ($n = 51$) to determine what characteristics differentiate these groups. Returning mentors had the highest levels of social competency and involvement and a strong leadership orientation. New mentors had the second highest levels of leadership orientation but the lowest levels of social competency and involvement. The propensity for leadership in mentors was associated with having many positive adult role models. Strategies to engage more young people in service as cross-age peer mentors are discussed.

Introduction

Service during youth establishes a firm foundation for future citizenship (Hart, Donnelly, Youniss, & Atkins, 2007; Yates & Youniss, 1996). Understanding how to engage more young people in meaningful service is thus an important goal for those interested in building a thriving civil society. Research focused on the characteristics of young people who already serve in their communities can inform strategies to involve more youth in service, and the body of evidence on the Five Cs model of Positive Youth Development (PYD) demonstrates that service contributions are more likely when youth exhibit PYD characteristics (Jelicic, Bobek, Phelps, Lerner, & Lerner, 2007). Nevertheless, the existing research on youth service, particularly within a PYD framework, is dominated by North American studies and disadvantaged young people from low socioeconomic backgrounds are under-represented. In addition, little research exists on young people serving as mentors within cross-age peer mentoring programs, which we argue can be a particularly rich and impactful kind of service experience. This article aims to identify the PYD characteristics of New Zealand youth living in socioeconomically deprived areas that chose to serve as a cross-age peer mentor for the first time, those who returned to mentor for at least a second year, and those who are not and have not engaged in mentoring within their school communities. In doing so, the

results of this study can help us to inform strategies for engaging more young people in the service opportunity cross-age peer mentoring provides.

PYD and youth service engagement

According to Lerner and colleagues' seminal Five Cs model of PYD, young people who exhibit *competence* in cognitive, social, academic, and vocational domains; *confidence* in their abilities and an overall sense of self-worth; *connection* to positive people and institutions; moral *character*; and *compassion* towards others are more likely to make positive self, family, community, and broader societal contributions in the future (Lerner et al., 2005; Lerner et al., 2014). More than a decade of empirical evidence collected as part of the longitudinal 4-H study of PYD demonstrates that PYD characteristics predict civic beliefs, skills, and actions (Lerner & Lerner, 2013). Research not derived from the Five Cs model of PYD also reveals that young people who serve exhibit strong character and compassion, and are competent, confident, and socially connected. For instance, Yates and Youniss (1996) conducted a review of research on adolescent engagement in community service and found that youth involved in service had higher levels of agency in terms of striving for independent achievements, better academic success, a higher locus of control, and a strong

goal-orientation. Youth volunteers report a greater sense of social responsibility, compassion, and religiosity (Yates & Youniss, 1996; Youniss, Yates, & Su, 1997). They also tend to be more involved in other extracurricular activities and enjoy interpersonal interactions (Yates & Youniss, 1996; Youniss et al., 1997). Youniss et al.'s (1997) study of U.S. secondary students revealed that youth who were more involved in school, sports, creative activities, and just having fun (called the all-rounders) also reported higher levels of community service than students who had a predominant school- or party-orientation, or had average or low levels of social integration.

Importantly, personal characteristics are not the only factors at play in influencing youth development or engagement in service. The Five Cs model of PYD suggests that the Five Cs arise when young people capable of intentional self-regulation and perseverance towards goals are embedded within a strengths-based context. It is the interaction between a young person's internal strengths and an asset rich environment that promotes the Five Cs and subsequent contributions to self and others (Lerner & Lerner, 2013; Lerner et al., 2014). Extensive research on the Search Institute's 40 Developmental Assets® framework of PYD supports four categories of internal and four categories of environmental assets that promote thriving behaviors, including helping others (Benson, 2007). Assets associated with a *positive identity, positive values, social competencies, and commitment to learning* are recognized as internal strengths, while assets associated with *support, boundaries and expectations, empowerment, and constructive use of time* are deemed to be critical external resources.

With regard to environmental influences that promote contribution, Scales, Benson, Leffert, and Blyth's (2000) investigation of the interconnection between developmental assets and thriving showed that constructive use of time (time in youth programs and in a religious community, in particular) was the most important asset category in terms of predicting young people's service to others. In a more recent Search Institute study, Scales, Benson, and Roehlkerpartain (2011) found that in addition to personal passion (or sparks), time in youth programs that involve supportive adult relationships, and opportunities to have voice are critical ingredients for social contribution. The 4-H study of PYD also demonstrates that supportive individuals, such as parents, teachers, and mentors are especially important predictors of PYD (Bowers et al., 2014) and citizenship (Lerner & Lerner, 2013).

The broad literature on youth volunteers supports the importance of familial influences but the concurrent influence of both familial and nonfamilial adults on

youth development has rarely been investigated (Bowers et al., 2014). What the youth voluntarism literature demonstrates is that those with parents who monitor their whereabouts (Huebner & Mancini, 2003) and those with high quality family relationships are more likely to be involved in their communities (Fletcher, Elder, & Mekos, 2000) and to report strong civic attitudes (Lenzi, Vieno, Santinello, Nation, & Voight, 2014). Youth belonging to families that express a strong ethic of social or civic responsibility are also more likely to think that civic responsibility and helping others is important (Flanagan, Bowes, Jonsson, Csapo, & Sheblanova, 1998; Lenzi et al., 2014). Parents involved in community service and those who encourage civic responsibility act as influential role models for their children (Fletcher et al., 2000; Harré, 2007; Lenzi et al., 2014; McLellan & Youniss, 2003; Yates & Youniss, 1996) and provide opportunities for other family members to get involved (Harré, 2007; Yates & Youniss, 1996).

Structural and cross-cultural considerations of youth service engagement

Even with these attributes and external influences, young people still need access to opportunities to be of service; they also need to be able to fit service in alongside competing interests and responsibilities (Harré, 2007). Young people living in disadvantaged communities may experience barriers to accessing traditional service opportunities due to limited transportation and financial resources that restrict engagement in out-of-school opportunities (Gootman & Eccles, 2001; Huebner & Mancini, 2003; Lareau, 2011). Lareau (2011) found that socioeconomically disadvantaged youth spend more time away from adults compared to young people from more affluent families. A greater need for parents to be involved in paid work may also mean these young people have less parental role modelling of voluntarism (Huebner & Mancini, 2003), even though the benefit of PYD opportunities for socioeconomically disadvantaged youth (Scales, 2011)—females, in particular (Urban, Lewin-Bizan, & Lerner, 2009)—may be greater. Indeed, parental education and other measures of socioeconomic background have also been found to be positively associated with youth voluntarism (Flanagan et al., 1998; Huebner & Mancini, 2003; Yates & Youniss, 1996; Youniss et al., 1997).

Because young people from higher socioeconomic backgrounds are more likely to be involved in service and the profiles of youth captured in the literature on PYD are those who are more accessible and within the normative range of the youth population (Lerner &

Lerner, 2013; Lerner et al., 2014), less is known about which PYD characteristics predict service for disadvantaged youth. Much could be gained from investigating the PYD characteristics of youth who serve in no-cost service opportunities existing within their schools during school time as these kinds of opportunities eliminate some of the structural barriers that impede socioeconomically disadvantaged young people from engaging in service. The studies dominating the field of PYD and youth voluntarism are also primarily based in North America.

Youth service in the New Zealand context

In New Zealand, we know little about the kinds of youth involved in service. The findings from a large scale representative survey of secondary school-age youth in New Zealand suggest that volunteer rates are quite low. Just over a quarter (27.8% of 6,611 respondents) reported having helped others in the community in the previous year while only 5.8% (of 8,069 respondents) indicated that they belonged to a volunteer organization (Adolescent Health Research Group, 2013). The descriptive trends for both outcomes also indicate slightly higher rates among females, older youth, and those from higher socioeconomic backgrounds, but no published information on their PYD characteristics is available.

The apparent low rates of youth service in New Zealand may, however, be confounded by the social construction of “voluntarism” and “citizenship” in New Zealand. The rates of “volunteering” may be higher if accounting for informal forms (Wilson, 2001). Activities others perceive as “volunteering” may not be seen as such by people from collectivist cultures or from lower socioeconomic brackets, where Māori and Pasifika peoples are over-represented. Māori (indigenous New Zealanders) and Pasifika (originating from a Pacific Island nation) notions of family and community (Wilson, 2001), and implied obligations to reciprocate service from others, complicate understandings of what constitutes “volunteering” (Robinson & Williams, 2001). It may also be the case that young people contributing through in-school youth programs do not perceive their involvement as service because the notion of “voluntarism” does not resonate with them. Youth, in general, may not see their service contributions within school-based programs as something they do in service of others because these programs are also promoted as opportunities for their own development and growth. Further research on the PYD characteristics of youth involved in service-oriented in-school programs is thus needed.

Cross-age peer mentoring programs as an enriching service experience

Because the nature of service experiences varies greatly, the impact of service on youth is also variable. In comparison to one-off experiences that require little personal investment (e.g., a day picking up litter around the school yard), service that involves genuine relationships with others in need, ongoing reflection, and opportunities for youth voice and agency is recognized to increase the impact of service experiences on young people’s development (Dymond, Renzaglia, & Chun, 2007). It is thus worthwhile to investigate the PYD characteristics that are associated with service characterized by these features. Cross-age peer mentoring programs for youth are one example of a rich service experience for the youth who serve as mentors because they require the development of authentic relationships and ongoing contributions of advice and support to younger peers. Nonetheless, research on young people serving as cross-age peer mentors has received very little attention in general (Karcher, 2014).

Within the context of youth development, Karcher (2014) argues that cross-age peer mentoring is similar to other peer support programs (e.g., peer tutoring and peer counselling), but is unique in its combination of (a) involving intermediate or high school-aged youth as mentors to peers at least two years younger; (b) providing ongoing support over at least 10 (often more) sessions per year; (c) a predominant focus on relationship-building to influence broad youth development; and d) fostering developmental benefits for both mentees and mentors (Karcher, 2014). To date, Karcher and Lindwall (2003) have conducted the only research we were able to locate that investigates the characteristics of cross-age youth peer mentors. Their findings from 57 peer mentors compared to 60 nonmentor youth demonstrated differences in their connectedness (both involvement and affection); peer mentors reported higher connectedness to school, family, and their future whereas nonmentors reported higher connectedness to self (a measure capturing a positive and consistent sense of self across time and relationships, a positive view of the self in the future, and an ability to withstand social criticism and to be alone, see Karcher, 2011). In a smaller study involving 33 peer mentors, Karcher and Lindwall (2003) found that those who expressed higher concern for others’ welfare were more likely to sustain their commitment to mentoring for a second year. In terms of alignment with PYD theory, their findings imply that connection and compassion, and commitment to learning may be defining PYD characteristics of cross-age peer mentors but a wider range of PYD characteristics have not been assessed.

To summarize, the broad literature provides important insights about the association of PYD characteristics with youth service but further research is needed to ascertain how these characteristics play out for socio-economically disadvantaged youth who may not have access to out-of-school service opportunities, in contexts outside of North America, and within specific types of service-oriented programs.

Current study

The research presented here is based on a university-community partnership project between the University of Auckland and the Graeme Dingle Foundation. The Graeme Dingle Foundation is a New Zealand youth development organization (formerly known as the Foundation for Youth Development) that provides governance, training, research, and evaluation for its Community Partners (local trusts) to deliver one or more of five youth development programs within their local regions. This research was focused on the senior students involved as cross-age peer mentors in the Graeme Dingle Foundation's Stars program. We explored the PYD profiles of young people who decided to become a peer mentor for the first time, young people who returned to mentor for at least a second year (to assess if youth involved in continued service as cross-age peer mentors could be distinguished from those demonstrating an initial inclination) and other senior students who had not engaged in mentoring in their school communities.

Stars peer mentoring program

Stars is a cross-age peer mentoring program delivered in schools across five regions of New Zealand. It is designed to help the entire cohort of Year 9 students (aged 12–14) who are in their first year of secondary school make a successful transition to their new school and aims to strengthen the sense of community within a school by bringing younger and older students from the same school together through peer mentoring. Stars encourages Year 9 students to develop a sense of responsibility and connectedness to the school, their peers, and their wider community through challenging and fun experiences in a supportive environment. It has three key activity components: the Stars Adventure Camp (a three to five day residential camp involving experiential indoor and outdoor activities), the community activities (a Community Project designed and delivered by mentees), a Community Adventure that allows students to explore community resources), and peer mentoring. The Year 9 students are supported

by their peer mentors and the Stars Coordinator during both the Adventure Camp and the community activities.

Before the start of the school year, Year 12 and Year 13 students (peer mentors aged 15–19) are recruited, inducted, selected, and trained to peer mentor new Year 9 students (mentees). The mentees are divided into small groups of 10–12 and then matched with a group of three to four peer mentors. The group meets for 20 weekly, 30- to 45-min peer mentoring sessions, over the first three (of four) school terms that make up the academic year. During the peer mentoring sessions, the peer mentors facilitate activities designed to develop life skills through experiential learning. Session topics include lessons on time and stress management, communication skills and relationships, goal-setting, and other topics associated with youth health and well-being. Peer mentors are also required to attend one training session with the Stars Coordinator each week that the program is delivered. The Stars Coordinators and teacher Group Leaders assist with the preparation and debrief of the peer mentoring sessions but only become involved in delivery if a peer mentor asks for assistance. In addition to the group-based peer mentoring sessions, peer mentoring occurs throughout the Stars program. Wherever possible, peer mentors are expected to encourage the Year 9 students to develop prosocial relationships with their peers, and provide examples of positive mentoring and role modelling.

Study aim and hypotheses

The primary aim of this research was to explore the characteristics that differentiate senior students who choose to return to mentor a younger peer for a second year, from those who became a mentor for the first time, and from similar students who opt not to mentor. The literature suggests that youth who serve others, like peer mentors, tend to exhibit higher levels of PYD as measured by the Five Cs (Lerner & Lerner, 2013) and the 40 Developmental Assets (Benson, 2007). We thus hypothesized that returning mentors would report higher average levels of PYD characteristics than both new and non-mentors. It was expected that development of these personal characteristics and values would have been supported during their previous mentoring experience, since research indicates such gains among mentors (Karcher, 2014; Weiler et al., 2013), and time in youth programs has been shown to predict the Five Cs (Lerner & Lerner, 2013) and other indicators of thriving (Scales et al., 2011). We also hypothesized that new mentors would report higher average levels of PYD characteristics than nonmentors because, such as

returning mentors, they share the motivation to serve, but may not have cultivated the same degree of skills and values due to their greater inexperience. Specifically, we assessed if there were measurable differences between three groups of students in a variety of life skills, values, extracurricular involvement, school preparedness, positive adult influences, and a supportive family context.

Method

Design

This study sits within a larger mixed-method research project designed to investigate the impact of the Graeme Dingle Foundation's Stars peer mentoring program on the senior student mentors. New and returning Stars mentors and a non-randomized comparison group of students from the same schools were recruited in early 2013 to participate in a longitudinal self-report questionnaire study over a two year period. This article presents cross-sectional findings only, pertaining to participant characteristics at the beginning of the program (i.e., within the first two months of mentoring).

Procedure

Program site selection

At the time the project was initiated, seven schools were participating in the Stars program across four regions of New Zealand. Five of these schools were purposively chosen for the project described in the current study. The selected Stars schools were chosen to ensure a mix of ethnicity, school size, as well as new and established Stars programs. The research team also wanted to ensure that a school from every Stars region was included. In regions that were delivering more than one Stars program (three of the four regions were delivering Stars in two schools); only one of the Stars schools was included to reduce the burden on the Community Partners responsible for coordinating the programs. Therefore, one school was excluded in each of two regions: one of the schools at the request of the Community Partner due to the large school population which the Stars coordinator felt would make data collection difficult and the other because there was some uncertainty as to whether the Stars program would continue at that school. In another region, two Stars schools were able to be included because the region's Community Partner was responsible for only one school (the Graeme Dingle Foundation's National Support Office was responsible for the coordination of the other school). This also ensured that the project included both

the longest and shortest running programs, as well as the schools with the smallest and largest school populations.

In New Zealand, schools are assigned a decile rating that is a measure of the socioeconomic status of the communities the school population is primarily drawn from. Decile 10 schools include the highest proportion of students from affluent areas, whereas decile 1 schools include the highest proportion of students from socioeconomically deprived areas. Public funding is differentially allocated according to need based on the decile rating (Ministry of Education, n.d.). In 2013, the decile ratings for each of the five participating schools ranged between two and three, indicating that students attending these schools were typically from low socioeconomic backgrounds. The population across the schools ranged from 193 to 1913. Four of the five schools were co-educational; the fifth had an all-female student body. The proportion of ethnicities represented within the student body varied across the schools; however ethnic minorities formed a high proportion of the student body in all participating schools; this is reflective of the socioeconomic profile of these schools. Pasifika were the largest ethnic group in four of the five schools (47% to 87% of the school population) and Māori formed the majority for the other (57%). The length of time the Stars program had been running in each of the schools ranged from two to eleven years.¹

Data collection

The research team visited each of the five schools in early 2013 to invite students to participate and to distribute participant information sheets and consent forms to those 16 years or older. Some students were under 16 years of age; these students were given caregiver information sheets and consent forms and participant assent forms. The researchers returned to the schools shortly after the initial visit to collect the initial questionnaire data. Participants were provided with snacks at the data collection session and were entered into draws (two or three depending on school size) for a \$20 gift voucher as an incentive for participation. Ethical approval for the research was obtained from the first author's institutional research ethics committee.

Questionnaire measures

Table 1 presents the measures used to assess the participants' personal strengths and external influences, henceforth considered collectively as PYD

¹Individual school profiles are not provided to reduce the likelihood of school identifiability.

Table 1. Operationalization of measures with sample items and Cronbach's alpha for multi-item measures.

Measure	Cronbach's α	Operationalization	Sample item
Time Management	.81	Making the best use of time	I plan and use my time efficiently.
Social Competence	.77	Feeling competent in social situations	I communicate well with people.
Achievement Motivation	.77	Motivation to put in the effort needed to do well	When working on a project, I do my best to get the details right.
Intellectual Flexibility	.64	Being able to adapt thinking and openness to new ideas	I am adaptable and flexible in my thinking and ideas.
Task Leadership	.80	Ability to lead other people when something needs to be accomplished	As a leader, I motivate other people when tasks need to be done.
Emotional Control	.76	Ability to regulate emotions in stressful situations	I stay calm and overcome anxiety in new or changing situations.
Active Initiative	.84	A desire to be actively involved in activities and opportunities	I like to be busy and actively involved in things.
Self-Confidence	.70	General confidence to succeed	I know I have the ability to do anything I want to.
Personal Values	.72	Belief in the importance of values associated with honesty, responsibility, and integrity	How important is each of the following to you in your life? ... Doing what is right, even if my friends make fun of me.*
Valuing Diversity	.57	Respect, appreciation, and desire to be with people from different cultural backgrounds	Thinking about the people who know you well. How do you think they would rate you on each of these? ... Respecting the values and beliefs of people who are of a different ethnicity than you are.*
Sympathy	.84	Expressing sympathy for others' misfortune	When I see someone being picked on, I feel sorry for them.
School Engagement	.60	Engagement in learning	How often do you ... come to class without bringing paper or something to write with?*
Parent Support	.80	Connection to and support from loving parents	My parent(s)/caregiver(s) give me support when I need it.*
Positive Parental Role Modelling	–	Exposure to parent involvement in helping others	My parent(s)/caregiver(s) spend a lot of time helping other people.*
Family Cohesion	–	Family involvement in shared meals	In an average week, how many times do all of the people in your family you live with eat dinner together?*
Positive Adult Role Models	–	Exposure to non-parental adults who help others	How many adults have you know for two or more years who ... spend a lot of time helping other people?*
Negative Adult Role Models	–	Exposure to non-parental adults who engage in inappropriate or unsafe behaviors	How many adults have you know for two or more years who ... do things that are wrong or dangerous?*
Voluntarism	–	Weekly involvement in voluntary service to others	During an average week, how many hours do you spend ... helping other people without getting paid (such as helping out at a hospital, day care center, food bank, youth program, community service agency, or doing other things) to make your city a better place for people?*
Sports Involvement	–	Weekly involvement with a sports team	During an average week, how many hours a week do you spend ... playing on or helping with sports teams at school or in the community?*
School Club Involvement	–	Weekly involvement in non-sport related clubs or organizations at school	During an average week, how many hours a week do you spend in clubs or organizations (other than sport) at school (for example, school newspaper, student council, school plays, language clubs, hobby clubs, drama club, debate, etc.)?*
Non-School Club Involvement	–	Weekly involvement in non-sport related clubs or organizations outside school	During an average week, how many hours a week do you spend in clubs or organizations (other than sport) outside school (such as Scouts, Girl Guides, YMCA, YWCA, etc.)?*
Religious Attendance	–	Weekly involvement in religious activities	During an average week, how many hours a week do you spend going to programs, groups or services at a church, synagogue, mosque, or other religious or spiritual place?*

*Survey items taken from Profiles of Student Life: Attitudes and behaviors, copyright © 2012 by Search Institute®, Minneapolis, MN. Used by permission.

characteristics or variables. A brief operationalization of each construct is presented along with a sample item and the internal consistency (Cronbach's alpha) for the subscales used with the current sample. A more detailed description of each measure is provided in the following sections.

The *Life Effectiveness Questionnaire* (LEQ) developed by Neill, Marsh, and Richards (2003) was administered. Initial consultation with program staff and a pilot of the survey with a group of Stars mentors who finished the program in 2012 indicated that the survey captured outcomes of relevance to the program and was easily interpreted by and administered to students. The LEQ measures eight domains of life effectiveness: *time management, social competence, achievement motivation,*

intellectual flexibility, task leadership, emotional control, active initiative, and self-confidence. It was initially developed as a simple, straightforward measure to evaluate the impact of experiential interventions, such as outdoor adventure programs and was deemed to reflect a number of important dimensions of competence as well as confidence. Neill (2008) developed the LEQ through rigorous psychometric testing. Each of the eight constructs has been shown to be unidimensional and to have strong internal consistency and test-retest reliability. Confirmatory Factor Analyses have demonstrated good multifactorial validity across the eight dimensions, strong support for factorial invariance across independent samples, and partial factorial invariance across gender and adolescent, early adult,

and adult groups (see Neill, 2008). The measure is also publicly available at <http://www.wilderdom.com/leq.html>. Each of the eight domains is measured with a 3-item subscale; thus, the total measure is 24 items. Responses to each item are provided on an 8-point Likert scale varying from 1 (FALSE, not like me) to 8 (TRUE, like me). The original scales for *intellectual flexibility* and *task leadership* had low internal consistency when assessed with the current sample but this was improved by the removal of one problematic item², thus the internal consistencies for these constructs reflect responses on only two items. Note that the internal consistency for intellectual flexibility was still only moderate ($\alpha = .64$).

Three prosocial qualities (*personal values, valuing diversity and sympathy*) based on Lerner et al.'s (2005) measure of Positive Youth Development were also included. The sympathy subscale was derived from a nine item measure of caring created by Lerner et al. (2005) from previously existing measures of sympathy and empathy (i.e., the Eisenberg Sympathy Scale and the Empathic Concern Subscale of the Interpersonal Reactivity Index). The scale requires a response to nine statements in relation to the question "How well does each of these statements describe you?" Responses are provided on a four-point Likert scale varying from 1 (Not Well) to 4 (Very Well). An exploratory factor analysis using principal axis factoring indicated problems with the unidimensionality of the original nine-item scale. The reverse-coded items were particularly problematic. A 3-item subset of items had strong internal consistency and aligned theoretically with a measure of sympathy that focused on feeling sorry for specific misfortunes experienced by others (i.e., *When I see someone being picked on, I feel sorry for them; It makes me sad to see a person who doesn't have friends; and When I seek another person who is hurt or upset, I feel sorry for them*). The excluded items were not as closely linked to specific instances of others' misfortune (e.g., *I feel sorry for people who don't have what I have*).

Three items from Lerner et al.'s (2005) four-item valuing diversity subscale were selected. Because observed means of the aggregated items were used in the analyses we used the three items that had standardized anchors across the four-point Likert scale response options (1 = Not Like Me to 4 = Very Much Like Me). The fourth omitted item required responses on a Likert scale with different anchors (1 = Not

Important to 4 = Extremely Important). We sought to shorten the questionnaire length wherever possible to reduce the response burden for the youth participants and we were concerned about how the fourth item may affect the factor loadings when the internal consistency was assessed using exploratory factor analysis. Lerner et al.'s (2005) 5-item personal values subscale with response options from 1 (Not Important) to 4 (Important) was also included. The internal consistency for the valuing diversity subscale was nevertheless low and it was not improved with the deletion of any items thus the three original items were retained for this construct ($\alpha = .57$). The valuing diversity and personal values subscales from Lerner et al.'s (2005) measure were borrowed from the Search Institute (2012) Profiles of Student Life-Attitudes and Behaviors (PSL-AB) survey. Permission to use these items in this study was also obtained from the Search Institute.

Measures of theoretically relevant predictors of youth development identified in the Search Institute's Developmental Assets framework and associated research (see Benson, 2007) were also included. Specifically, *parental support* (feeling loved and supported, five items) and *positive parental role modelling* (parents often help others, one item) were measured with on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree); while *positive adult role models* (number of adults well known to young person who help others often) and *negative adult role models* (number of adults well known to young person who are involved in wrong or unsafe things) were measured with one item requesting the number of respective role models on a 5-point scale (0 = 0 to 5 = 5 or more); *school engagement* (level of school boredom and lack of preparedness to learn) was measured with four items requiring responses on a 3-point Likert scale (1 = usually to 3 = never). The engagement subscale had moderate internal consistency ratings ($\alpha = .60$) but was retained because item deletion did not improve reliability. Weekly extracurricular involvement in sports activities/clubs, non-sport school organizations or clubs, community organizations or clubs, and activities or programs offered by religious organizations was each measured with a one-item scale with response options from 0 (0 hours) to 6 (11 or more hours). All measures were obtained from the Search Institute (2012) PSL-AB survey after receiving permission for their inclusion.

Participants were asked to indicate a number of *demographic characteristics* including their gender, age, and one or more ethnicity (NZ Māori, Tokelauan, Fijian, Niuean, Tongan, Cook Islands Māori, Samoan, Other Pacific Islands, NZ European/Pākehā, Other European, South-East Asian, Indian, Chinese, Other Asian,

²The problematic item for the intellectual flexibility subscale was *I change my thinking or opinions easily if there is a better idea*. For the task leadership subscale, the problematic item was *I can get people to work for me*.

Other ethnicity). Participants also indicated whether or not they had been previously involved in the Stars program as a Peer Mentor. The latter responses were used to derive *mentoring status* (new or returning or nonmentors). New mentors were those beginning the program in 2013 as mentors for the first time. Returning mentors were those who indicated that they were both current mentors and had been previously involved as a Stars peer mentor and nonmentors were those who were not current mentors and who indicated that they had not been previously involved as a peer mentor. The coding of mentor status for the current mentors was verified against a list of the 2013 new and returning mentors provided by Stars Coordinators.

Sample characteristics

According to program records, a total of 235 peer mentors participated in the 2013 deliveries of the program at the five participating schools, and 199 mentors (85%) expressed interest in participating in the study; 157 of these mentors consented (or assented and provided parental consent) to participate and completed the initial questionnaire thus the response rate based on the total 2013 population of mentors was 66%. Of the participating mentors, 65% were female and 33.4% male (two did not identify a gender), 31.2% identified as European (NZ or Other), 23.6% as Māori, 50.3% as Pasifika, and 31.8% as Asian, with 35% of students identifying with more than one ethnicity while 1.9% did not specify any ethnicity. The mentors' ages ranged from 13³ to 19 but the majority (84.7%) were 16 or 17 years old; 30% were returning mentors.

A comparison group of similar students who were not involved as peer mentors in the Stars program was recruited via convenience and snowball sampling. Participating schools were asked to share the invitation to participate in the research with the other senior students in the school; however, those that were advised of the invitation were predominantly the friends of current peer mentors who were encouraged by their mentor friends to come along to the information session. At one school the nonmentor students were those involved in the Stars Teacher Liaison's class because he was willing to allocate time for survey completion during his

class time. Across all five schools, eighty students who were not involved in the Stars program expressed interest in participating in the study; however, only 68 of these students returned their consent or assent forms and completed the initial questionnaire. Because it is difficult to estimate the number of nonmentor students who actually received the invitation, we cannot provide the response rate for the nonmentor sample. Of the 68 who consented, nine indicated they had previously been involved as a mentor in the Stars program, eight did not complete the question about previous mentoring experience, and 51 indicated that they have never been involved as a mentor in the Stars program. Although it would have been of interest to compare the profiles of those who were not currently Stars mentors but had been previously to the other groups, the sample size for this subgroup prevented us from conducting any meaningful comparisons. Consequently, these participants were excluded from the analyses as were those who did not specify if they had previously been involved in mentoring. The group of 51 students not currently or previously involved as mentors, were deemed nonmentors for the current study. Of the nonmentors, 37.3% were male, 27.5% percent identified as European (NZ or Other); 21.6% as NZ Māori, 58.8% as Pasifika, and 27.5% as Asian while 29.4% of students identified with more than one ethnicity. They ranged in age from 14 to 19 but the majority (88%) were 16 or 17 years of age. The total sample size for the current study was thus 208 (51 nonmentors, 109 new mentors, and 48 returning mentors).

Analyses

Questionnaire data were initially assessed for normality. There are various guidelines about acceptable levels within the literature. Kline (2005) suggests that skewness levels less than three and kurtosis less than ten indicate normality departures that are unlikely to be problematic. We have based our assessment on the more conservative criteria advocated by West, Finch, and Curran (1995) as well as Kim (2013), who deem skewness less than two and kurtosis less than seven to be acceptable. Only two items exceeded skewness or kurtosis of ± 1.5 . The largest departure from normality related to baseline sympathy, with skewness of -1.6 , and kurtosis of 2.5, indicating that transformation was not necessary.

Descriptive statistics (means and standard deviations) were calculated for the outcomes of interest. Chi-square tests were conducted to determine whether group proportions differed significantly with respect to gender or ethnicity. A one-way ANOVA was

³Although Stars is designed as a cross-age peer mentoring program where mentors are at least two years older than their mentees, one of the schools included in this research project had trialled the inclusion of Year 10 students (aged 13–15) as junior Peer Mentors to support the senior Peer mentors during mentoring sessions. The school was concerned that the Year 10 students were not engaged with the program. After consultation with Graeme Dingle Foundation's National Support Office Programme development team, the school realigned their mentor selection process to only include mentors at least two year levels above the mentees.

conducted to assess age differences between the groups. A one-way MANCOVA was then conducted to assess if there was an overall between-group difference for the combined 22 variables of interest. Age was included as a covariate because returning mentors were expected to be older than many new mentors by virtue of having had to have been a mentor in the previous year. Univariate between-group differences were also examined for each outcome because we were interested in ascertaining which specific characteristics distinguished the groups. The Benjamini-Hochberg procedure was used to adjust for false discoveries associated with conducting 22 univariate tests. The procedure is recognized as a more powerful method for dealing with the increased likelihood of Type 1 errors associated with multiple comparisons compared to the highly conservative Bonferroni correction (McDonald, 2014). The false discovery rate was set at a conservative level of .05 to account for the potential for biased standard errors associated with the nested structure of the data whereby the 208 mentor and nonmentor study participants were nested within five different schools. Pairwise comparisons were subsequently conducted for all significant univariate tests using the Games-Howell procedure, which is recommended when group variances are unequal (Field, 2009). Cohen's *d* effect sizes were calculated for the significant pairwise comparisons.

A linear discriminant function analysis was then conducted to investigate whether there were measurable differences in the patterns of responding by group (never mentored, new mentor, returning mentor), based on the PYD characteristics (i.e., all non-demographic variables). Although the number of participants in each group differed, the analysis was conducted assuming equal group sizes as this gave a better indication of the differentiating factors. The results showed classification accuracy significantly better than chance (59%; compared with 33% by chance), with similar success for each group; 59% for those who had never mentored, as well as new mentors and 60% for returning mentors. All analyses were conducted using IBM SPSS 23 software.

Results

Descriptive statistics and between-group differences

With regards to demographic characteristics, there was a significant difference in age between the three groups, $F(2, 202) = 17.85, p < .001$. Returning mentors were 16.75 ($SD = 0.80$), nonmentors were 16.36 ($SD = 0.88$), and new mentors were 15.93 ($SD = 0.88$) years of age

Table 2. Means and standard deviations for positive youth development characteristics.

Outcome	Mentor Status		
	Non-Mentor <i>M</i> (<i>SD</i>)	New Mentor <i>M</i> (<i>SD</i>)	Returning Mentor <i>M</i> (<i>SD</i>)
Time Management	5.40 (1.22)	5.33 (1.45)	5.58 (1.37)
Social Competence	5.65 (1.37)	5.62 (1.33)	6.29 (1.00)
Achievement Motivation	6.54 (1.29)	6.72 (0.97)	6.85 (0.94)
Intellectual Flexibility	6.31 (1.35)	6.51 (1.09)	6.87 (0.76)
Task Leadership	5.78 (1.70)	6.27 (1.32)	6.78 (0.89)
Emotional Control	5.73 (1.40)	5.89 (1.33)	6.14 (1.13)
Active Initiative	6.41 (1.34)	6.51 (1.33)	6.97 (0.98)
Self-Confidence	6.39 (1.26)	6.28 (1.20)	6.88 (0.98)
Personal Values	3.40 (0.54)	3.49 (0.44)	3.49 (0.47)
Valuing Diversity	3.57 (0.40)	3.43 (0.47)	3.54 (0.48)
Sympathy	3.64 (0.57)	3.59 (0.56)	3.52 (0.64)
Parent Support	4.01 (0.79)	4.05 (0.82)	3.97 (0.81)
Positive Parental Role Modelling	3.95 (0.99)	3.91 (0.93)	3.94 (0.98)
Family Cohesion	4.61 (2.01)	5.13 (2.14)	4.65 (2.51)
Positive Adult Role Models	2.78 (1.19)	3.13 (1.10)	3.66 (0.75)
Negative Adult Role Models	1.55 (1.57)	1.49 (1.47)	2.00 (1.52)
Voluntarism	1.45 (1.69)	1.46 (1.63)	1.67 (1.40)
School engagement	2.30 (0.36)	2.31 (0.37)	2.28 (0.36)
Sports Involvement	1.92 (1.67)	1.38 (1.59)	2.29 (1.84)
School Club Involvement	1.63 (1.77)	1.41 (1.51)	2.10 (1.51)
Non-School Club Involvement	0.94 (1.57)	0.55 (1.17)	0.90 (1.42)
Religious Attendance	1.65 (1.79)	2.04 (1.74)	1.85 (1.58)

on average. Pairwise comparisons revealed that returning mentors were older than both new and nonmentors, and nonmentors were significantly older than new mentors. There were no significant differences in gender or ethnicity across the groups.

Table 2 presents the means and standard deviations for the variables of interest. The results of the one-way MANCOVA revealed a significant overall difference between the three groups across the combined outcomes, after adjusting for age, Wilk's $\lambda = .65, F(44, 360) = 1.95, p = .001, \eta^2 = .19$. Nevertheless, age was a significant covariate, Wilk's $\lambda = .80, F(22, 180) = 2.05, p < .01, \eta^2 = .20$. After adjusting for a Benjamini-Hochberg false discovery rate of .05 for the 22 univariate tests, results indicated significant group differences in positive adult role models, $F(2, 201) = 8.23, p < .001, \eta^2 = .19$; social competence, $F(2, 201) = 7.68, p = .001, \eta^2 = .07$; task leadership, $F(2, 201) = 6.21, p = .01, \eta^2 = .06$; and sports involvement, $F(2, 201) = 6.10, p < .01, \eta^2 = .06$. At the univariate level, age did not predict any of the individual PYD characteristics after the Benjamini-Hochberg false discovery rate adjustment.

The post-hoc tests indicated that returning mentors reported a greater number of positive adult role models and higher levels of social competence and task leadership compared to both new and non-mentors. Returning mentors also reported greater involvement in sports than new mentors. The effect sizes (Cohen's *d*) indicated that these differences ranged from small-medium to large effects with the largest effects occurring between returning and non-mentors in positive adult role models and task leadership. The effect size

Table 3. Mean difference scores, Cohen's *d* effect sizes, and effect size confidence intervals for significant pairwise comparisons of positive youth development characteristics.

Outcome	Mdiff	Cohen's <i>d</i>	CI
Positive Adult Role Models			
Returning vs. Non-Mentors	.88***	0.88	0.47–1.29
Returning vs. New Mentors	.53**	0.53	0.19–0.88
Social Competence			
Returning vs. Non-Mentors	.64*	0.53	0.13–0.93
Returning vs. New Mentors	.67**	0.54	0.20–0.89
Task Leadership			
Returning vs. Non-Mentors	.99**	0.72	0.32–1.13
Returning vs. New Mentors	.50*	0.41	0.07–0.76
Sports Involvement			
Returning vs. New Mentors	.91*	0.54	0.20–0.98

Note. *= $p < .05$. **= $p < .01$. ***= $p < .001$.

between returning and new mentors were medium and small-medium for both of these outcomes, respectively (see Table 3). All other effects were medium according to the rough effect size heuristics outlined by Cohen (1988).

Student profiles

In comparison to ANOVA, discriminant function analysis better enables one to discern clusters of variables that meaningfully differentiate group membership. In this way, these findings provide a better sense of the distinguishing profiles of returning, new, and non-mentors. The first discriminant function was statistically significant, $\Lambda = .68$, $\chi^2(44) = 74.75$, $p = .003$, as was the second, $\Lambda = .84$, $\chi^2(21) = 33.7$, $p < .039$. Table 4 shows the structure matrix of the discriminant function coefficients. Only items with coefficients greater than .25 are included to improve clarity. The structure matrix indicates that high scores on Discriminant Function 1 related to a higher number of hours involved in sports teams, school or non-school clubs, as well as higher degrees of self-confidence, social competence, and valuing diversity. This grouping of variables was thus

Table 4. Structure matrix of discriminant function coefficients.

Variable	Function 1: Social Competency and Involvement	Function 2: Prosocial Influences and Leadership Orientation
Sport team Hours spent/week: playing on or helping with sports teams at school or in the community?	.468	.082
Baseline Self Confidence	.364	.268
Baseline Social Competence	.340	.338
School Club Hours spent/week: in clubs or organizations (other than sport) at school?	.329	.177
Baseline Valuing Diversity	.284	–.107
Non-School Club Hours spent/week: in clubs or organizations (other than sport) outside school?	.278	–.086
Adult Positive Model How many adults have you known for two or more years who ... spend a lot of time helping other people?	.189	.638
Baseline Task Leadership	.090	.580
Baseline Intellectual Flexibility	.135	.384
Baseline Active Initiative	.201	.319

Note. Bolded coefficients indicate the discriminant function with which each item aligns.

Table 5. Canonical discriminant functions at group centroids.

Mentor Group	Function 1: Social Competency and Involvement	Function 2: Prosocial Influences and Leadership Orientation
Never Mentored	.372	–.680
New Mentor	–.451	.076
Returning Mentor	.629	.551

determined to reflect characteristics of *social competency and involvement*. Returning mentors had the highest average scores for Function 1, suggesting that these students were more likely to have higher levels of social competency and involvement. New mentors had the lowest average for Function 1. Function 2 related most strongly to the number of adults known who spend a lot of time helping others, degree of task leadership, intellectual flexibility, and active initiative, features we felt reflected *prosocial influences and a positive leadership orientation*. For Function 2, returning mentors had the highest average scores, while nonmentors had the lowest.

The group centroids are shown in Table 5. As noted above, the three groups appear to be distinct with respect to both functions, with returning mentors having high average scores for both functions. However, new mentors also differed from nonmentors, with new mentors scoring low on the first social competency and involvement function and average on the second prosocial influence and positive leadership orientation function and nonmentors scoring relatively high on the former function, and very low on the latter.

Discussion

Overview of findings

The Stars program provided an opportunity to explore the PYD characteristics of an ethnically diverse (largely

non-European) group of young New Zealanders from low socioeconomic backgrounds who engaged in service to younger peers in their school communities, a subpopulation of youth that has previously received no attention in the PYD or youth service literature. The extant research on PYD demonstrates that prosocial behavior and civic engagement is influenced by a young person's competence, confidence, connection, character, and compassion (Lerner & Lerner, 2013). Supportive adults and constructive activities, such as time spent in youth programs, predict the aforementioned Five Cs of PYD as well as service contributions (Lerner & Lerner, 2013; Lerner et al., 2014; Scales et al., 2011). This led us to expect that the senior students who were returning to peer mentor for another year in Stars would have higher levels of PYD characteristics (both personal strengths and positive external influences) compared to new and nonmentors. In partial support of our first hypothesis, returning mentors reported higher average ratings on all variables where significant differences were obtained; however, significant differences were only obtained on a few of the variables measured. We also predicted that while new mentors would have lower levels of PYD characteristics than the more experienced Stars mentors, having not spent as much time in the service-oriented youth development program, new mentors would report higher levels of PYD characteristics compared to their nonmentor peers because of their inclination towards service, but only minor differences existed in the new and non-mentor profiles.

The characteristics that did differentiate the three groups clustered meaningfully into two variable groupings that, together, could be used to better discern the profiles of returning, new, and nonmentors: (a) characteristics that reflected prosocial adult influences and a positive leadership orientation and (b) characteristics that reflected social competency and involvement. The findings indicate that the returning mentors have the most distinct profile of the three groups, characterized by having many positive adult role models and a strong leadership orientation, as well as high levels of confidence and sociability. New mentors also had a stronger prosocial adult influence and leadership profile than nonmentors, but a weaker sense of social competency and lower social involvement. Our findings thus indicate that a leadership orientation, which is linked to being surrounded by adults that make prosocial contributions, is a defining characteristic of youth who choose to serve as Stars peer mentors.

This reinforces recent research findings that relationships with adults are a critical ingredient for PYD and contribution (Bowers et al., 2014; Lerner & Lerner, 2013; Scales et al., 2011). Few studies, however, have

assessed the influence of both familial and nonfamilial adults on youth development (Bowers et al., 2014). For the current sample of youth from a socioeconomically disadvantaged background, we discovered that having many positive adult role models plays a stronger role in differentiating youth mentors from nonmentors than positive parental role modelling and parental support. This is intriguing given the number of studies that demonstrate the importance of family influences on youth voluntarism (Fletcher et al., 2000; Harré, 2007; Lenzi et al., 2014; McLellan & Youniss, 2003; Yates & Youniss, 1996).

For young people in low socioeconomic communities, such as those in our study, it may be that access to parents is comparatively restricted (Huebner & Mancini, 2003). In New Zealand, descriptive trends indicate that youth from low socioeconomic backgrounds are less likely to spend time with their mothers (Adolescent Health Research Group, 2013); thus, they may have less access to prosocial parental role models. The link between parent and child service inclinations is thought to be driven by observational modelling and sharing of views and values which reinforce prosocial beliefs and behaviors for young people. Yates and Youniss (1996) and Fletcher et al. (2000) found this was particularly so in the context of warm parent-child relationships. For youth from low socioeconomic backgrounds, who may not spend as much time around their parents (Huebner & Mancini, 2003; Lareau, 2011), it may be that other positive adult role models fulfill this role thus leading to their inclination toward leadership and to serve others. Although the research conducted by Bowers et al. (2014) did not focus on youth service involvement, they found that in general both familial and non-familial adults had a positive effect on youth development, but non-familial adults played an important compensatory role for youth who experienced problematic parenting. Our findings support the important role that nonfamilial adults can play in the development of youth from disadvantaged communities, whether or not this is through a compensatory effect requires further investigation.

The high sociability of returning mentors was expected given the existing research on the Five Cs model of PYD (Lerner & Lerner, 2013) and Yates and Youniss' (1996) review on youth volunteers. Larson, Hansen, and Moneta (2006) also found that service activities help to cultivate social capital by connecting young people to adult networks and building their interpersonal skills. Furthermore, the high involvement of the returning mentors in sports and clubs in this study aligns with Zarrett et al.'s (2009) finding that participating in both sports and other developmental programs is linked to higher levels of PYD and service contributions.

This suggests that other extracurricular commitments do not detract from service involvement; in fact, social involvement of various kinds (for example, leisure, sports, or service) may be mutually enhancing.

The low sociability of new mentors is harder to explain based on the existing literature. Although we hypothesized that new mentors would report lower levels of PYD characteristics than returning mentors because of their lack of experience as Stars mentors, we did not expect new mentors to report lower sociability than non-mentors. However, Stars program staff and mentors participating in the study were not surprised when presented with this finding. They indicated that often new mentors are shy and quiet students and some see Stars mentoring as an opportunity to further cultivate important life skills that they do not yet exhibit. Perhaps the prosocial adults involved in these young people's lives notice their leadership potential and encourage them to give mentoring a try. We do know that in some schools, teachers identify students who demonstrate leadership potential and encourage those students to apply. In other schools, any student who is interested is welcome to participate in training and try the role. This raises interesting questions about what differentiates students who put themselves forward and those who are encouraged by others to do so. Unfortunately, systematic data have not yet been collected on mentor motivations to become involved in Stars. Our data also suggest that the three groups could not be differentiated based on other motivational characteristics (i.e., active initiative, achievement motivation, or school engagement) nor did the groups differ on self-regulation tendencies (i.e., time management and emotional control) which PYD theory suggests are important predictors of thriving (Lerner & Lerner, 2013).

This brings us to consider why we did not obtain as much differentiation as expected between mentors and nonmentors. In addition to self-regulatory and motivational characteristics, mentors and non-mentors were not distinguishable in terms of church attendance, familial influences or, importantly, their prosocial values and other voluntary contributions. Indeed, nonmentors contributed as many hours to helping others or making their community a better place as did their mentor peers and they had similar levels of character and sympathy toward others. This highlights a problem with our sampling approach. Our recruitment of nonmentors required us to rely on school personnel to share the research invitation with other senior students in the school and the Stars Coordinators to encourage peer mentors to bring their friends along to the research information meeting. This convenience and snowball sampling approach created a comparison group of

nonmentors that were more similar to their peer mentor counterparts than expected. Research does indicate that young people tend to have friends that share similar core values (Lerner & Lerner, 2013), thus in retrospect it makes sense that the peers they brought along to hear about the Stars research shared their prosociality and inclination to serve. This research therefore says much more about service as cross-age peer mentors than it does about youth service in general.

Leadership on the part of Stars mentors is needed to direct group activities and mentors must act as role models for their younger peers. These elements may therefore attract young people with the propensity for leadership to this particular kind of service. Other service experiences, such as serving food in a homeless shelter or helping out within the familial context, while still likely to attract youth with prosocial values and characteristics, may require less leadership capacity. The nonmentors may have been contributing to others in ways that aligned with their prosocial values but did not require the same degree of leadership.

Study limitations and future research

Evidently, the aforementioned point is a limitation of the research. Our findings cannot be extrapolated to other types of service experiences and the field would benefit from future research that directly compares the PYD characteristics of youth attracted to different types of service experiences to better elucidate the PYD-contribution link. Because the sample of youth recruited for this study were similar, high-functioning youth, despite being embedded in socioeconomically disadvantaged communities, we still have a minimal understanding of how PYD characteristics play out for less accessible young people at the lowest extreme of the socioeconomic spectrum (Lerner & Lerner, 2013).

Generalizability is also restricted because the sample consisted only of New Zealand youth from low socioeconomic communities who were involved in a single mentoring program. Given the finding regarding the importance of having several adult role models over and above having a parental role model and broader parental support, it would be of interest for further studies to compare the relative influence of familial and nonfamilial adults on youth service to see if this effect could be replicated with youth of varying socioeconomic backgrounds or if the effect is moderated by socioeconomic status or parental availability. It would also be valuable to explore if the process of influence is similar between parents and other adult role models. Because we are unclear as to the directionality of influence between the mentors' leadership orientation and

their access to multiple nonparental prosocial adults, future research could investigate whether these young leaders seek out positive adult role models, whether prosocial adults reach out to young leaders, or whether they exist in these young people's natural environment due to another spurious variable.

Finally, this was an exploratory study that made use of baseline data from a larger study designed to investigate the impact of the Stars program on the youth mentors. The baseline data afforded us the opportunity to assess the characteristics of mentors relative to a comparison group of nonmentors who unfortunately were not retained in the larger impact evaluation study and thus could not offer a comparison at any other point. This research thus did not aim to investigate whether participation in Stars influenced the development of the returning mentors' defining characteristics as this was the focus of the larger impact study. Rather, this research was solely focused on differentiating three groups of similar youth based on their degree of service involvement as cross-age peer mentors. Given the paucity of research on cross-age peer mentors and on the characteristics that predict involvement in specific forms of service, we urge researchers to build on this research by investigating the PYD characteristics of youth involved in different types of service opportunities that are readily accessible to youth across the full socioeconomic spectrum.

Implications for engaging youth in peer mentoring service

The limitations outlined in the previous sections notwithstanding, we have shown here that prosocial adult influences and a positive leadership orientation differentiate those who not only put their names forward to mentor in the Stars program but who also continue their service involvement beyond a year. This suggests that promoting leadership qualities in youth who may not be initially inclined toward leadership may be a viable means through which we can increase broader youth engagement in service. Positive adult role models seem to play a particularly important role in this, whether these adults reach out to potential young leaders, young leaders seek them out themselves, or prosocial adults are noticed by young leaders for other reasons. Whatever the mechanism through which the prosocial adult-youth service link occurs, to cultivate youth citizenship, adults who regularly interact with youth should be encouraged to direct young people's attention towards adult helping behaviors. This could be by providing opportunities for observation of their positive role modelling actions or sharing stories of service to others.

Conclusion

Engaging young people in service is of value because service experiences offer developmental benefits and sows the seeds for more engaged adult citizenship. Compared to other types of service that require minimal personal investment, cross-age peer mentoring offers a rich service opportunity because it involves meaningful relationships and ongoing contributions. It is therefore in our interest to attract more youth to this kind of authentic service to others. For the ethnically diverse group of New Zealand youth from low socioeconomic areas involved in this research, having a positive leadership orientation was one feature that distinguished cross-age peer mentors from other similar youth. Furthermore, having prosocial adult role models was associated with youth leadership qualities. Although there are limitations in terms of the generalizability of these findings, this research suggests that leadership skill development should be a focus of strategies geared to involve more young people in service as mentors. Adults who surround young people also have a critical role modelling part to play in promoting the prosocial leadership capabilities that are associated with mentoring service.

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Disclosure statement

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