Child Youth Care Forum (2016) 45:85–105
DOI 10.1007/s10566-015-9319-9

ORIGINAL PAPER

Protégés' Personality Traits, Expectations, the Quality of the Mentoring Relationship and Adjustment: A Big Five Analysis

Limor Goldner[1]

Published online: 26 May 2015

Abstract
Background Community-based mentoring interventions can benefit high-risk youth. However, meta-analyses suggest that these benefits may be conditioned by protégés' personality.
Objectives Associations between protégés' personality traits and mentoring expectations, the quality of the mentoring relationship, the perceived mentoring contribution, and levels of adjustment at the end of mentoring were explored using the Big Five model. In addition, the possible moderation of protégés' personality traits on the relationship between the quality of the mentoring relationship and protégés' level of adjustment at the end of the intervention and the perceived benefits of mentoring was explored.
Methods Self-reports from protégés, parents, and teachers were used in a prospective research design. The sample consisted of 167 protégés (mean age = 9.58) from *Perach*, the largest community-based mentoring program in Israel.
Results Protégés' agreeableness, extraversion, and openness were positively associated with their expectations. Agreeableness was positively associated with the quality of the relationship. Agreeableness, conscientiousness, and openness were positively associated with protégés' social and academic adjustment at the end of mentoring, and with the perceived contribution of mentoring, whereas neuroticism and extraversion were negatively associated. Protégés' personality traits moderated the correlations between the quality of the relationship and their conduct self-concept, as well as the parents' perceived mentoring contribution.
Conclusion This study highlights the contribution of protégés' personality in shaping their ability to benefit from mentoring in terms of adjustment and perceived contribution of mentoring.

✉ Limor Goldner
limor.goldner@gmail.com

[1] Graduate School of Creative Art Therapies, Faculty of Social Welfare and Health Sciences, University of Haifa, 199 Aba Khoushy 199 Ave., Mount Carmel, 3498839 Haifa, Israel

Keywords Youth mentoring · Psycho-social development · Personality · Protégés' characteristics

Introduction

Children's and adolescents' development is closely linked to the support they receive from non-parental adult figures such as mentors (Cavell et al. 2002; Klaw and Rhodes 1995). Half to more than three-quarters of American youth report having a meaningful relationship with a non-parental adult (e.g., Bean et al. 2002; DuBois and Silverthorn 2005; Zimmerman et al. 2002). This type of relationship is often termed "natural mentoring". In natural mentoring the relationship is embedded in the young person's social network and appears to fulfill a unique emboldening role between parents and friends (Goldner and Mayseless 2008). Studies suggest that these relationships serve as a protective and empowering mechanism in the lives of children by reducing behavioral problems and promoting academic competence, wellbeing, and healthy behavior (Ahrens et al. 2008; DuBois and Silverthorn 2005).

However, at the same time, data from a recent national survey of a representative sample of 8th graders in the United States indicated that 22.9 % of these 8th graders did not have at least one non-parental adult figure with whom they could talk. Furthermore, a troubling subgroup of youth comprising about 10 % of the sample stated that there were no adults in their life from whom they could seek help (DuBois and Karcehr 2013). Given the decrease in natural adult figures in many youngsters' social networks, interventions that pair youth with formal mentors have seen tremendous growth in the past three decades, with millions of volunteer mentors involved in mentoring programs around the world (Goldner and Scharf 2013a).

Longitudinal research and random assigned trials supported by meta-analysis evaluations (e.g., DuBois et al. 2002, 2011) indicate that formal mentoring can have a positive impact on children's and adolescents' socio-emotional (e.g., Cavell et al. 2002, 2009; Thomson and Zand 2010), academic (e.g., Rhodes et al. 2000), and behavioral (e.g., Cavell and Hughes 2000; Cavell et al. 2009) functioning. These positive effects on youth outcomes become progressively stronger when relationships persist for longer periods of time and are at their greatest when relationships last at least 1 year (Grossman and Rhodes 2002). Beyond issues of time, researchers have shown that protégés' outcomes and development at the end of mentoring are influenced by the extent to which mentors and their protégés establish a strong connection (e.g., Langhout et al. 2004; Parra et al. 2002; Rhodes et al. 2005; Thomson and Zand 2010; Zand et al. 2009). Specifically, in a caring and sensitive mentor-youth relationship, mentors can provide protégés with a corrective, positive experience that facilitates their development (Parra et al. 2002).

However, a closer look at these studies reveals that not all protégés in formal mentoring are equally suited for mentoring, not all benefit from it equally (Rhodes and DuBois 2008), and that the overall benefits have been characterized as relatively small (the Cohen's *d* range from .14 to .19) (DuBois et al. 2002, 2011). This conclusion underscores the need to identify which protégés' characteristics are best related to their development (de Tormes Eby et al. 2012).

To date, empirical research to identify the differential contribution of formal mentoring interventions to sub-groups of protégés has predominantly focused on their background

characteristics, such as gender and age (DuBois et al. 2011; Grossman and Rhodes 2002; Rhodes et al. 2008), relationship history (Schwartz et al. 2011), attachment orientations in the context of youth (Goldner and Scharf 2014) and college academic mentoring (Larose et al. 2005). Thus, there is a need to better define those protégé characteristics that are associated with the quality of the mentoring relationship, the perceived contribution of the mentoring, and its outcomes. The current study utilized the Big Five personality model to explore the contribution of protégés' personality traits to shaping the mentoring relationship, expectations from the intervention, the perceived benefits of mentoring, and protégés' levels of adjustment at the end of mentoring.

The Big Five Model

Personality refers to a person's tendencies to behave, think and feel in certain consistent ways (Shiner and Caspi 2003). These traits are often determined primarily by biological and psychological structures and are generally not constructed as a product of social interactions or relationships. They encompass various aspects of the self such as self-esteem, conscious and unconscious self-representations, self-presentation, and identity (Caspi and Shiner 2006; Shiner 1998).

The "Big Five" is a general term that refers to broad dimensions of personality or dispositional tendencies; namely, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experiences. Extraversion is manifested in greater sociability, assertiveness, talkativeness and self-confidence. Agreeableness refers to being helpful, cooperative and sympathetic towards others. Neuroticism refers to the degree of emotional instability, anxiety, depression and anger. Openness is reflected in intellect and the extent of cultural interests, fantasy and creativity. Finally, conscientiousness is exemplified by being disciplined, organized and achievement-oriented (Costa and McCrae 1992).

The structure of the Big Five has been replicated across geographic and cultural contexts (McCrae 2002; Schmitt et al. 2007). Accumulating evidence shows that the Big Five is a valid model for describing differences in individuals' personalities that are already present in childhood (Barbaranelli et al. 2003; Fransson et al. 2013).

Children's Personality, Adjustment, and Personal Relationship

Personality researchers have suggested that children's personality is a primary factor in their development and later functioning (Shiner 1998). As personality theory emphasizes aspects of arousal, emotions, attention, and self-regulation (Rothbart et al. 2000; Vaughn et al. 2008), associations between personality traits and children's adjustment are expected.

Empirically, studies examining the associations between the Big Five traits and children's adjustment have shown that greater neuroticism was positively associated with high levels of internalizing (Barbaranelli et al. 2003; Markey et al. 2006) and externalizing symptoms including depression, sadness, anxious behavior and low levels of anti-social behavior (Barbaranelli et al. 2003; Markey et al. 2006), as well as low self-esteem (Robins et al. 2001). By contrast, greater agreeableness was negatively associated with internalizing and externalizing symptoms (Barbaranelli et al. 2003), hyperactivity, and behavioral problems (Muris et al. 2005) but positively associated with pro-social behavior (Muris et al. 2005). A mixed picture emerges regarding extraversion: whereas greater extraversion was positively associated with high self-esteem (Robins et al. 2001), it was also positively associated with high levels of externalizing problems (Huey and Weisz 1997), anti-social, and dangerous behaviors (Prinzie et al. 2003). These differences have been ascribed to

extraverts' tendencies for grandiose narcissism, presentation and self-disclosure, along with their low level of ego control that is primarily expressed in energetic, antagonistic, aggressive and dominant behavior (Krämer and Winter 2008; Miller et al. 2011). Finally, conscientiousness was negatively associated with behavioral problems (Barbaranelli et al. 2003; Muris et al. 2005), but conscientiousness and openness to experience were positively correlated with high self-esteem (Robins et al. 2001), school achievement (Asendorpf and Van Aken 2003; Barbaranelli et al. 2003), and pro-social behavior (Muris et al. 2005).

In addition, direct correlations have been reported between personality traits and adjustment in the field of psychotherapy. In particular, high neuroticism (as characterized by excessive worrying, irritability, hostility, lack of confidence and pessimism) were shown to be associated with no treatment outcomes or aggravated depressive symptoms, whereas agreeableness appeared to be related to more favorable outcomes (for a review, see Mulder 2002).

Children's personality traits may also help account for differences in the ways they perceive, interpret, and react in personal relationships with close or unfamiliar adult figures, as well as how they elicit adults' responses to them. This range of mechanisms shapes children's internal representations regarding themselves, others and personal relationships which are internalized in their self-system and guide their future behavior in interpersonal and social encounters (Bozionelos and Bozionelos 2010; Shiner and Caspi 2003).

Studies have charted the role of personality traits in the formation and evolution of adult-child relationships. High agreeableness in children, which is manifested in children's cooperative and friendly behavior, was shown to correlate positively with their willingness to suspend their individual interests, endorse submission, avoid relationship-threatening tactics such as guilt, manipulation and physical force, as well as with more constructive management of conflicts such as negotiation (Jensen-Campbell et al. 2003). By contrast, children's low agreeableness was negatively associated with aggressiveness and externalizing problems (Asendorpf and Van Aken 2003; Huey and Weisz 1997). Children's extraversion and agreeableness, which are manifested in grater sociability and friendliness, were correlated with their security attachment with their mothers. Similarly, children's openness, which is expressed in greater curiosity, and children's conscientiousness, which is characterized by greater commitment, were also positively correlated with security attachment with their mothers. However, the correlation with regard to neuroticism, which is characterized by greater anxiety and emotional instability, was negative (Goldner and Scharf 2013b).

Personality and Mentoring

Thus collectively, these findings suggest that protégés' personality traits may directly influence the way children benefit from the mentoring relationship and may moderate the link between the mentoring relationship and their outcomes. Workplace and career mentoring research has argued that high levels of neuroticism may be related to protégés' hesitation or hostility when approaching a mentor (Bozionelos and Bozionelos 2010). This may also lead to anxiety and insecurity during the relationship (Waters 2004), resulting in low expectations and benefits from mentoring. In contrast, extravert protégés, who are characterized by an exaggerated tendency to proactively seek social encounters even with strangers, might be more likely to approach mentors, and to more readily involve themselves and appreciate the relationship (Wu et al. 2008). Thus they may have higher expectations and derive more benefits from the mentoring relationship.

Because openness is reflected in intellectual curiosity, creativity, imagination, attentiveness to emotions, and receptiveness to new ideas, protégés who score high on this trait may be more receptive to their mentors' advice. They may be more likely to develop an interest in the mentoring experience, which may expose them to novel perspectives and views, provide them with an exploratory experience, and enhance their level of adjustment (Waters 2004; Wu et al. 2008). Likewise, due to their trusting and pleasant nature, agreeable protégés are more likely to approach and be approached by mentors. Their sensitive and affectionate nature may lead to the development of a more reciprocal and positive mentor-protégé relationship, and possibly strengthen and enhance its benefits. Finally, conscientious protégés, who tend to strive for achievement and are self-disciplined, hard-working, and reliable, may be more likely to invest the effort and persistence required to benefit from mentoring (Waters 2004; Wu et al. 2008).

Empirically, data from workplace and career mentoring indicate that an adaptive personality organization positively impacts career attainment and perceived career success (Turban and Dougherty 1994). For instance, negative associations were found between neuroticism and attempts to initiate mentoring relationships in the workplace (Turban and Dougherty 1994), levels of career satisfaction and possibilities for job promotion (Wu et al. 2008), whereas positive associations were found between protégés' extraversion and efforts to initiate mentoring relationships (Aryee et al. 1999), career satisfaction and job promotion (Wu et al. 2008). Similarly, positive associations were found between openness, agreeableness and mentoring (Bozionelos and Bozionelos 2010). Openness was associated with proactivity in seeking mentoring among novice protégés (Wanberg et al. 2006).

These findings and the questions they raise suggest that further exploration of the relationship between protégés' personality organization and the benefits of mentoring in the context of youth mentoring is warranted. The following hypotheses were tested here: (1) positive personality traits (i.e., openness, agreeableness, and conscientiousness) should be positively associated with greater perceived benefits from mentoring and with a greater level of adjustment at the end of the mentoring intervention as compared to neuroticism and extraversion; (2) positive personality traits as well as extraversion should be positively associated with a more positive mentoring relationship and higher expectations from the intervention, whereas neuroticism should be negatively associated; (3) protégés' personality traits should moderate the relationship between the quality of the mentoring relationship and the perceived benefits from the mentoring as well as protégés' level of adjustment at the end of the intervention. In particular, positive personality traits should increase the correlations between a positive mentoring relationship and protégés' development and perceived benefits of the mentoring, whereas negative personality traits should decrease these correlations.

Method

Participants

One hundred and sixty-seven protégés, 166 parents (164 mothers, 2 fathers), and 99 teachers participated in this study. The participants were drawn from an initial sample of 187 protégés, 187 parents, and 136 teachers who participated in the baseline assessment. The protégés' attrition rate (9 %, $n = 20$) was due to unwillingness to complete the questionnaire on the second assessment (7 %, $n = 14$), relocation (1 %, $n = 2$), or

inability to contact the children's parents (2 %, $n = 4$). However, no differences were found in any of the variables between the protégés who remained in the study and those who dropped out.

The protégés were from 19 elementary schools in at-risk neighborhoods based on a socio-economic index of the Ministry of Education in the northern part of Israel, located in both peripheral and central areas. Referral to the study was made by the branches of the *Perach* mentoring program in this area (see Setting below). Fifty-three percent of the children were boys ($n = 89$) and 47 % were girls ($n = 78$). The mean age was 9.58 years (range 8–12; $SD = 1.12$). Fifty-two percent of the children came from two-parent families ($n = 87$), and 48 % were children from divorced families and single-parent families ($n = 80$). Sixty percent (60 %) of the children were born in Israel ($n = 100$), and the remaining participants were immigrants (mostly from the Former Soviet Union -FSU). The children had an average of 2.63 siblings (range 1–11; $SD = 1.37$). The average number years of education for the protégés' mothers was 12.01 (range 0–20; $SD = 3.67$), and 11.89 (range 0–23; $SD = 3.60$) for the protégés' fathers. No significant differences were found between protégés' background variables and their baseline level of adjustment. The missing data (9 % of the protégés' reports, 11–17 % of the parents' reports, and 27 % of teachers' reports) were not compensated for statistically in the SPSS analyses. This decision was made according the acceptable cutoff of 10 % in the literature regarding an acceptable percentage of missing data in a dataset for valid statistical inferences (Dong and Peng 2013; Fox-Wasylyshyn and El-Masri 2005).

The mentors were BA candidates from universities and colleges in Israel. These students are volunteers and receive a partial scholarship in return for their participation in the mentoring program. Thirty percent of the mentors were males ($n = 50$) and the remainder ($n = 118$) were females. The mean age of the mentors was 24.06 (range 19–55; $SD = 3.33$); 64 % of the mentors came from two-parent families ($n = 108$) and 36 % were from divorced families and single-parent families ($n = 60$). Sixty-two percent of the mentors were born in Israel ($n = 104$), and the others were immigrants mainly from the FSU ($n = 64$, 38 %).

Setting

This study was conducted in the context of *Perach* (the Hebrew word for "flower" and also the acronym of the mentoring and tutoring project) project, the Israeli national mentoring program in which every year approximately 22,000 university and college students volunteer to work with at-risk children. The *Perach* intervention is relatively structured and short-term, and lasts for the duration of the academic year from November until the end of June, a total of 8 months. The program usually serves elementary school children from second to sixth grade. Schools are selected for the program by the Ministry of Education according to the students' socioeconomic status based on several criteria such as average parental income, parents' education, and the average ratio between number of children in the family and number of rooms in the family home.

After the selection of the schools, children are referred to the program by their homeroom teachers according to their level of adjustment (e.g., low levels of welfare and wellbeing, social detachedness, behavioral and discipline problems, and poor academic performance) and families' needs. Teachers are guided to select children who can benefit from a close relationship with a non-professional university student to enhance their level of adjustment in one or more areas. Matching of mentors and protégés is usually based on similar areas of interests and temperament, as well as the protégé's socio-emotional needs

and the mentor's ability to address them, but do not involve formal assessment tools. Protégés receive at least four contact hours per week in their natural surroundings (usually their home).

The intervention is based on the notion of "developmental mentoring", in which the primary focus is on facilitating the relationship between mentor and protégé as a way of promoting child development. This reflects the assumption that mentoring influences social, emotional and academic development through the creation of a supportive relationship (Karcher et al. 2006).

Mentors receive monthly guidance from *Perach* coordinators on specific issues such as aspects of the mentor's role, qualities of positive mentoring relationships, typical phases, periods and difficulties during the relationship, and preparation for planned separation. In these meetings, a specific plan including goals and activities is designed for each protégé by his/her mentor and coordinator. This plan serves as a guide for the mentors. In addition, written materials, organized meetings with the protégés' teachers, and professional counselling by educational counsellors are provided to the mentors when needed.

The project is closely supervised; hence, the total amount of shared protégé-mentor hours ($M = 121.43$ h, range 62–156, $SD = 13.04$) and the frequency of the meetings were similar across dyads at the end of the mentoring period (91 % of the protégés reported two meetings per week for a total time of 2 h).

Procedure

The current intervention study implemented a short, longitudinal pre/post research design, using reliable and validated questionnaires at two time points. The baseline (Time 1) assessment took place prior to the start of the mentoring. The Time 2 assessment took place approximately 8 months later during the last month of the mentoring program. During the baseline (Time 1) assessment, protégés first completed questionnaires regarding their personalities and expectations from mentoring and then completed a questionnaire regarding their adjustment. At Time 2, the protégés completed questionnaires regarding their adjustment, and then they reported on the quality of the relationship and the perceived contribution of the mentoring. Parents and teachers reported on protégé adjustment at the beginning and end of the mentoring (Times 1 and 2). Parents also reported on the contribution of the mentoring (Time 2). All measures were independently translated into Hebrew by three translators who are experts in the field of mentoring and developmental psychology, and native speakers of Hebrew. They compared their translations, discussed areas of disagreement, and then constructed a final version.

Ethical approval was obtained from both the Ministry of Education and from the Committee to Evaluate Human Subject Research of the University of Haifa (approval number: 0501/06). Regarding consent, a trained research assistant made initial contact with the protégés' parents by telephone, provided information on the goals of the study, and asked for the parents' consent for their offspring to participate in the study. After written consent was obtained, a home visit was conducted. Parents and protégés completed the questionnaires in their natural surroundings aided by a trained assistant who helped with any reading difficulties. Teachers completed the questionnaires in their free time. Participants were assured of the confidentiality of their responses.

Measures

All Cronbach reliability alphas are presented in Table 1.

Table 1 Cronbach α values

Questionnaire	Scale	Protégés	Parents
Big-five questionnaire for children (BFQ-C) (Barbaranelli et al. 2003)			
	Extraversion	.70	
	Agreeableness	.81	
	Neuroticism	.76	
	Openness	.68	
	Conscientiousness	.80	
Expectations about counselling questionnaire (Tinsley et al. 1980; Tinsley 1982)			
	Mentor's attitudes and behaviours	.88	
	Protégé's attitudes and behaviors	.65	
	Mentor's characteristics	.74	
	Counseling process and outcome	.65	
	General expectations	.93	
Quality of the relationship			
Mother–father–peer (MFP) scale (Epstein 1983)			
	Warmth/acceptance	.77	
	Granting of autonomy	.77	
	General relationship	.87	
Self-perception profile competence scale for children (SPPC; Harter 1985)			
	Cognitive-academic perception	.63 (T1)	
		.73 (T2)	
	Behavioral perception	.71 (T1)	
		.61 (T2)	
Strengths and difficulties questionnaire (Goodman 1997)			
	Behavioral problems		.73 (T1)
			.74 (T2)
	Social functioning		.62 (T1)
			.73 (T2)
Perceived mentoring contribution		.91(T2)	.90 (T2)

T1 baseline assessment, *T2* assessment at the end of the mentoring

Protégés' Personality (Time 1 Only)

Protégés completed sixty-five items from the Big Five Questionnaire for Children (BFQ-C) (Barbaranelli et al. 2003), measured on a three-point scale to assess personality (from 1 = not true at all, to 3 = very true). On this scale, extraversion/energy refers to activity, enthusiasm, assertiveness and self-confidence, agreeableness is defined as a positive approach towards others, neuroticism/emotional instability refers to feelings of anxiety, depression and anger, intellect/openness taps intellect and breadth of cultural interests, fantasy

and creativity and conscientiousness assesses dependability, orderliness and fulfillment of commitments. Barbaranelli et al. (2003) reported significant associations between child, parent and teacher ratings as well as between the Big Five factors and the dimensions of Eysenck's Junior Personality Questionnaire. They also showed that intellect/openness and conscientiousness emerged as important predictors of academic achievement. Externalizing problems were associated with low conscientiousness and low emotional stability, and internalizing problems with low emotional stability. The reported reliabilities tend to be satisfactory, and range from .71 to .95 (Barbaranelli et al. 2008; Caprara et al. 2011).

Protégés' Expectations from Mentoring (Time 1 Only)

Protégés completed thirty-five items on a seven-point Likert scale (from 1 = not true to 7 = definitely true) from the Expectations about Counseling Questionnaire (Tinsley 1982; Tinsley et al. 1980). The rationale for using this questionnaire was the connection often made by researchers in the field of youth mentoring between mentoring relationships and psychotherapy (Spencer and Rhodes 2005). The questionnaire was developed to measure students' expectations about counseling in four general areas: client attitudes and behavior (responsibility, motivation, and openness), counselor attitudes and behavior (acceptance, confrontation, genuineness, directness, empathy, self-disclosure, and nurturance), counselor characteristics (attractiveness, expertness, trustworthiness, and tolerance), and the counseling process and outcome (immediacy, concreteness, and outcome). Sample items include: "I expect to talk about my present concerns" and "I expect my mentor to help me to solve my problems". The internal consistency reliabilities of the scales were reported to range from .69 to .94 (Robitschek and Hershberger 2005). In the current study, modifications were made to suit the field of youth mentoring and the age of the protégés. Due to the high correlations (*rs* ranging from .58 to .82) between the subscales, a conservative approach was adopted and the four subscales were combined into one scale dubbed "expectations". Previous research has also reported an overlap between the factors, accounting for little unique variance in the overall factor structure (Hatchett and Han 2006; Moore-Thomas and Lent 2007).

Quality of the Relationship (Time 2 Only)

Protégés reported on the quality of the relationship using 19 items from the Mother–Father–Peer (MFP) Scale (Epstein 1983), rated on a five-point Likert scale (from 1 = almost never, 5 = almost always). Seven items were used to tap granting of autonomy by the mentors (e.g., "My mentor encourages me to make my own decisions"), and 12 items were used to measure the mentor's warmth/acceptance manifested in displays of love, warmth, appreciation and acceptance (e.g., "I can always depend upon my mentor when I really need his/her help"). The use of this questionnaire was based on the suggestion often made by scholars in the field of mentoring that the mentor-protégé relationship is analogous to parent–child dynamics in many respects (Rhodes 1994) and synthesizes aspects of warmth, acceptance and autonomy (Spencer and Liang 2009). The inventory has shown good reliability and was validated against several other measures of parenting (Crowell et al. 1999). The Cronbach's α for granting of autonomy was shown to range from .71 to .86, and from .81 to .85 for warmth/acceptance (Crowell et al. 1999; Epstein 1983). In the current study, due to the high inter-correlation between the two scales ($r = .65$, $p < .001$) a combined scale indicating the general quality of the mentoring relationship was constructed.

Protégés' Adjustment (Times 1 and 2)

Two scales from the Self-Perception Profile Competence Scale for Children (SPPC; Harter 1985) were used to measure the protégés' perception of their self-worth in the cognitive-academic, and conduct realms. Protégés were first asked to select the type of child that they most resembled from those described in the first or the second part of the statement. After making this choice, they were asked to indicate whether the description was fully, or only partially, true for them. A score of one represented low self-perception, whereas four represented a high rating of self-perception. This measure has been widely used and exhibits good psychometric qualities (Schwartz et al. 2011; Shapiro et al. 2005).

To examine children's behavioral and social adjustment (conduct problems, hyperactivity, emotional symptoms, peer problems and pro-social behaviors), parents completed four scales, each with five items rated on a three-point scale (from 1 = not true at all, to 3 = very true) from the Strengths and Difficulties Questionnaire (SDQ; Goodman 1997). Studies carried out in diverse settings support the SDQ's validity and reliability (Goodman 2001) and its predictive power across cultures, languages, and socio-economic backgrounds (Goodman 2001).

In the present study, the reliability of the parents' reports was low, similar to Stone et al. (2010), who found lower psychometric properties of the inventory among parents. Hence, the two conduct scales were merged into one scale termed "behavioral problems". The correlations between hyperactivity and conduct problems were $r = .73$ ($p < .001$) at Time 1 and $r = .74$ ($p < .001$) at Time 2. Higher scores indicate higher levels of behavioral problems. The two social scales were also combined into one scale termed "social functioning". The correlations between peer problems and pro-social behaviors were $r = -.25$ ($p < .01$) at Time 1 and $r = -.32$ ($p < .001$) at Time 2. Higher scores indicate higher levels of social functioning.

The protégés' academic performance was also evaluated using teachers' reports on reading scores at the beginning and end of the year on a five (failing grade) to ten (excellent) scale according to their assessment of the child's reading abilities (including accuracy, fluency and comprehension).

Perceived Mentoring Contribution (Time 2 Only)

The Mentoring Contribution Questionnaire was designed specifically for this study and was completed by protégés and parents at Time 2 to assess the perceived contribution of the mentoring relationship to the academic and social domains. The questionnaire consisted of ten items rated on a five-point Likert scale (from 1 = not true at all, to 5 = very true). For example: "The mentoring helped me go to school more organized and prepared"; "Because of the mentoring I feel less lonely".

Results

Protégés' Development

Differences between the Time 2 and Time 1 scores were calculated using two repeated measures MANOVAs on protégés' adjustment, protégés' self-concept (self-report), and parents' reports on protégés' adjustment. Since teachers reported only on protégés' reading

scores, an ANOVA for repeated measures was conducted. A significant main effect for time was found for protégés' self-perception (self-report) $F(2,165) = 3.78$, $p < .05$, $\eta^2 = .04$, and their adjustment as reported by their parents $F(2,161) = 7.14$, $p < .01$, $\eta^2 = .08$. As indicated in Table 2, the ANOVA analyses showed higher levels of conduct self-concept (Cohen's $d = .20$), academic/cognitive (approaching significance, $p = .09$, Cohen' $d = .12$), social functioning (Cohen's $d = .24$) and reading scores $F(1,99) = 30.29$, $p < .001$, $\eta^2 = .24$ (Cohen's $d = .44$) after the mentoring, as well as lower levels of behavioral problems (Cohen's $d = -.22$). The differences in the socio-emotional and behavioral scores had a relatively small effect size; however, it was larger than the average effect size ranging from .14 to .19 as reported in Dubois et al.'s (2002, 2011) meta-analyses.

The Correlations Between Protégés' Personality and Protégés' Adjustment at the End of the Mentoring, and Perceived Mentoring Contribution

The correlations between protégés' personality traits and protégés' adjustment at the end of the mentoring were examined by computing partial Pearson correlations between protégés' personality traits and their adjustment scores at the end of the mentoring, while controlling for the relevant adjustment scores at the beginning of mentoring. In addition, the correlations between protégés' personality traits and the perceived mentoring contribution were examined by computing Pearson correlations between protégés' personality traits and protégés' and parents' perceptions regarding the contribution of the intervention. As can be seen in Table 3, neuroticism was moderately and negatively associated with the self-concept of conduct. Agreeableness was positively and moderately correlated with protégés' social functioning as reported by parents and with protégés' perception of the mentoring contribution at the end of the intervention.

Protégés' conscientiousness was moderately and positively correlated with their reports regarding the contribution of mentoring at the end of the intervention. Openness was moderately and positively correlated with protégés' academic/cognitive self-concept at the end of the mentoring, and with the perceived contribution of the mentoring (self-report) at the end of the intervention. Interestingly, and contrary to the hypothesis, extraversion was

Table 2 Protégés' adjustment in the beginning and at the end of the intervention

	Time 1 M (SD)	Time 2 M (SD)	*F* time	η^2 time	*df*	Error	Cohen's *d*	95 % CI	
								Lower bound	Upper bound
Self-cognitive	2.58 .56	2.65 .60	2.89‡	.02	1	166	.12	−.16	−.02
Self-conduct	2.84 .58	2.95 .50	5.29**	.03	1	166	.20	−.20	−.05
Social functioning	2.64 .26	2.71 .33	10.33**	.06	1	162	.24	−.12	−.03
Behavioral problems	1.62 .28	1.55 .36	5.94*	.04	1	162	−.22	.01	.11
Reading score	6.65 1.34	7.22 1.27	30.29***	.24	1	98	.44	−.36	−.78

‡ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$, $N = 99$–167. Different numbers of reports by teachers, parents, and protégés account for different numbers of participants

moderately and negatively correlated with protégés' reading scores at the end of the mentoring as reported by teachers. Extraversion was also negatively correlated with parents' perceived contribution.

The Correlations Between Protégés' Personality and Mentoring Expectations, and the Quality of the Relationship

The correlations between protégés' personality traits, their expectations from the mentoring, and the quality of the mentoring relationship were examined by computing Pearson correlations between protégés' reports on their personality traits and their expectations concerning the intervention or the quality of the relationship. As hypothesized, and as can be seen in Table 3, extraversion, agreeableness, conscientiousness, and openness were positively correlated with protégés' expectations of mentoring. Regarding the quality of the relationship, unexpectedly, only agreeableness was moderately and positively correlated. It is possible that this small number of correlations derived from the limited range of the distribution of the relationship variable; most protégés reported high levels of mentoring relationship quality (range 1.00–5.00, $M = 4.10$, $SD = .73$). Sixty-six percent of the protégés reported a quality of mentoring relationship between 4.00 and 5.00, 28 % reported a quality of mentoring relationship between 3.00 and 3.99, and only 6 % of the protégés had a quality of mentoring relationship between 1.00 and 3.00.

The Correlations Between Protégés' Expectations, the Quality of the Relationship and Protégés' Adjustment at the End of the Mentoring, and Perceived Mentoring Contribution

First, the correlations between the protégés' general expectations from the mentoring, as well as the quality of the relationship and protégés level of adjustment at the end of the

Table 3 Correlations between protégés' personality traits and protégés' expectations, mentoring relationship and protégés' outcomes

	Extraversion	Neuroticism	Agreeableness	Conscientiousness	Openness
Cognitive/academic self-concept	−.10	−.10	−.04	−.06	.16*
Conduct self-concept (positive)	.00	−.21*	.02	−.06	.01
Protégés' perceived contribution	.06	.09	.23***	.21**	.13*
Social functioning	.00	.04	.19*	.02	.00
Behavioural problems	−.09	−.03	.10	.09	.10
Parents' perceived contribution	−.22**	−.02	.06	−.10	−.11$^{\#}$
Reading score	−.24*	−.05	−.02	.00	−.09
Expectations of mentoring	.30***	−.14‡	.51***	.43***	.34***
Mentoring relationship	−.06	.03	.12*	.01	.02

‡ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$, $N = 99$–167. Different numbers of reports by teachers, parents, and protégés account for different numbers of participants

mentoring were tested using partial Pearson correlations, controlling for protégés' baseline adjustment scores. Moreover, the correlations between the protégés' general expectations from the mentoring and the quality of the relationship and the perceived mentoring contribution were tested using Pearson correlations (see Table 4).

As can be seen in Table 4, protégés' academic/cognitive and conduct self-concept scores, their social functioning, as well as their reading scores were all moderately and positively correlated with the quality of the relationship, but not with their expectations. Similarly, positive correlations were found between the quality of the relationship and protégés' and parents' perception of the mentoring contribution. Surprisingly, no correlations were found between protégés' expectations from the mentoring and protégés' level of adjustment at the end of the mentoring and protégés' and parents' perceived mentoring contribution.

The Moderating Role of Protégés' Personality

To examine the moderating role of protégés' personality on the link between the quality of the mentoring relationship and protégés' outcomes, a series of univariate hierarchical multiple regression analyses (UHMRA) were conducted following the guidelines of Aiken and West (1991). Hierarchical regression analyses were conducted to predict conduct self-concept, social functioning, reading scores, and protégés' and parents' perceived mentoring contribution. The dependent variables were standardized, and the independent variables were centered. In the first step of the regression analysis, protégés' baseline scores were entered when available. The second step involved entering the relevant personality trait which was correlated with the outcome variable, and in the third step the quality of the mentoring relationship score was entered. The decision to enter personality before the quality of the relationship stemmed from the psycho-biological nature of personality factors and their early consolidation. The variable of protégés' expectations was not entered into the regression analyses because it did not correlate with protégés' level of adjustment at the end of the mentoring or the perceived contribution of the mentoring. In the third step of the regression, the protégés' report regarding the quality of the relationship was entered. Finally, in the fourth step the interaction between the personality trait and the quality of the mentoring relationship was entered. These analyses were followed by post

Table 4 Correlations between the quality of the relationship, protégés expectations from the mentoring and protégés outcomes

	Quality of the relationship	Expectations
Academic/cognitive self-concept	.16*	−.10‡
Conduct self-concept (positive)	.14*	.12‡
Perceived contribution (protégés' reports)	.53***	.06
Social functioning	.20**	.12‡
Behavioral problems	.00	−.08
Perceived contribution (parents' reports)	.32***	.03
Reading score	.18*	−.08

‡ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$, $N = 99$–167. Different numbers of reports by teachers, parents, and protégés account for different numbers of participants

Table 5 Regression analyses: prediction of protégés' level of adjustment at the end of the mentoring and the perceived mentoring contribution

	ΔR^2	β	Total adjusted R square	F change		ΔR^2	β	Total adjusted R square	F change
Step and predictor					Step and predictor				
Protégés' conduct-self					*Perceived contribution (parents' report)*				
Step 1 (Baseline)	.14	.28***		$F(1,160) = 27.19$***	Step 1 (Extraversion)	.05	−.23**		$F(1,151) = 8.18$**
Step 2 (Baseline, neuroticism)	.03	−.16*		$F(2,159) = 6.23$*	Step 2 (Extraversion, quality of the relationship)	.08	.28***		$F(2,150) = 16.16$***
Step 3 (Baseline, neuroticism, quality of the relationship)	.00				Step 3 (Extraversion, quality of the relationship, interaction)	.03	.19*		$F(3,149) = 6.19$*
Step 4 (Baseline, neuroticism, quality of the relationship, Interaction)	.04	−.16*		$F(3,157) = 4.32$*					
Total adjusted R square	.21					.16			
F final model				$F(4,161) = 10.92$**					$F(3,152) = 10.71$***

* $p < .05$; ** $p < .01$; *** $p < .001$, $N = 155$–165. Different numbers of reports by teachers, parents, and protégés account for different numbers of participants

hoc simple slope tests across protégés with low (−SD), average, and high (+SD) levels of the relevant personality traits. Table 5 presents the three models that were significant.

In predicting protégés' conduct self-perception, the baseline assessment in the first step of the regression accounted for 14 % of the variance ($p < .001$). The second step (baseline assessment and neuroticism) accounted for 3 % of the variance ($p < .05$) with the baseline assessment serving as a positive predictor and neuroticism serving as a negative predictor contributing to a decrease in protégés conduct self-perception. The third step (baseline assessment, neuroticism, and the quality of the relationship) did not add significant contributions. The fourth step of the regression added a significant contribution to the variance of 4 % ($p < .05$) with both neuroticism and the interaction between the quality of the relationship and neuroticism serving as negative predictors contributing to a decrease in protégés' conduct self-perception. Taken together, all of the above predictors explained 21 % of the variance ($p < .05$). Post hoc simple slope tests revealed that for children with low ($B = -.24$, $SE = .32$, $p < .05$), average ($B = -.16$, $SE = .33$, $p < .05$) and high levels of levels of neuroticism ($B = -.22$, $SE = .33$, $p < .05$), neuroticism was related to a decrease in conduct self-perception.

In predicting parents' perceived contribution of the mentoring, extraversion in the first step of the regression accounted negatively for 5 % of the variance ($p < .05$), both extraversion and the quality of the relationship in the second step of the regression explained 8 % of the variance ($p < .05$) with extraversion serving as a negative predictor hampering parents' perceived contribution, and the quality of the relationship as a positive predictor contributing to a greater perceived contribution. The third step of the regression (extraversion, the quality of the relationship, and the interaction between extraversion and the quality of the relationship) accounted for an additional 3 % of the variance ($p < .05$). Extraversion served as a negative predictor contributing negatively to perceived contribution, whereas the quality of the relationship and the interaction were positive predictors. All the predictors jointly accounted for 16 % of the variance ($p < .05$). Post hoc simple slope tests revealed that for children with low ($B = .25$, $SE = .42$, $p < .05$) and average ($B = .19$, $SE = .42$, $p < .05$) levels of extraversion the quality of the relationship was related to a greater perceived contribution by the parents, while for protégés with high levels of extraversion ($B = -.11$, $SE = .35$, $p < .05$) this relation was negative.

Discussion

The aims of the current study were to explore the contribution of protégés' personality traits to the formation of the mentoring relationship and expectations from the intervention, as well as the perceived benefits of mentoring, and protégés' level of adjustment at the end of the mentoring. Specifically, the findings showed low associations between protégés' personality traits, their expectations, and their adjustment at the end of mentoring in terms of academic, social and behavioral functioning after 8 months of a mentoring intervention. Personality traits were moderately associated with the perceived contribution of the mentoring as reported by protégés and parents. Note, however, that the small effect sizes preclude generalization, and that it is important to replicate the findings in other samples as well.

These results are in line with previous findings for children, which reported associations between positive personality factors, fewer behavioral problems and better social functioning (Goldner and Scharf 2013b), and stressed the significant role of protégés'

personality traits in promoting or hampering their adjustment. Thus, an adaptive personality organization appears to reduce children's vulnerability to injurious environmental influences, such as low SES, stress and adversity. Positive traits may promote children's resilience by enabling them to utilize coping strategies such as self-regulation, flexible adaptation to the ever-changing demands of life, an optimistic approach to life, a positive social and achievement orientation, curiosity, and openness to new experiences (Fredrickson et al. 2003; Friborg et al. 2005).

An interesting facet of this study relates to the mixed results regarding the role of extraversion on protégés' expectations and outcomes. As mentioned, extraversion was associated with a decrease in protégés' reading scores and lower levels of the perceived contribution of mentoring by parents, but with greater expectations from the mentoring. These mixed findings are similar to previous studies that reported varying effect of children's extraversion on their academic functioning (Caprara et al. 2011; Poropat 2009), positive associations between extraversion, externalizing problems, and anti-social behavior (Huey and Weisz 1997; Prinzie et al. 2003), and positive associations with sociability and self-esteem (Robins et al. 2001). Viewing extraversion as a multifaceted trait may help to better understand these results. Specifically, the interpersonal facet of extraversion, which emphasizes aspects of self-disclosure, gregariousness and positive emotions, along with extraverted individuals' grandiose and narcissistic fantasies could encourage extravert protégés to develop high expectations from the relationship. Nevertheless, the temperamental facet of this trait, which stresses attributes of activity, excitement seeking, and assertiveness may prompt protégés to socialize and pursue other activities rather than study. This tendency may affect protégés' ability to learn, resulting in lower levels of academic performance (Eysenck 1992). It is also possible that the higher activity and weaker levels of control that are associated with extraversion hamper teacher-student relationships, affect teachers' ratings (Murphy and Cleveland 1995), and consequently impair protégés' self-perception of their ability to be aided by an adult figure.

Another interesting aspect of this study relates to the correlations between protégés' positive personality traits and their expectations from the mentoring relationship. It appears that positive personality configuration traits may enable protégés to circumvent their negative internal models of personal relationships with adult figures, and allow them to experience the beginning of mentoring as a step toward their future development. The finding regarding the moderating role of protégés' neuroticism may demonstrate the way protégés' neuroticism hampers their ability to enjoy and use the unique type of friendship that mentors provide as an essential vehicle for their development.

The influence of protégés' personality was also revealed in the moderating role of protégés' traits on the relationship between the quality of the relationship and protégés' level of conduct self-perception as well as with their parents' reports regarding the perceived benefits of the mentoring. Although the current study found direct correlations between a positive mentoring relationship and protégés' emotional, behavioral, and academic development, as was also reported in studies using random assigned trials and longitudinal designs (Cavell et al. 2009; Cavell and Hughes 2000; Rhodes et al. 2005; Thomson and Zand 2010; Zand et al. 2009), the findings indicate that this relationship depends on and is conditioned by the personality traits of the protégés. Specifically, protégés who are characterized by neuroticism may have difficulties appreciating the mentoring relationship in terms of their own enhancement and thus may be more vulnerable to negative conduct self-concept. Similarly, parents of protégés who are characterized by high levels of extraversion have difficulties to perceive the contribution of the mentoring. Thus,

protégés' negative personality traits may hamper their ability to benefit from the mentoring intervention.

Practical Implications

These results also have practical importance, as they can provide guidelines for training mentors for mentoring programs. Although a personality assessment prior to the selection of protégés is not recommended here, it is important for field practitioners to be aware of the possible role of protégés' positive personality constellations in shaping and benefitting from mentoring relationships when supervising the relationships. This is crucial as mentoring programs often screen and match mentors and protégés' based on participants' personal characteristics including temperamental tendencies, which are considered to be the root of personality organization (Caspi and Shiner 2006).

By alerting mentors to the significance of protégés' positive personality structures in facilitating their protégés expectations and adjustment, mentors could act with more sensitivity in encouraging these qualities. Moreover, since protégés' personality organization may enhance the associations between the quality of relations with their mentors and the benefits received or perceived, practitioners should supervise the mentoring relationship by meeting regularly with mentors, protégés, and parents to ensure the development of a positive relationship between mentors and protégés. This is especially important given the possible negative impact of protégés' neuroticism on the association between the quality of the relationship and protégé outcomes. In this respect, mentors should have a good grasp of mentoring challenges and the difficulties that can result from protégés' neuroticism, and not respond to the associated irritable and nervous behaviors with hostility, offense, or a lack of understanding. Mentors should be trained to be attentive and sensitive to protégés' anxiety, anger, lack of trust, and/or despair. This recommendation is also true for protégés' extraversion. Mentors should have a fuller perspective of this complex trait so as to recognize its inherent potential rather than view it as an expression of a behavioral problem.

Limitations and Future Directions

Several limitations of this study should be acknowledged. First, the current study used a pretest/posttest design without a control group. Thus, some of the small changes seen across the 8 months could easily be attributed to other factors than protégés' personality traits or the quality of the relationship such as maturation and developmental changes or alternative explanations such as protégés' selection, their support outside of the mentoring intervention, children's attachment orientations, regression effects, and mentors' characteristics. Therefore, the findings regarding the associations between protégés' personality traits and the quality of the relationship and the outcomes at the end of the mentoring should be interpreted with caution and need additional corroboration.

Second, the effect sizes of the correlations in the current study were rather small according to Cohen's (1988) conventions, indicating that other aspects of children's characteristics such as temperament, attachment security, cognitive abilities, life circumstances, and maturation could serve as serious contenders for the actual changes and may have contributed to the findings. Future research should examine additional protégé characteristics in predicting protégé self-development, as well as mentors' characteristics and their mutual influences. For instance, since insecure attachment experiences in childhood may lead to profound disturbances in self-system processes including an

impaired sense of agency, volition and control over one's actions, as well as low self-esteem and a sense of inner badness, future studies could also explore the joint contribution of protégés' attachment security and personality traits to protégés' level of adjustment at the end of the mentoring. Moreover, it is also possible that the developmental approach taken in the program may have limited the findings more than if a more prescriptive and behavioral approach had been employed using a detailed manual.

Third, the sample size was relatively small; therefore generalizing from this study requires future corroboration. Also, the low reliability of parents' SDQ and protégés' openness scores should also be noted and the results regarding these data should be addressed with circumspection. In addition, the scale assessing protégés' perceived mentoring relationship was used as a proxy for program impact. However, it may have been a manifestation of good attitude, as shown by the higher rates of agreeableness, rather than a measure of program impact; hence the results regarding this scale reported by protégés should be addressed with care. Further, self-report questionnaires were used to assess protégés' personality, and these may have been biased toward a positive presentation. Finally, the study was conducted with a single mentoring organization that served elementary school protégés in one cultural context. Future studies could explore whether these findings also apply to other contexts, taking into account cultural values and norms.

In conclusion, despite these limitations, this study stresses the benefits of protégés adaptive personality organization in promoting protégés' benefits from the intervention and to respond, enjoy, and use positive mentoring relationships to enhance their adjustment.

Acknowledgments This study was partially supported by the Israeli Association for Social Science and Education: Grant No. 28 for Ph.D. students.

References

Ahrens, K. R., Dubois, D. L., Richardson, L. P., Fan, M. F., & Lozano, P. (2008). Youth in foster care with adult mentors during adolescence have improved adult outcomes. *Pediatrics, 121*(2), 246–252.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. California: Sage.

Aryee, S., Lo, S., & Kang, I. L. (1999). Antecedents of early career stage mentoring among Chinese employees. *Journal of Organizational Behavior, 20*(5), 563–576.

Asendorpf, J. B., & Van Aken, M. A. (2003). Validity of Big Five personality judgments in childhood: A 9 year longitudinal study. *European Journal of Personality, 17*(1), 1–17.

Barbaranelli, C., Caprara, G. V., Rabasca, A., & Pastorelli, C. (2003). A questionnaire for measuring the Big Five in late childhood. *Personality and Individual Differences, 34*(4), 645–664.

Barbaranelli, C., Fida, R., Paciello, M., Di Giunta, L., & Caprara, G. V. (2008). Assessing personality in early adolescence through self-report and other-ratings: A multitrait-multimethod analysis of the BFQ-C. *Personality and Individual Differences, 44*(4), 876–886.

Bean, M. R., Chen, C., & Greenberger, E. (2002). The nature of adolescents' relationships with their "very important" non-parental adults. *American Journal of Community Psychology, 30*(2), 305–325.

Blakeslee, J. E., & Keller, T. E. (2012). Building the youth mentoring knowledge base: Publishing trends and coauthorship networks. *Journal of Community Psychology, 40*(7), 845–859.

Bozionelos, N., & Bozionelos, G. (2010). Mentoring received by protégés: its relation to personality and mental ability in the Anglo-Saxon organizational environment. *The International Journal of Human Resource Management, 21*(4), 509–529.

Caprara, G. V., Vecchione, M., Alessandri, G., Gerbino, M., & Barbaranelli, C. (2011). The contribution of personality traits and self-efficacy beliefs to academic achievement: A longitudinal study. *British Journal of Educational Psychology, 81*(1), 78–96.

Caspi, A., & Shiner, R.L. (2006). Personality development. In W. Damon & R. Lerner (Series Eds.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology*, Vol. 3. *Social, emotional, and personality development* (6th ed., pp. 300–365). New York: Wiley.

Cavell, T. A., Elledge, L. C., Malcolm, K. T., Faith, M. A., & Hughes, J. N. (2009). Relationship quality and the mentoring of aggressive, high-risk children. *Journal of Clinical Child and Adolescent Psychology, 38*(2), 185–198.

Cavell, T. A., & Hughes, J. N. (2000). Secondary prevention as context for assessing change processes in aggressive children. *Journal of School Psychology, 383*(3), 199–235.

Cavell, T. A., Meehan, B. T., Heffer, R. W., & Holladay, J. J. (2002). The natural mentors of adolescent children of alcoholics (COAs): Implication for preventive practices. *The Journal of Primary Prevention, 23*(1), 23–42.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Costa, P. T., & McCrae, R. R. (1992). *Revised NEO personality inventory (NEO-PI-R) and NEO five-factor inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.

Crowell, J. A., Treboux, D., & Waters, E. (1999). The adult attachment interview and the relationship questionnaire: Relations to reports of mothers and partners. *Personal Relationships, 61*(1), 1–18.

de Tormes Eby, L. T., Allen, T. D., Hoffman, B. J., Baranik, L. E., Sauer, J. B., Baldwin, S., et al. (2012). An interdisciplinary meta-analysis of the potential antecedents, correlates, and consequences of protégé perceptions of mentoring. *Psychological Bulletin (on line publication)*. doi:10.1037/a0029279.

Dong, Y., & Peng, C. Y. J. (2013). Principled missing data methods for researchers. *SpringerPlus, 2*(1), 1–17.

DuBois, D. L., Holloway, B. E., Valentine, J., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology, 30*(2), 157–197.

DuBois, D. L., & Karcehr, M. J. (2013). Youth mentoring: Progress and prospects for the 21st century. In D. L. DuBois & M. J. Karcher (Eds.), *The handbook of youth mentoring* (2nd ed., pp. 525–534). California: Sage Publications.

DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest, 12*(2), 57–91.

DuBois, D. L., & Silverthorn, N. (2005). Characteristics of natural mentoring relationships and adolescent adjustment: Evidence from a national study. *The Journal of Primary Prevention, 26*(2), 69–92.

Epstein, S. (1983). The mother–father–peer scale. Unpublished manuscript, University of Massachusetts, Amherst.

Eysenck, H. J. (1992). A reply to Costa and McCrae. P or A and C—the role of theory. *Personality and Individual Differences, 13*, 867–868.

Fox-Wasylyshyn, S. M., & El-Masri, M. M. (2005). Handling missing data in self-report measures. *Research in Nursing & Health, 28*(6), 488–495.

Fransson, M., Granqvist, P., Bohlin, G., & Hagekull, B. (2013). Interlinkages between attachment and the Five-Factor Model of personality in middle childhood and young adulthood: A longitudinal approach. *Attachment and Human Development, 15*(2), 219–239.

Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R. (2003). What good are positive emotions in crises? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of Personality and Social Psychology, 84*(2), 365.

Friborg, O., Barlang, D., Martinussen, M., Rosenvinge, J. H., & Hjemdal, O. (2005). Resilience in relation to personality and intelligence. *International Journal of Methods in Psychiatric Research, 14*(1), 29–42.

Goldner, L., & Mayseless, O. (2008). Juggling the roles of parents, therapists, friends and teachers: A working model for an integrative conception of mentoring. *Mentoring and Tutoring Partnership in Learning, 16*(4), 412–427.

Goldner, L., & Scharf, M. (2013a). International and cross cultural aspects in youth mentoring. In D. L. DuBois & M. J. Karcher (Eds.), *The Handbook of youth mentoring* (pp. 189–199). California: Sage Publications.

Goldner, L., & Scharf, M. (2013b). Attachment security, personality, and adjustment of elementary school children. *The Journal of Genetic Psychology, 174*(5), 473–493.

Goldner, L., & Scharf, M. (2014). Attachment security, the quality of the mentoring relationship and protégés' adjustment. *The Journal of Primary Prevention, 35*(4), 267–279.

Goodman, R. (1997). The strengths and difficulties questionnaire: A research note. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 38*(5), 581–586.

Goodman, R. (2001). Psychometric properties of the strengths and difficulties questionnaire. *Journal of American Child and Adolescent Psychiatry, 40*(11), 1337–1345.

Goodman, R., Ford, T., Simmons, H., Gatward, R., & Meltzer, H. (2000). Using the strengths and difficulties questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. *The British Journal of Psychiatry, 177*(6), 534–539.

Grossman, J. B., & Rhodes, J. E. (2002). The test of time: Predictors and effect of duration in youth mentoring relationships. *American Journal of Community Psychology, 30*(2), 199–219.
Harter, S. (1985). Supplementary description of the self: perception for children revision of the perceived competence scale for children. Unpublished manuscript. University of Denver.
Hatchett, G. T., & Han, K. (2006). Development and evaluation of new factor scales for the expectations about counseling inventory in a college sample. *Journal of Clinical Psychology, 62*(10), 1303–1318.
Huey, S. J., & Weisz, J. R. (1997). Ego control, ego resiliency, and the five-factor model as predictors of behavioral and emotional problems in clinic: referred children and adolescents. *Journal of Abnormal Psychology, 106*(3), 404–415.
Jensen-Campbell, L. A., Gleason, K. A., Adams, R., & Malcolm, K. T. (2003). Interpersonal conflict, agreeableness, and personality development. *Journal of Personality, 71*(6), 1059–1086.
Karcher, M. J., Kuperminc, G. P., Portwood, S. G., Sipe, C. L., & Taylor, A. S. (2006). Mentoring programs: A framework to inform program development, research, and evaluation. *Journal of Community Psychology, 34*(6), 709–725.
Klaw, E. L., & Rhodes, J. E. (1995). Mentor relationships and the career development of pregnant and parenting African–American teenagers. *Psychology of Women Quarterly, 19*(4), 551–562.
Krämer, N. C., & Winter, S. (2008). Impression management 2.0: The relationship of self-esteem, extraversion, self-efficacy, and self-presentation within social networking sites. *Journal of Media Psychology: Theories, Methods, and Applications, 20*(3), 106–116.
Langhout, R. D., Rhodes, J. E., & Osborne, L. N. (2004). An exploratory study of youth mentoring in an urban context: Adolescents' perceptions of relationship styles. *Journal of Youth and Adolescence, 33*(4), 293–306.
Larose, S., Bernier, A., & Soucy, N. (2005). Attachment as a moderator of the effect of security in mentoring on subsequent perceptions of mentoring and relationship quality with college teachers. *Journal of Social and Personal Relationships, 22*(3), 399–415.
Markey, C. N., Markey, P. M., Erickson, A. J., & Tinsley, B. J. (2006). Children's behavioral patterns, the five-factor model of personality, and risk behaviors. *Personality and Individual Differences, 41*(8), 1503–1513.
McCrae, R. R. (2002). NEO-PI-R Data from 36 Cultures: Further intercultural comparisons. In R. R. McCrae & J. Allik (Eds.), *The five-factor model of personality across cultures* (pp. 105–126). New York: Kluwer Academic/Plenum.
Miller, J. D., Hoffman, B. J., Gaughan, E. T., Gentile, B., Maples, J., & Keith Campbell, W. (2011). Grandiose and vulnerable narcissism: A nomological network analysis. *Journal of Personality, 79*(5), 1013–1042.
Moore-Thomas, C., & Lent, R. W. (2007). Middle school students' expectations about counseling. *Professional School Counseling, 10*(4), 410–418.
Mulder, R. T. (2002). Personality pathology and treatment outcome in major depression: A review. *The American Journal of Psychiatry, 159*(3), 359–371.
Muris, P., Meesters, C., & Diederen, R. (2005). Psychometric properties of the Big Five Questionnaire for Children (BFQ-C) in a Dutch sample of young adolescents. *Personality and Individual Differences, 38*(8), 1757–1769.
Murphy, K. R., & Cleveland, J. (1995). *Understanding performance appraisal: Social, organizational, and goal-based perspectives*. Thousand Oaks, CA: Sage.
Parra, G. R., DuBois, D. L., Neville, H. A., Pugh-Lilly, A. O., & Povinelli, N. (2002). Mentoring relationships for youth: Investigation of a process-oriented model. *Journal of Community Psychology, 30*(4), 367–388.
Poropat, A. E. (2009). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin, 135*(2), 322–338.
Prinzie, P., Onghena, P., Hellinckx, W., Gritens, H., Ghesquiere, P., & Colpin, H. (2003). The additive and interactive effects of parenting and children's personality on externalizing behavior. *European Journal of Personality, 17*(2), 95–117.
Rhodes, J. E. (1994). Older and wiser: Mentoring relationships in childhood and adolescence. *Journal of Primary Prevention, 14*(3), 187–196.
Rhodes, J. E. (2002). *Stand by me: The risk and rewards of mentoring today's youth*. Cambridge: Harvard University.
Rhodes, J. E., & DuBois, D. L. (2008). Understanding and facilitating the youth mentoring movement. *Social Policy Report, 23*(3), 3–19.
Rhodes, J. E., Grossman, J. B., & Resch, N. L. (2000). Agents of change: Pathways through which mentoring relationships influence adolescents' academic adjustment. *Child Development, 71*(6), 1662–1671.

Rhodes, J., Lowe, S. R., Litchfield, L., & Walsh-Samp, K. (2008). The role of gender in youth mentoring relationship formation and duration. *Journal of Vocational Behavior, 72*(2), 183–192.

Rhodes, J., Reddy, R., Roffman, J., & Grossman, J. B. (2005). Promoting successful youth mentoring relationships: A preliminary screening questionnaire. *Journal of Primary Prevention, 26*(2), 147–167.

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single item measure and the Rosenberg Self-Esteem scale. *Personality and Social Psychology Bulletin, 27*(2), 151–161.

Robitschek, C., & Hershberger, A. R. (2005). Predicting expectations about counseling: Psychological factors and gender implications. *Journal of Counseling and Development, 83*(4), 457–470.

Rothbart, M. K., Ahadi, S. A., & Evans, D. E. (2000). Temperament and personality: Origins and outcomes. *Journal of Personality and Social Psychology, 78*(1), 122–135.

Schmitt, D. P., Allik, J., McCrae, R. R., & Benet-Martínez, V. (2007). The geographic distribution of Big Five personality traits patterns and profiles of human self-description across 56 nations. *Journal of Cross-Cultural Psychology, 38*(2), 173–212.

Schwartz, S. E. O., Rhodes, J. E., Chan, C. S., & Herrera, C. (2011). The impact of school-based mentoring on youths with different relational profiles. *Developmental Psychology, 47*(2), 450–462.

Shapiro, D. R., Moffett, A., Lieberman, L., & Dummer, G. M. (2005). Perceived competence of children with visual impairments. *Journal of Visual Impairment and Blindness, 99*(1), 15–25.

Shiner, R. L. (1998). How shall we speak of children's personality in middle childhood? A preliminary taxonomy. *Psychological Bulletin, 124*(3), 308–332.

Shiner, R. L., & Caspi, A. (2003). Personality differences in childhood and adolescence: Measurement, development, and consequences. *Journal of Child Psychology and Psychiatry, 44*(1), 2–32.

Spencer, R., & Liang, B. (2009). "She gives me a break from the world": Formal youth mentoring relationships between adolescent girls and adult Women. *Journal of Primary Prevention, 30*, 109–130.

Spencer, R., & Rhodes, J. E. (2005). A counseling and psychotherapy perspective on mentoring relationships. In D. L. DuBois & M. J. Karcher (Eds.), *The Handbook of youth mentoring* (pp. 118–132). California: Sage Publications.

Stone, L. L., Otten, R., Engels, R. C. M. E., Vermulst, A. A., & Janssens, J. M. A. M. (2010). Psychometric properties of the parent and teacher versions of the strengths and difficulties questionnaire for 4–12-year olds: A review. *Clinical Child Family Psychology Review, 13*(3), 254–274.

Thomson, N. R., & Zand, D. H. (2010). Mentees' perceptions of their interpersonal relationships: The role of the mentor-youth bond. *Youth and Society, 41*(3), 434–445.

Tinsley, H. E. A. (1982). *Expectations about counseling*. Unpublished test, Southern Illinois University at Carbonate Department of Psychology.

Tinsley, H. E. A., Workman, K. R., & Kass, R. A. (1980). Factor analysis of the domain of client expectancies about counseling. *Journal of Counseling Psychology, 27*(6), 561–570.

Turban, D. B., & Dougherty, T. W. (1994). Role of protégé personality in receipt of mentoring and career success. *Academy of Management Journal, 37*(3), 688–702.

Vaughn, B. E., Bost, K. K., & van IJzendoorn, M. H. (2008). Attachment and temperament: Additive and interactive influences on behavior, affect, and cognition during infancy and childhood. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 192–216). New York: Guilford Press.

Wanberg, C. R., Kammeyer-Mueller, J., & Marchese, M. (2006). Mentor and protégé predictors and outcomes of mentoring in a formal mentoring program. *Journal of Vocational Behavior, 69*(3), 410–423.

Waters, L. (2004). Protégé–mentor agreement about the provision of psychosocial support: The mentoring relationship, personality, and workload. *Journal of Vocational Behavior, 65*(3), 519–532.

Wu, P. C., Foo, M. D., & Turban, D. B. (2008). The role of personality in relationship closeness, developer assistance, and career success. *Journal of Vocational Behavior, 73*(3), 440–448.

Zand, D. H., Thompson, N., Cervantes, R., Espritu, R., Klagholz, D., La Blanc, L., & Taylor, A. (2009). The mentor–youth alliance: The role of mentoring relationships in promoting youth competence. *Journal of Adolescence, 32*(1), 1–17.

Zimmerman, M. A., Bingenheimer, J. B., & Notaro, P. C. (2002). Natural mentors and adolescent resiliency: A study with urban youth. *American Journal of Community Psychology, 30*(2), 221–243.