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Dimensions of social capital and life adjustment in the transition to early adulthood

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Abstract

The predictive relations between social capital depth (high-quality relationships across contexts) and breadth (friendship network extensivity) and early-adult, life adjustment outcomes were examined using data from a prospective longitudinal study. Interviews at age 22 yielded (a) psychometrically sound indexes of relationship quality with parents, peers, and romantic partners that served as indicators of a latent construct of social capital depth, and (b) a measure of number of close friends. In follow-up interviews at age 24, participants reported on their behavioral adjustment, educational attainment, and arrests and illicit substance use. Early-adolescent assessments of behavioral adjustment and academic performance served as controls; data on what were construed as interpersonal assets (teacher-rated social skills) and opportunities (family income) were also collected at this time. Results showed that depth was associated with overall better young-adult adjustment, net of prior adjustment, and assets and opportunities. Breadth was only modestly associated with later outcomes, and when its overlap with depth was taken into account, breadth predicted higher levels of subsequent externalizing problems. These findings are consistent with the notion that social capital is multidimensional and that elements of it confer distinct benefits during an important life transition.

Keywords

friendship qualities; parent–child relations; romantic relationships

Interpersonal resources that support adaptive functioning have been described in terms of social capital. From a sociological perspective, social capital refers to societal-level supports that directly or indirectly influence community-level qualities of life (Pulkkinen, Lyyra, & Kokko, 2011). At the behavioral individual level, social capital reflects the presence of positive social relationships that confer developmental advantages by virtue of interpersonal trust and reciprocity (Coleman, 1988; Putnam, 2000). Individual-level social capital has been construed broadly, involving in part, access to instrumental and emotional support, skills and information, positive companionship, and various other resources that promote goal attainment and life adjustment (e.g., happiness, educational or occupational advancement) (Pulkkinen, Nygren, & Kokko, 2002).

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In the present study, we focus on two dimensions of individual-level social capital in early adulthood—specifically, the “potential” for social capital via the depth, or quality, of relationships and the breadth, or extensivity, of relationships (Furstenberg & Hughes, 1995). We assess depth across the primary close-relationship contexts of young adulthood, including relationships with parents, best friends, and romantic partners. We assess breadth in the friend domain, reasoning that friends are the primary source of extensivity in young adults’ relationship networks. We examine the possibility that relationship depth and breadth in young adulthood derive in part from individual attributes and social opportunities acquired and experienced in earlier development (inputs in late childhood), and provide supports for later achievements and adaptations in adulthood (outputs in the mid-20s).

Key aspects of functioning have been found to become notably more stable in the mid-to-late 20s (Arnett, 2004; Collins & Madsen, 2006; Schulenberg & Zarrett, 2006). The mid-20s thus provide a window into likely trajectories of adaptive (or maladaptive) development across the early-adult years. Moreover, as individuals transition from the immediate postadolescence period (late teens and early 20s) to the middle 20s, social capital may be especially important in fostering positive adjustment outcomes, and reducing problematic outcomes. There is a drop in institutional structure during this period (e.g., declines in parental support and the end of postsecondary education), which, for many, may allow for greater self-selection of paths and activities, which can fuel an increase in well-being. However, for some young people—and perhaps particularly for those with limited social capital—the sudden drop in institutional structure can overwhelm one’s coping capacities and create a mismatch between individual needs and contextual affordances. Such difficulties can contribute to a sense of floundering (Mortimer, Zimmer-Gembeck, Holmes, & Shanahan, 2002), which typically is not conducive to positive mental health outcomes.

Developmental precursors of social capital

Following Furstenberg and Hughes (1995), we examine theoretically relevant precursors of social capital and the extent to which they may co-occur with and possibly account for the relation between social capital and early-adult adjustment outcomes. One approach to testing for the impact of developmental antecedents is to focus on earlier social relationship factors that may represent analogues of social capital. For example, quality of friendships in middle childhood might be a forerunner of subsequent social capital breadth and depth. In this way, early-adult social capital might represent a downstream manifestation of earlier social capital, that is, homotypic continuity (Caspi & Roberts, 1999) in the capacity for acquiring social capital. Another approach—and the one used in the current report—is to consider key individual differences that may predispose or facilitate the acquisition of social capital and that may in part explain the link between social capital and adult adjustment and well-being. Interpersonal competence in childhood could serve as one important individual difference that contributes both to the development of social capital and to later adjustment outcomes (Coie, 1990; Parker & Asher, 1987). We therefore examined the relation between social skillfulness as rated by teachers in late childhood and social capital, and we controlled for social skillfulness when examining links between social capital and young-adult adjustment outcomes.

Environmental contexts, including sociodemographic features of families and communities, may likewise provide affordances or constraints in acquisition of social capital. Family income is a broad marker of access to resources that may facilitate the acquisition of capital (e.g., through the provision of opportunities to engage with peers and adults in supportive environments, such as after-school programs and extracurricular activities; Furstenberg & Hughes, 1995). Family income was examined as a predictor of social capital and as a control in the main analyses testing the relation between social capital and adult adjustment.

Life adjustment outcomes of social capital

Social capital has been implicated in a wide range of indexes of well-being and adaptive functioning. Much of this work has focused on concurrent relations and comparatively little of this work has focused on social capital among young adults. Veenstra (2000) reported mixed evidence of links between social-psychological (e.g., trust and commitment) and activity (e.g., participation in clubs) elements of social capital and health indexes in a sample of middle-aged and elderly Canadians. Curran (2007) operationalized social capital in terms of family connectedness, supportiveness, and trust, and found higher levels of capital to be associated with lower levels of adolescent reported substance use. In a cross-sectional study with adolescents, King and Furrow (2004) identified a latent social capital variable indicated by rates of social interaction, shared vision, and trust in relationships with a parent, friend, and other adult. Social capital mediated the association between religiousness and moral outcomes (e.g., empathic concern, perspective taking, and altruism).

We postulated that childhood levels of interpersonal competence and family income may function as assets and create opportunities, respectively, that promote the development of social capital and positive life adjustment outcomes (e.g., education, mental health, behavioral adjustment). It seems probable that earlier interpersonal competence and family income foster positive life adjustment outcomes, in part, indirectly through their associations with social capital in young adulthood. Primarily, we anticipated that depth of social capital cultivates a range of positive life adjustment outcomes and diverts young adults from negative outcomes. This hypothesis is supported by evidence that close relationships provide companionship and support and promote positive mood and health (Baumeister & Leary, 1995; Reis, Collins, & Berscheid, 2000). Moreover, positive, close relationships may facilitate involvement in productive activities (e.g., education) and steer young adults away from involvement in high-risk activities (e.g., substance abuse), due to individuals' concern about possible disapproval from others (Reis et al., 2000).

A more extensive social (friendship) network may be expected to enhance the resources and support available in relationships, such that higher breadth of social capital would also predict better adjustment outcomes in young adulthood. On the other hand, individuals do not possess a limitless capacity to engage in close relationships due to the time and energy that relationships demand. As such, breadth or number of relationships may reach a point of diminishing returns and even contribute to tension within relationships (e.g., conflict, jealousy; Parker, Rubin, Erath, Wojslawowicz, & Buskirk, 2006). Although a greater number of friendships has been linked with various indices of positive adjustment, the difference between individuals with and without *any* friends may largely account for these associations (e.g., Parker & Seal, 1996). It is even possible that an extensive network offers more opportunities for engagement in high-risk social activities in young adulthood (e.g., substance use). We expected that breadth of social capital would predict little, if any, variance in positive life adjustment outcomes above and beyond depth of social capital.

Method

Participants

Participants and their families were recruited (Dodge, Bates, & Pettit, 1990) in 1987 or 1988 at three sites: Knoxville and Nashville, Tennessee, and Bloomington, Indiana. Most parents were recruited during kindergarten preregistration when they were approached at random and asked if they would participate in a longitudinal study of child development; a small number who did not preregister were, by advance plan, recruited on the first day of school or by subsequent contact. Approximately 75% agreed to participate. The sample consisted of 585 families at the first assessment (52% male; 83% European American, 15% African

American, 2% other ethnic groups). Follow-up assessments were conducted annually through age 24. Seventy-eight percent ($n = 459$) of the original 585 families provided adjustment outcome data at age 24.

Procedures and measures

Data were collected from target participants, their mothers, and their teachers using questionnaires and structured interviews. Academic performance data were taken from school records.

Social capital depth—Participants completed questionnaires at age 22 that tapped relationship quality across parent–child, romantic partner, and best-friend relationships.

Parent–child relationship quality: Three measures assessed parent–child (young adult) relationship quality. These measures and the items comprising them (as well as those comprising relationship quality indexes in the romantic relationship and friendship domains) are listed in Table 1. Participants rated their relationship quality separately for each parent on a 10-point scale, where 1 = *really bad* and 10 = *absolutely perfect*. The two ratings were correlated, $r = .16$, $p < .01$, and were averaged to create a *global rating of parent–child relationship quality*.

Support was indexed by young-adult interview responses to three items: “How much does your mother (father) provide for your emotional needs?”; “How much does your mother (father) take care of your practical needs?”; and “How much does your mother (father) act as an advisor/mentor?” Participants rated parental support on a 5-point scale ranging from 1 = *never* to 5 = *a lot of the time*. Items were averaged to yield measures of mothers’ ($\alpha = .71$) and fathers’ ($\alpha = .81$) support. These scores were correlated, $r = .28$, $p < .001$, and were averaged to create an overall index of *parental support*.

Six items in the interview tapped parental involvement (e.g., “How often does your mother [father] talk with you about ordinary daily events in your life?”). Items were rated on a 5-point scale ranging from 1 = *never* to 5 = *very frequently*. Young-adult reports of mothers’ ($\alpha = .88$) and fathers’ ($\alpha = .91$) involvement were correlated, $r = .40$, $p < .001$, and were averaged to form an overall *parental involvement* score.

Romantic relationship quality: Four measures were derived from the Dyadic Adjustment Scale (DAS; Spanier, 1976): (a) *Dyadic Satisfaction* (10 items, e.g., “In general, how often do you think that things between you and your partner are going well?” $\alpha = .87$); (b) *Dyadic Consensus* (13 items, e.g., “Most persons have disagreements in their relationships. Please indicate the approximate extent of agreement or disagreement between you and your partner when handling family finances,” $\alpha = .84$); (c) *Dyadic Cohesion* (5 items, e.g., “Do you and your mate engage in outside interests together?” $\alpha = .71$). (d) *Affection Expression* (4 items, e.g., “Indicate if either item caused differences of opinions or were problems in your relationships during the past few weeks being too tired for sex or not showing love,” $\alpha = .61$).

Best-friendship relationship quality: Four items were developed for the interview to capture relationship quality with best friends. $\alpha = .76$. Three, were rated on a 5-point scale where 1 = *strongly disagree*, 3 = *neither agree nor disagree*, and 5 = *strongly agree*: “Friend would help if you needed it”; “Could tell friend about a problem”; “Feel happy when you are with friend.” A fourth item (“Gets along with friend”) was rated on a 5-point scale ranging from 1 = *not well at all*, to 3 = *okay*, and to 5 = *very well*).

Social Capital breadth—As noted earlier, *breadth of social capital* was judged to be represented best by the extensivity of the participant's friendship network at age 22. Participants reported the number of friends they could ask for help or advice if they had a problem. A maximum value of 10 friends was used to reduce the skew of the raw variable.

Developmental affordances (covariates) in childhood and adolescence

Resource accessibility was indexed by level of, *family income* as reported by mothers during an in-home interview when the participants were 12 years old. An 8-point scale was used (ranging from < \$10,000 to > \$50,000). The lowest income level was reported by 16% of mothers, the highest by 26% of mothers.

Interpersonal competence in early adolescence was assessed with the Teacher Checklist of Peer Relationships (Pettit, Bates, & Dodge, 1997). This checklist contains seven items that reflect teacher judgments of children's *social skillfulness* on 5-point scales (ranging from *very poor* to *very good*) and includes items such as "Understands others' feelings" and "Is aware of the effects of his/her behavior on other children," $\alpha = .89$.

Adjustment covariates at age 12

Adjustment covariates included externalizing behaviors, internalizing behaviors, and academic competence. *Externalizing behaviors* were assessed with mothers' reports on the 34-item externalizing scale, $\alpha = .89$, of the Child Behavior Checklist (Achenbach, 1991). *Internalizing behaviors* were measured with adolescents' reports on the 31-item internalizing scale, $\alpha = .85$, of the Youth Self-Report (Achenbach, 1991). Measures of *academic competence* were obtained from school records in Grade 7 (age 12). A composite grade point average (GPA) was calculated for each child by averaging the grades earned in reading, math, language arts, spelling, social studies, and science (A = 4, B = 3, C = 2, D = 1; $\alpha = .93$). The percentile rankings for three common scales (reading, language, and math) of achievement test scores were also noted. A composite achievement test score was then computed by averaging the three summary scores, $\alpha = .90$. The composite GPA and achievement test scores were highly correlated, $r = .69$, $p < .001$, and were standardized and averaged to create an overall *academic competence* score.

Adjustment outcomes at age 24

During interview assessments at age 24, participants were asked a number of questions about current levels of adjustment. Participants completed the 123-item Young Adult Self-Report (Achenbach, 1997); the broadband scales of *externalizing problems* (28 items, e.g., "get into fights," $\alpha = .85$) and *internalizing problems* (24 items, e.g., "worry a lot," $\alpha = .91$) were used. *Arrests* were measured with four items that indicated whether participants had been arrested for misdemeanors (age 23 or age 24) or felonies (age 23 or age 24). A *substance use* score was derived from the number of illicit substances that participants had ever used, drawn from five items: "smoked marijuana," "inhaled/huffed substances," "tried cocaine or crack," "tried LSD or heroine," and "tried any other way to get high." Participants were also asked to indicate level of education completed. Level of *educational attainment* was scored as follows: dropped out of high school and had not graduated were classified as not having completed high school (8%); graduated from high school (25%); some college (31%); graduated college (27%); and postbachelor education (8%). These reports were rescaled on a 1- to 5-point scale from lowest to highest level of completed education.

Results

Preliminary analyses

Descriptive statistics and correlations among study variables are presented in Table 2. All measures of earlier adjustment (childhood externalizing, internalizing, and academic competence) and covariates (childhood social skills and family income) were correlated with one another. Childhood social skills were correlated with depth and breadth of social capital and all life adjustment outcomes in young adulthood (externalizing, arrests, substance use, internalizing, educational attainment). Other measures of earlier adjustment and family income were correlated with most measures of social capital and life adjustment in young adulthood. Social capital depth was correlated with all life adjustment outcomes. Social capital breadth was correlated with higher educational attainment and lower internalizing problems. Life adjustment outcomes were generally correlated with one another.

Plan of analysis

Full information maximum likelihood estimates were computed via the Analysis of Moment Structures (AMOS) program (Arbuckle & Wothke, 1999) to test the social capital depth measurement model (Table 1) and the structural models linking earlier adjustment, covariates, and depth and breadth with life adjustment outcomes (Table 3). The models were examined for goodness of fit using χ^2 , comparative fit index (CFI), and root mean square error of approximation (RMSEA) fit indices. CFI values above .90 and .95 indicate adequate and good model fit, respectively, and RMSEA values below .08 and .05 indicate adequate and good model fit, respectively (Hu & Bentler, 1999; Kline, 1998). A separate structural equation model was fit for each life adjustment outcome; each model included the measure of earlier adjustment that corresponded with the outcome variable (e.g., childhood externalizing behavior was included in the models predicting externalizing problems, substance use, and arrests in young adulthood), the covariates (childhood social skills and family income), and depth and breadth of social capital. In each model, we estimated (a) correlations among earlier adjustment and covariates and correlations between depth and breadth; (b) associations linking earlier adjustment and covariates with depth and breadth; and (c) associations linking earlier adjustment, covariates, and depth and breadth with life adjustment outcomes. Thus, the predictive associations reported in what follows refer to effects net of other effects in the model. Sobel tests were used to test indirect pathways in which earlier adjustment, social skills, and family income predicted depth and breadth which, in turn, predicted adjustment outcomes in young adulthood (Preacher & Hayes, 2004). In additional analyses, the effect of gender on life adjustment outcomes was controlled, and multigroup analyses were used to examine whether associations linking depth and breadth with life adjustment outcomes differed significantly by gender. These analyses are not discussed in further detail because gender did not account for associations linking depth or breadth with adjustment outcomes, nor did the effects of depth or breadth differ by gender.

Social capital analyses

Depth of social capital measurement model—Depth of social capital was modeled as a second-order latent construct indicated by first-order latent variables representing parent–child relationship quality, romantic relationship quality, and best-friend relationship quality. The first-order relationship quality latent variables were indicated by measures of parent–child, romantic, and best-friend relationship quality. As shown in Table 1, the magnitudes of all first- and second-order factor loadings were moderate to strong, and the data fit the social capital measurement model well, $\chi^2(41, N = 585) = 100.30$, CFI = .95, RMSEA = .05.

Predicting educational attainment—Depth of social capital predicted educational attainment, $\beta = .21, p < .05$. No significant indirect pathways through depth emerged. Both childhood family income and academic competence directly predicted higher educational attainment in young adulthood, $\beta = .15, p < .01$ and $\beta = .41, p < .001$, respectively. The full set of predictors accounted for 45% of the variance in educational attainment, and model fit was good, $\chi^2(91, N = 585) = 168.76, CFI = .95, RMSEA = .04$.

Predicting internalizing problems—Depth of social capital predicted fewer internalizing problems, $\beta = -.47, p < .001$, and operated as a pathway through which childhood family income indirectly predicted lower internalizing problems in young adulthood, $t = -2.42, p < .05$. In addition, childhood internalizing behaviors directly predicted higher internalizing problems in young adulthood, $\beta = .20, p < .001$. The full set of predictors accounted for 26% of the variance in internalizing problems, and model Fit was adequate, $\chi^2(91, N = 585) = 194.29, CFI = .92, RMSEA = .04$.

Predicting externalizing problems—Depth of social capital also negatively predicted externalizing problems, $\beta = -.62, p < .001$, and operated as a pathway through which childhood family income indirectly predicted lower externalizing problems in young adulthood, $t = -2.55, p < .05$. In contrast, breadth positively predicted externalizing problems, $\beta = .21, p < .01$. Childhood externalizing behaviors and family income also directly predicted higher externalizing problems in young adulthood, $\beta = .16, p < .05$ and $\beta = .19, p < .05$, respectively. The full set of predictors accounted for 34% of the variance in externalizing problems, and model fit was adequate, $\chi^2(91, N = 585) = 188.32, CFI = .93, RMSEA = .04$.

Predicting arrests—Depth negatively predicted arrests, $\beta = -.48, p < .01$, and operated as a pathway through which childhood family income indirectly predicted fewer arrests in young adulthood, $t = -2.35, p < .05$. In contrast, breadth positively predicted arrests, $\beta = .16, p < .05$. There were no direct effects of childhood social skills or family income in this model. The full set of predictors accounted for 19% of the variance in arrests, and model fit was adequate, $\chi^2(91, N = 585) = 188.08, CFI = .93, RMSEA = .04$.

Predicting illicit-substance use—Depth negatively predicted illicit-substance use, $\beta = -.36, p < .05$, and operated as a pathway through which childhood family income indirectly predicted lower substance use in young adulthood, $t = -2.04, p < .05$. In contrast, breadth positively predicted substance use, $\beta = .14, p < .05$. There were no direct effects of childhood social skills or family income in this model. The full set of predictors accounted for 10% of the variance in illicit-substance use, and model fit was adequate, $\chi(101, N = 585) = 186.44, CFI = .94, RMSEA = .04$.

Discussion

The results presented here suggest that breadth of social capital may confer benefits to young adults as they navigate the challenges of a key developmental transition when roles and responsibilities are shifting and the potential for floundering and veering toward unhealthy and maladaptive adjustment trajectories is significant. In the current study we found that social capital breadth (extensivity of friendship network) and depth (committed and supportive relationships) at age 22 forecast patterns of adaptation at age 24, even after taking into account adjustment proxies (e.g., prior externalizing) in early adolescence. Moreover, presumed capital enhancers in early adolescence—opportunities and access afforded by family income and social skillfulness—did not explain the links between social capital and life adjustment, though they did in several instances predict both social capital

and adjustment. Collectively, these findings highlight the potential value of social capital depth (and, perhaps, related constructs such as social networks) during the critical transition from adolescence to early adulthood.

Distinguishing between depth and breadth of social capital

As have others (e.g., Abbott, 2009; also see Pulkkinen et al., 2011), we conceptualized social capital in terms of depth and breadth. Predictions to and from depth (by early-adolescent adjustment and affordances and subsequent life adjustment outcomes, respectively) were stronger and more numerous than those for breadth. Although measurement considerations at least partially explain this disparity—depth was a latent construct built upon multiple items from three relationship domains, whereas breadth was measured with a single item of number of close friends—there also is a sound theoretical basis for expecting such a pattern. Individuals both seek and derive support from those with whom they have a close relationship (Furman & Buhrmester, 2009). Moreover, individuals in particular relationship domains (e.g., mothers, friends, romantic partners) are sources of different facets of support. A well-known example is that youths turn less to parents and more to peers for emotional support across the adolescent years, though both types of relationships continue to be sources of instrumental support (Cheng & Chan, 2004). The accumulation of close, supportive relationships across development presumably yields greater depth of social capital in young adulthood. The greater the depth of social capital, the greater the individual's coping capacity across a variety of contexts and demanding situations. From this perspective, depth should be associated with an array of outcomes, as was the case in the current study. Depth was modestly associated with educational attainment and more robustly associated with lower levels of behavior problems (externalizing and internalizing), substance use, and arrests. Thus, depth of social capital may help young adults better cope with some of the challenges (such as becoming angry, depressed, or prone to substance abuse) during a period of heightened vulnerability (Schulenberg & Zarrett, 2006).

As noted in the first part of this article, number of close friends per se may, under some circumstances, provide useful sources of support and a sense of connection to a wider social network. But under other circumstances, such as when the connections are superficial, or when network extensivity reflects the emphasis a person places on social activities (e.g., partying), having a large network of friends may be less beneficial or even detrimental to positive adaptations. In the main structural analyses in which depth and breadth were entered simultaneously, breadth predicted higher levels of externalizing problems and substance use and a greater likelihood of being arrested. Developmentally, friendship networks become less extensive and more intensive during the transition from adolescence to early adulthood (Parker et al., 2006). Young adults with a broad but shallow network of friends may be at increased risk for adjustment problems if such networks limit time and create tension (e.g., jealousy) within relationships or afford greater opportunities for risk taking and a concomitant network-wide reluctance to take on age-normative roles and responsibilities. Abbott (2009) recently argued that under some circumstances social capital can have adverse effects on health and well-being because some social ties (e.g., such as those with maladjusted peers) may reinforce maladaptive behavior. Similar arguments have been made in the peer relationships literature regarding the friendship networks of antisocial youths and the role of such networks in perpetuating and reinforcing rule-breaking, substance use, and other forms of misconduct (Dodge, Dishion, & Lansford, 2006).

What are the mechanisms through which social capital fosters health and well-being?

Following Furstenberg and Hughes (1995), we controlled for earlier levels of social skillfulness and family income in the main analyses to insure that any "effects" of social

capital were not attributable to individual assets or social opportunities. The indirect pathways from social skills and family income to subsequent adjustment outcomes suggest to the extent that an individual can take advantage of an interpersonal skill set and a wide array of social opportunities, the development of positive relationships in young adulthood should follow. Close and supportive relationships, in turn, engender subsequent health and well-being.

We also controlled for early-adolescence proxies of subsequent adjustment outcomes. By doing so we were able to show that depth of social capital was associated with internalizing and externalizing problems and associated outcomes, as well as a higher level of educational attainment. What, then, may account for these effects? A cornerstone of many conceptualizations of social capital is that it makes resources available by virtue of interpersonal trust and reciprocity (Coleman, 1988). But resource availability does not necessarily lead to resource utilization. As was noted earlier, our operationalization of social capital and, in fact, most such operationalizations in the extant literature, do not tap whether and how individuals actually take advantage of the social capital they have built up over time and access it when needed. One might speculate that access to social support, companionship, advice, and other resources would enhance positive coping, especially in the face of the challenging circumstances characteristic of early adulthood. However, currently there is little direct evidence of how social capital is actually accessed and used, so, for now, underlying mechanisms are not clear. Identifying such mechanisms remains a task for future inquiry.

It also is the case that additional individual-difference variables—most notably personality—were not considered here and are largely neglected in studies of social capital and its import for healthy adjustment. An illustration of the role that personality might play is that breadth as operationalized in this study may be a proxy for personality factors such as extraversion, sensation seeking, and fearlessness. Integrating personality development with research on the accrual and utilization of social capital is an important direction for future research.

Although gender differences were not a central focus of the present study, the possibility of such differences was examined at the bivariate level and in terms of differences in antecedent-outcome paths in the structural models. Main effect differences were consistent with those typically reported in the literature, that is, higher levels of externalizing-type behaviors for males and higher levels of internalizing problems for females; and greater social capital depth for females. However, links between social capital depth and breadth and life adjustment outcomes did not differ for males and females. The benefits of social capital, then, are not gender specific. Of course, only a limited range of adjustment outcomes were considered. Other outcomes, such as job performance, union formation and stability, and child-rearing quality, might be differentially associated with social capital for men and women.

An asset of the current study is its use of a prospective longitudinal design to trace developmental patterns in the precursors, forms, and sequelae of social capital. However, not all constructs were measured at each wave of data collection, limiting conclusions about the direction of effects. Reliance on self-reports of social capital and adjustment outcomes is a limitation (though educational attainment level is a relatively straightforward and perhaps more objective measure) and may have inflated the magnitude of the associations between these measures. Whereas multi-informant assessments are often desirable in research on social and personal relationships, in the case of social capital and related constructs, individual perspectives may provide the key window into the presence or absence of social capital. Others in one's social network may believe they serve as important resources, but

unless the individual him-/herself feels supported and connected, the benefits of social capital likely will be minimal.

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Table 1

Standardized factor loadings for second-order measurement model of social capital depth

Latent constructs		Factor loading (second order)	Indictors	Factor loading (first order)
Social capital (depth)	Parent–child relation quality	.498	Global relationship quality (2)	.728
			Support from parents (6)	.768
			Positive involvement (12)	.788
	Romantic relation quality	.682	DAS dyadic satisfaction (10)	.772
			DAS dyadic consensus (13)	.702
			DAS dyadic cohesion (5)	.563
			DAS affection expression (4)	.526
			Friendship quality	.386
	Friendship quality	.386	Friend would help (1)	.706
			Could tell problem (1)	.761
			Feel happy with friend (1)	.700

Note. Indicators of parent–child relationships include an equal number of items that refer to mothers and fathers. The number of items that comprise each indicator is shown in parentheses. DAS = Dyadic Adjustment Scale. All factor loadings were significant. Model fit $\chi^2(41, N=585) = 100.30$, CFI = .95, RMSEA = .05.

Table 2

Correlations among study variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Family income (age 12)	—											
2. Social skills (age 12)	.41**	—										
3. Academic competence (age 12)	.44**	.66**	—									
4. Internalizing (age 12)	-.17**	-.12*	-.13*	—								
5. Externalizing (age 12)	-.29**	-.38**	-.35**	.13*	—							
6. Social capital depth (age 22)	.47**	.38**	.50**	-.28**	-.28**	—						
7. Social capital breadth (age 22)	.16**	.14**	.22**	-.14*	-.08	.39**	—					
8. Educational attainment (age 24)	.43**	.42**	.58**	-.16**	-.32**	.51**	.31**	—				
9. Internalizing (age 24)	-.12*	-.16**	-.05	.29**	.18**	-.48**	-.12**	-.15**	—			
10. Externalizing (age 24)	-.11	-.21**	-.15**	.11*	.24**	-.52**	-.01	-.16**	.53**	—		
11. Arrests (age 24)	-.15*	-.16*	-.28**	.11*	-.17**	-.40**	-.03	-.21**	.01	.16**	—	
12. Substance use (age 24)	-.03	-.12*	-.16**	-.02	.10*	-.26**	.02	-.15**	.09	.31**	.21**	—
Mean	4.47	2.77	-.01	11.46	9.24	—	4.52	3.03	9.88	7.67	.13	.53
Standard deviation	2.88	.91	.91	7.25	7.14	—	2.56	1.08	7.85	6.13	.46	.80
N	392	354	420	409	459	—	453	529	464	464	416	464

Note.

* $p < .05$;

** $p < .01$.

Table 3
Standardized coefficients linking covariates and relationship depth and breadth with life adjustment outcomes

	Age 24 life adjustment outcomes				
	Education	Internalizing	Externalizing	Arrests	Substance use
Early adolescence (age 12)					
Adjustment <i>I</i>	.41***	.20***	.16*	.09	.04
Social skills	.00	-.04	-.06	.03	-.08
Family income	.15**	.12	.19*	.07	.13
Early adulthood (age 22)					
Social capital depth	.21*	-.47***	-.62***	-.48**	-.36*
Social capital breadth	.10	.07	.21**	.16*	.14*

Note.

I Refers to earlier level of the outcome variable;

*** $p < .001$;

** $p < .01$;

* $p < .05$.