An Analysis of natural mentoring relationship profiles and associations with mentees' mental health: considering links via support from important others

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Abstract

We explored associations between natural mentoring relationship profiles and young adults' life satisfaction and symptoms of depression via participants' perceived support from important others accounting for participants' perceived support and mental health prior to the onset of their natural mentoring relationships. Participants included 396 young adults (57% female; mean age = 30.97, *SD* = .6), the majority of whom identified as Black or African American (79% Black, 18% White, 3% Biracial). Most participants had completed high school but few participants (13%) had completed degrees from 4-year institutions. We used a latent profile approach to identify natural mentoring relationship profiles and employed structural equation modeling to test our study hypotheses. Slightly over half of study participants (53%) reported the presence of a natural mentor in their lives since the age of 14. Results suggest that natural mentoring relationships characterized by high levels of relational closeness and either extended relationship duration or frequent contact may promote improvements in psychological well-being among mentees over time via greater experiences of social support from important others.

Keywords

natural mentoring relationships; mental health; social support; young adults

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Natural mentors (supportive nonparental adults from youths' pre-existing social networks) may play a critical role in the healthy development of young people. In both cross-sectional and longitudinal studies, researchers have found more positive psychosocial outcomes among youth and young adults with natural mentoring relationships in comparison to their peers without these supportive relationships (DuBois & Silverthorn, 2005b; Hurd, Sanchez, Zimmerman, & Caldwell, 2012; Kogan, Brody, & Chen, 2011; McDonald, Erikson, Johnson, & Elder, 2007; Sterrett, Jones, McKee, & Kincaid, 2011; Zimmerman, Bingenheimer, & Notaro, 2002). Given increased risk of mental health problems across the adolescent and early adult years (Kessler, Foster, Webster, & House, 1992; Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993; Rao, Hammen, & Daley, 1999; Zahn-Waxler,

Klimes-Dougan, & Slattery, 2000), understanding the potential of natural mentoring relationships to protect against psychological distress and promote well-being during this time could be of great value.

Researchers have found that supportive natural mentoring relationships may buffer adolescents and young adults against the developmental risks associated with the onset of depression. These studies have reported direct and indirect associations between natural mentoring relationships and mentees' reduced depressive symptoms (Hurd, Stoddard, Bauermeister, & Zimmerman, 2013; Hurd & Zimmerman, 2010a, 2010b; Kogan & Brody, 2010; Rhodes, Contreras, & Mangelsdorf, 1994; Rhodes, Ebert, & Fischer, 1992). Yet some researchers failed to find an association between natural mentoring relationships and reduced psychological distress (DuBois & Silverthorn, 2005b; Zimmerman et al., 2002). In fact, DuBois & Silverthorn (2005b) found that natural mentoring relationships may be more likely to affect indicators of psychological well-being (e.g., life satisfaction) as opposed to psychological distress. Given the association between and overall importance of both psychological distress and well-being, we included indicators of both in the current study. In addition to exploring direct associations between natural mentoring relationships and psychological outcomes, we also assessed indirect pathways through which natural mentoring relationships may affect mentees' mental health. Notably, our study explores these relationships among a predominantly African-American, working-class sample. In light of the pervasive underutilization of mental health services among African American and low-income populations (Cheung & Snowden, 1990; Snowden, 1999), understanding the role of lay persons in contributing to the mental health of these groups can inform the development of innovative intervention approaches that promote their mental health.

Pathway of Influence

One mechanism through which natural mentoring relationships may promote improved psychological outcomes among mentees may be through improving mentees' ability to obtain support from other important individuals in their lives (Rhodes, 2005). Specifically, natural mentoring relationships may help youth build key interpersonal skills (Rhodes, Reddy, & Grossman, 2005) that allow youth to better manage their relationships with important others, including parents, friends, or romantic partners. By learning how to successfully express their emotions, problem-solve, perspective-take, and resolve conflict, mentored youth may form more effective relationships with others, thus, facilitating the process of garnering support from these relationships. Also, supportive and nurturing mentoring relationships can teach youth that positive relationships with others are possible. Positive experiences with natural mentors may help youth revise working models of interpersonal interactions that may have been damaged by previous unhealthy relationships with parents or other attachment figures (Rhodes, Spencer, Keller, Liang, & Noam, 2006). These revised working models may allow youth to more accurately perceive strengths (such as the provision of support) in their relationships with important others through adolescence and into adulthood. Further, relationships with natural mentors may establish a secure sense of attachment, allowing youth to experience a greater sense of acceptance and consequently, experience greater satisfaction in future relationships with important others (Rhodes et al., 1994). Moreover, natural mentors may help reduce tension in other proximal relationships,

enabling those relationships to be more positive and supportive (Rhodes et al., 2006). Natural mentors may listen to youth and offer emotional support, serving a buffering role in mentees' conflict with others. In addition, natural mentors may be a source of advice and adult perspectives as youth work to resolve discord in other relationships. By helping youth to experience greater support from proximal relationships, natural mentoring relationships may indirectly bolster mentees' psychological health. This is underscored by previous study findings that have demonstrated the role of social support (particularly, perceived emotional support) in promoting more positive mental health outcomes among youth and adults (Hussong, 2000; Newman, Newman, Griffen, O'Connor, & Spas, 2007) and findings documenting inverse associations between social support and depression (Newman et al., 2007; Pierce, Frone, Russell, Cooper, & Mudar, 2000). These findings suggest that social support may help protect youth against the negative effects of stressors and promote more positive mental health outcomes as they transition into adulthood.

In studies of formal mentoring relationships, researchers have found that youth with mentors were more likely than their counterparts without to report more positive relationships with their peers and parents (Grossman & Tierney, 1998; Hamilton & Darling, 1996). Rhodes, Grossman, & Resch (2000) found that improved perceptions of relationships with parents mediated the association between mentor presence and positive changes in adolescents' educational outcomes. Rhodes et al., (2005) reported that among youth who had mentoring relationships that lasted longer than 1 year, having a mentoring relationship was associated with reduced drug use via improvements in adolescents' perceptions of their relationships with their parents. To date, little, if any, research has considered how relationships with natural mentors (rather than formal mentors) may contribute to more positive mental health outcomes via increments in mentees' perceptions of support from important others. It is possible that relationships with formal and natural mentors influence youth through similar pathways. Advantages of natural mentoring relationships may be the potential for longer-lasting relationships given the organic nature of their formation (Zimmerman, Bingenheimer, & Behrendt, 2005). Nevertheless, researchers have found that natural mentoring relationships may vary substantially across a number of significant relationship characteristics (DuBois & Silverthorn, 2005a).

Relationship Characteristics

Researchers have begun to identify a number of relationship characteristics that may determine the effectiveness of natural mentoring. In particular, frequency of contact (Rhodes, 2002), relationship duration (Klaw et al., 2003), and closeness (Chen, Greenberger, Farruggia, Bush, & Dong, 2003; DuBois & Silverthorn 2005a; Greenberger, Chen, & Beam, 1998) are relationship characteristics that researchers have found to be related to mentees' outcomes. According to theory (Rhodes, 2005), a stronger interpersonal bond (i.e., greater degree of closeness) may be needed in order for mentoring relationships to make a difference in mentees' lives. Further, length of relationship and frequency of contact may affect the degree of closeness of the mentor-mentee relationship, as sustained patterns of interaction may be necessary for strong mentoring bonds to emerge (Rhodes, 2002). Consistent with this notion, researchers have found associations among relationship characteristics such as relationship duration and closeness (Beam et al., 2002; DuBois &

Silverthorn, 2005a; Klaw et al., 2003). The interrelatedness of these characteristics has made the assessment of their individual effects challenging (DuBois & Silverthorn, 2005a). Yet given that these characteristics are experienced in combination, research that considers the cumulative nature of these characteristics and their association with mentees' outcomes is needed.

Current Study

In the current study, we used a latent profile approach to investigate how the co-occurrence of differing relationship characteristics (natural mentoring relationship profiles) related to mentees' outcomes. After identifying natural mentoring relationship profiles, we created a structural equation model to assess direct and indirect effects (with a primary focus on indirect effects) of these profiles (in comparison to a "no mentor" group) on participants' depressive symptoms and life satisfaction via participants' perceived support from important others. Of note, we included indicators of participants' social support and mental health collected when they were in the ninth grade so that we could assess for change in these outcomes over time as a function of natural mentoring relationship profiles. This is one of the first studies to assess potential effects of natural mentoring relationships into early adulthood while accounting for baseline levels of functioning. Our model also included controls for demographic factors such as gender, race, and educational attainment, given potential associations between these factors and participants' perceived support and mental health. Based on theory and previous research, we expected that natural mentoring relationships characterized by greater relational closeness would be more strongly associated with improvements in participants' psychosocial outcomes. Given that relationship duration and frequency of contact may be associated with greater interpersonal closeness between mentors and mentees, we expected that relationships characterized by greater length and more frequent contact would also be more strongly predictive of mentees' improved outcomes. In addition, we expected that natural mentoring relationship profiles would be associated with improved mental health outcomes among mentees via greater perceptions of support from important others in mentees' lives.

Methods

Participants

Participants in the current study included 396 young adults (79% Black, 18% White, 3% Biracial; 57% female; mean age = 30.97, *SD* = .6) who participated in the eleventh wave (year: 2011) of a longitudinal study focused on factors contributing to high school incompletion. Most participants in the current study had at least completed high school but few had completed degrees from 4-year institutions (8% less than high school, 12% GED, 43% high school diploma, 24% training certification or associate's degree, 11% bachelor's degree, 2% master's degree or higher). A quarter of participants (*n* = 101) were married and an additional 118 participants reported being in a serious relationship or living with a partner. The original sample included 850 ninth graders (mean age = 14.55, *SD* = .66) attending four main public high schools in an urban, Midwestern city. Participation requirements in the first study wave (year: 1994) included an eighth-grade GPA at or below

3.0 and the absence of a school-diagnosed emotional or developmental disability. The racial and gender distribution in the current study's sample mirrored that of the original sample (80% Black, 17% White, and 3% Biracial; 50% female).

In order to be included in the current study, participants had to have complete data on the item assessing natural mentor presence and among those participants who identified a natural mentor, complete data on natural mentoring relationship characteristics was also required. Attrition analyses comparing participants in the present study ($n = 396$) to those not included due to attrition ($n = 454$) indicated that participants in the present study were more likely to be female [$\chi^2_{(1)} = 11.8, p < .01$], slightly younger at wave 1 [$M = 14.47, SD = .6$ compared to $M = 14.62, SD = .7$; $t_{(848)} = 3.41, p < .01$], and reported greater symptoms of depression at wave 1[$M = 1.73, SD = .71$ compared to $M = 1.59, SD = .67$; $t_{(848)} = 3.41, p < .01$]. Participants included in the present study and those excluded from this study due to attrition did not differ in their eighth-grade GPAs, or their wave 1 levels of friend support, parental support, or self-acceptance. In addition, the racial breakdown of the two samples (those included vs. those excluded due to attrition) did not differ.

Procedure

Participants completed structured interviews with Black and White, male and female trained interviewers. Interviews averaged 50-60 minutes and were primarily conducted in participants' schools during waves 1-4 and in the community, at participants' homes, or over the phone during later study waves. We received approval from the University of Michigan Institutional Review Board and consent from participants (and from their parents when they were minors).

Measures

Table 1 includes descriptive statistics for key study variables.

Natural Mentor—Participants were asked, "Other than your parents or a person who raised you, has an adult made an important positive difference in your life at any time since you were 14 years old?" (Udry, 2003). To ensure that natural mentor responses were consistent with our definition of a natural mentor (natural mentors are older than their mentees, not romantic partners, not parental figures, and organically formed relationships with mentees), we excluded participants who identified younger siblings, formal mentors, romantic partners, and step or foster parents. Subsequently, participants were instructed to answer a series of questions about the nonparental adult who has had the biggest influence on them. These questions included how they knew the adult (open ended), the adult's sex, the adult's race/ethnicity, the age of the participant when the adult became important in his/her life (scale ranged from 1 *14-16 years old* to 5 *26 years old or older*), the length of the relationship (scale ranged from 1 *less than one year* to 9 *more than 14 years*), the frequency of contact (see or talk to adult; scale ranged from 1 *less than once a year* to 7 *almost every day*), and degree of closeness felt toward the adult (scale ranged from 1 *not close at all* to 5 *very close*) presently or previously (if participants reported that the relationship had terminated).

Friend Support—Five items were used to assess perceived support from friends (Procidano & Heller, 1983) in waves 1 and 11. Participants indicated how true items were for them such as "I rely on my friends for emotional support" on a Likert scale of 1 (not true) to 5 (very true).

Parental Support—In wave 1, participants reported on the amount of support they received from their parents (Procidano & Heller, 1983). Participants indicated how true the 5 items were for them (example item: "I have a deep sharing relationship with my parents") on a Likert scale of 1 (not true) to 5 (very true).

Support from Most Important Person (MIP)—In wave 11, participants were asked to identify the person to whom they feel closest and have regular contact. In response to this item, 33% indicated a parent (mostly mothers), 33% indicated a spouse or romantic partner, 15% indicated a sibling, 11% indicated extended relatives, and 8% indicated a non-romantic friend or roommate. Participants were then asked to report on the amount of social support they received from this person (Vinokur, Price, & Caplan, 1996). Items included "How much does he/she provide you with encouragement and reassurance when you need it?" and "How much does he/she show that he/she cares about you as a person?" The measure included 6 items and response options ranged from 1 (not at all) to 5 (a great deal). It is important to note that we excluded participants who reported the same extended kin relationship (e.g., aunt) as their natural mentor and MIP (n = 6) because our analyses focused on the potential of natural mentoring relationships to affect participants' relationships with significant others and including participants who listed the same adult for both categories would have biased our results.

Depressive Symptoms—In waves 1 and 11, participants were asked to report the frequency with which they experienced symptoms of depression such as "feeling no interest in things," "feeling blue (or sad)," and "feeling lonely" during the past week (Derogatis & Spencer, 1982). This measure included 6 items and response options ranged from 1 (never) to 5 (very often).

Self-Acceptance—In wave 1, four items were used to assess participants' self-acceptance (Stein, Newcomb, & Bentler, 1987). On continuums from "unhappy with myself to happy with myself," or "regard myself as a failure to regard myself as successful," participants indicated which end of the continuum was more true for them (1 = *first statement is true for me*, 3 = *I'm exactly in the middle*, 5 = *second statement is more true for me*).

Life Satisfaction—Five items were used to assess life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985) in wave 11. Participants were asked to indicate how true statements were for them (e.g., "I am satisfied with my life" and "In most ways my life is close to my ideal") on a scale from 1 (not true) to 5 (very true).

Demographics—Participants self-reported their race/ethnicity and gender in wave 1. In wave 11, they were asked to report the highest degree or certification they had received (1 = *none*, 6 = *master's degree or higher*).

Data Analysis

We used latent profile analysis (LPA) using the mixture model in Mplus 6 software (Muthén & Muthén, 2010) to identify types of natural mentoring relationships based on the length of the relationship, the frequency of contact, and degree of closeness. We compared models with 1, 2, and 3 profile solutions using the Bayesian information criteria (BIC), sample-size adjusted BIC, entropy statistics, and average probabilities for most likely latent variable membership to identify the best fitting model. Once we identified natural mentoring relationship profiles, we dummy coded these profiles (comparison group was youth who did not have a natural mentoring relationship) and included them as predictor variables in our structural equation model.

We conducted structural equation modeling using Mplus 6 software (Muthén & Muthén, 2010) with maximum likelihood as the method of parameter estimation. Due to a small amount of missing data ($< 2\%$) across all study variables, full information maximum likelihood (FIML) methods were used. All latent variables were represented by parceled indicators. After evaluating our measurement model, we proceeded to test our structural model, which included direct and indirect paths from natural mentoring relationship profiles to participants' symptoms of depression and life satisfaction via participants' perceptions of support from friends and MIPs. Our model was designed to assess for changes in our intervening and outcome variables as a result of natural mentoring relationship types. Accordingly, we included participants' baseline (wave 1) friend support, parental support, depressive symptoms, and self-acceptance: each as predictors of their corresponding wave 11 outcome (friend support, MIP support, depressive symptoms, and self-acceptance, respectively).

We also assessed paths from friend and parental support at wave 1 to depressive symptoms and life satisfaction at wave 11. These paths were intended to evaluate the extent to which change in support from significant others (potentially caused by natural mentoring relationships) was associated with change in depressive symptoms and life satisfaction (Kessler & Greenberg, 1981). Our model also included the following demographic variables as predictors of all wave 11 intervening and outcome variables: gender (dummy coded $0 =$ female, $1 =$ male), race/ethnicity (dummy coded $0 =$ Black or Biracial, $1 =$ White), and educational attainment. We correlated all exogenous variables with each other and correlated the disturbances of the two intervening variables with each other and the disturbances of the two outcome variables with each other. We assessed model fit with the χ^2 statistic, comparative fit index (CFI), the Tucker Lewis Index (TLI), and the root-mean-square error of approximation (RMSEA). We generated bootstrapped confidence intervals of the indirect effects. We determined a significant indirect effect if the 95% confidence interval of the standardized specific indirect effect did not include 0. Lastly, in an effort to compare the relative effects of natural mentoring relationship profiles, we constrained paths from the natural mentoring relationship profiles to the intervening variables to be equivalent to each other. We subsequently freed these paths and used the change in the chi-square statistic to determine if freeing those parameters resulted in an improved model fit (when comparing nested models, a χ^2 reduction greater than 3.8 for the loss of 1 degree of freedom is significant at $p < .05$)

Results

Natural Mentors

Approximately 53% (*n* = 209) of participants reported the presence of a natural mentor in their lives since the age of 14. Of these identified natural mentors, 57% were family members such as aunts, uncles, grandparents, cousins, and older siblings. The remaining 43% were unrelated adults such as family friends, preachers/pastors, church members, teachers, coaches, guidance counselors, and neighbors. Overall, 85% of participants identified a racially-matched natural mentor, and 75% of participants identified a gender-matched natural mentor. Participants of different racial backgrounds were equally likely to have a racially-matched mentor. Similarly, male and female participants were equally likely to have a gender-matched mentor. Most participants with a natural mentor reported that their natural mentor became important in their lives when they were 14-16 years old (61%) or 17-19 years old (16%). Eleven percent of those with mentors reported that their natural mentor became important in their lives when they were 20-25 years old and the remaining 12% reported that their natural mentor became important when they were 26 years old or older.

Natural Mentoring Relationship Profile Results

Results of our LPA indicated that the 3-profile solution fit our data the best (see Table 2). In addition, the average latent class probabilities for most likely latent class membership were high (above .95 for all 3 profiles). An overview of these 3 profiles is displayed in Figure 1 and descriptive characteristics of these profiles can be found in Table 3. We labeled the first profile Long-standing (LS) natural mentoring relationships (*n* = 95) as this profile was characterized by relatively longer-lasting relationships (on average, 12-14 years) that formed when participants were younger (on average, 14-16 years old). Though participants in this profile only reported seeing their natural mentors on average once a month, participants in this profile reported high average levels of closeness to their natural mentors. We labeled the second profile Frequent-contact (FC) natural mentoring relationships (*n* = 79) due to elevated levels of contact (on average, 2-5 times a week) between participants and natural mentors in this profile. Participants in this profile also reported high levels of closeness to their natural mentors; however, compared to the relationships of participants in the first profile, these relationships were of shorter duration (on average, 8-9 years) and formed when participants were slightly older (on average, 17-19 years old). We labeled the third profile Less-engaged (LE) natural mentoring relationships (*n* = 35) due to lower average values across the three relationship characteristics. Participants in this profile reported the shortest relationships (on average, 6-7 years) with the least frequent contact (on average, every few months) and lowest levels of closeness (on average, participants reported feeling *only a little close* to natural mentors).

Natural mentoring relationship profiles differed in their composition of familial and racially-matched mentors, but did not differ in their composition of gender-matched mentors (Table 3). Post-hoc evaluation of standardized residuals indicated more familial mentors among participants in the LS natural mentoring relationship profile and fewer familial mentors among participants in the LE natural mentoring relationship profile than were expected.

Further, we found fewer racially-matched mentors among participants in the LE natural mentoring relationship profile than were expected. Of note, we did not find associations between natural mentoring relationship status and participants' race [$\chi^2(6) = 7.96$, *ns*], gender [$\chi^2(3) = 1.80$, *ns*], or educational attainment [F(3, 392) = 9.48, *ns*].

Correlations and Measurement Model

Table 4 presents correlations among study variables. Our measurement model achieved adequate model fit [$\chi^2(df = 319$ *n* = 396) = 565.6, *p* < .01; CFI = .97, TLI = .96, RMSEA = .04 (95% CI for RMSEA = .04,.05)]. Factor loadings of indicator variables on latent constructs ranged from .65 to .92 across model constructs.

Structural Model

Our structural model demonstrated adequate fit to the data [$\chi^2(df = 300$ *n* = 396) = 402.5, *p* < .01; CFI = .98, TLI = .97, RMSEA = .03 (95% CI for RMSEA = .02, .04)]. Significant pathways are displayed in Figure 2. In comparison to participants who did not have a natural mentor, those with an LS or FC natural mentoring relationship demonstrated greater levels of support from friends and MIPs after accounting for support from friends and parents at wave 1. Friend and MIP support were associated positively with life satisfaction after accounting for self-acceptance at wave 1. MIP support also predicted fewer symptoms of depression after accounting for depressive symptoms at wave 1. Bootstrapped confidence intervals of standardized indirect effects indicated that LS natural mentoring relationships were indirectly related to greater life satisfaction via friend support (95% CI: .02, .08) and MIP support (95% CI: .01, .05). FC natural mentoring relationships were also indirectly related to greater life satisfaction via friend support (95% CI: .01, .04) and MIP support (95% CI: .01, .05). We also found a negative association between friend support at wave 1 and wave 11 life satisfaction. After reversing the sign, this negative coefficient can be interpreted as a change in friend support from wave 1 to wave 11 that potentially resulted from LS and FC natural mentoring relationships and may have contributed to improvements in life satisfaction (Kessler & Greenberg, 1981). Not included in Figure 2 are significant paths from participants' educational attainment to wave 11 friend support (β = .13, *SE* = .05, *p* < .05), wave 11 life satisfaction (β = .20, *SE* = .05, *p* < .05), and wave 11 symptoms of depression (β = -.13, *SE* = .05, *p* < .05). Also not depicted is a significant positive association between being White and life satisfaction (β = .14, *SE* = .05, *p* < .05).

In a subsequent model, we constrained the paths from LS and FC mentoring relationships to friend support to be equal. We did the same with paths from LS and FC mentoring relationships to MIP support. We then freed these paths to determine if freeing the paths improved the model fit. In both cases, we did not find improved model fit (based on a drop greater than 3.8 of the χ^2 statistic) when freeing these paths. This additional set of analyses indicated that LS and FC natural mentoring relationships did not differ in their positive associations with friend support or MIP support.

Discussion

Results of the current study suggest that natural mentoring relationships characterized by high levels of relational closeness and either extended relationship duration or frequent contact may promote improvements in psychological well-being among mentees over time via greater experiences of social support from important others. Our working class, predominantly African American, young adult sample appeared to benefit equally from natural mentoring relationships formed in early adolescence that had longer duration but less frequent contact (LS mentoring relationships) and natural mentoring relationships formed in emerging adulthood with comparatively shorter duration but more frequent contact (FC mentoring relationships). Specifically, we found that LS natural mentoring relationships and FC natural mentoring relationships were directly related to increments in perceptions of support from friends and MIPs and indirectly related to greater life satisfaction. Additional analyses indicated that these associations were equivalent across these two mentoring groups (LS and FC), suggesting that in comparison to their counterparts without natural mentors, young adults who had experienced either LS or FC natural mentoring relationships experienced their relationships with their friends and MIPs as more supportive and consequently displayed greater life satisfaction. Yet participants with natural mentoring relationships characterized by shorter relationship length, infrequent contact, and low levels of relational closeness (LE mentoring relationships) did not differ from participants without natural mentors across indicators of social support or mental health. Combined, these findings denote the importance of relationship characteristics in determining the benefits of natural mentoring relationships and highlight a meaningful pathway through which natural mentoring relationships may relate to improved psychological outcomes among young adults.

Consistent with theory (Rhodes, 2005) and previous study findings (DuBois & Silverthon, 2005a), relational closeness appeared to be a key characteristic in beneficial natural mentoring relationships. This finding suggests that a strong interpersonal bond is needed in order for natural mentoring relationships to help mentees build key interpersonal skills, revise working models of relationships, establish a secure sense of attachment, improve their sense of acceptance, or more successfully manage conflict in other proximal relationships. In the current study, relational closeness appeared to be facilitated by relationship length and frequency of contact. More frequent contact may be more important for relatively newer relationships in order for closeness to be established, whereas long-standing relationships may require less contact to maintain already-established close bonds. Of note, natural mentors in the LS mentoring profile were more likely to be relatives. It may be that natural mentoring relationships with relatives provide a greater sense of stability and dependability, thus requiring less frequent contact to maintain relational closeness. Given that FC natural mentoring relationships were formed on average during emerging adulthood, these relationships may have required more frequent contact for close bonds to be established.

The absence of benefits associated with LE natural mentoring relationships is consistent with previous research findings noting the potential of mentoring relationships of shorter duration to be less effective (Rhodes et al., 2005). Further, our findings suggest that it was the combination of shorter relationship duration and infrequent contact that may have led to

low feelings of relational closeness toward mentors. Natural mentors in the LE natural mentoring relationship profile were less likely to be relatives and less likely to be racially matched with mentees. This lack of commonality also may have contributed to reduced relational closeness between mentors and mentees. Overall, the lack of change in outcomes among those in the LE natural mentoring group compared to those without natural mentors points to the need for future research on natural mentoring relationships that fully considers relationship characteristics and the potential for low levels of certain characteristics to render these relationships ineffective. Further, future research may need to consider the presence of negative characteristics that may detract from the success of these relationships.

The research on natural mentoring relationships has reached a point where merely assessing the presence of these relationships is not sufficient for promoting an improved understanding of the potential of these relationships to positively influence mentees' psychosocial outcomes. By using research to further our understanding of characteristics that lead natural mentoring relationships to flourish, we will be in a better position to design interventions aimed at bolstering these naturally occurring relationships and enabling them to be maximally beneficial in promoting youths' healthy development. Results of the current study indicate that encouraging the formation of natural mentoring relationships earlier in youths' lives or promoting more frequent contact between mentors and mentees in relationships formed later in youths' development could lead to greater closeness and as a result, more successful mentoring relationships (Rhodes, 2005).

Our finding that LS natural mentoring relationships were positively correlated with friend support and parental support at Wave 1, and negatively correlated with Wave 1 depressive symptoms suggest that these youth may have benefited from the early formation of natural mentoring ties. Alternatively, these findings may indicate that youth with greater support from friends and parents may be more likely to develop successful, long-term mentoring relationships. Nevertheless, our findings reflect increases in perceived support over time among participants with LS natural mentoring relationships. Therefore, at the least, our findings reflect a reciprocal association between support from important others and LS natural mentoring relationships over time. It is worth noting that FC mentoring relationships were similarly related to more support from friends and MIPs and these relationships were not associated with wave 1 levels of support. This finding suggests that greater levels of support from friends and parents during early adolescence is not a necessary requirement for the formation of emotionally close natural mentoring relationships during later adolescence or emerging adulthood.

Although we found indirect associations between LS and FC natural mentoring relationships and mentees' life satisfaction via greater support from friends and MIPs, we did not find indirect associations between LS and FC natural mentoring relationships and mentees' symptoms of depression. When considering a wide range of psychosocial outcomes, DuBois and Silverthorn (2005b) noted a tendency for natural mentoring relationships to be more predictive of positive outcomes (e.g., psychological well-being) as opposed to negative outcomes (e.g., psychological distress). Further, Rhodes (2005) model of youth mentoring includes a particular focus on the promotion of positive outcomes, as opposed to the reduction of risk. It may be that mentoring relationships are better positioned to shape

positive rather than negative outcomes; however, findings from a number of natural mentoring studies have demonstrated the potential of natural mentoring relationships to reduce negative outcomes, as well (Hurd et al., in press; Hurd & Zimmerman, 2010a, 2010b; Kogan & Brody, 2010; Kogan et al., 2011; Rhodes et al., 1994; Rhodes et al., 1992; Zimmerman et al., 2002). Moreover, psychological distress and well-being are inextricably linked, suggesting that successful natural mentoring relationships should have the potential to influence both of these outcomes. It is possible that we did not find significant indirect associations in the current study due to relatively lower average levels of depressive symptoms among study participants and less variability to explain. Though not significant, our findings were in the direction we hypothesized.

Study Limitations and Directions for Future Research

Several study limitations require attention. One of these limitations is our retrospective assessment of natural mentoring relationships. Asking young adults to describe mentoring relationships that occurred at any time since the age of 14 allowed for the possibility of recall bias. In addition, this approach permitted the possibility that participants' mental health influenced natural mentoring relationship recall. We, however, believe our results discount this possibility for several reasons including that the associations we found between mentoring relationships and mental health were indirect rather than direct associations. Further, our findings supported indirect associations with life satisfaction, but not with depressive symptoms. If mental health influenced recall of mentorship relationships, we would have expected to see recall of less positive relationships among participants with greater depressive symptoms, but we did not find a direct or indirect association between natural mentoring relationships and depressive symptoms. To confirm, we tested a near-equivalent model where life satisfaction and depressive symptoms at wave 11 predicted natural mentoring relationship profiles, and we also did not find direct associations among these variables in this model. Nevertheless, future studies should look to assess natural mentoring relationships prospectively. Ideally, these studies will also conduct pre- and post-relationship assessments as we did in the present study.

This study also was limited by a lack of assessment of individual characteristics of mentees that may have influenced the formation of beneficial natural mentoring relationships and promoted more positive psychosocial outcomes over time. Including an assessment of individual characteristics in future studies will allow for further isolation of the effects of natural mentoring relationship characteristics on mentees' outcomes. Future studies should also investigate individual characteristics of mentors and additional relationship characteristics such as compatibility and the degree of shared interests between mentors and mentees as these factors may shape relationship length, frequency of contact, and closeness. These factors also may determine the benefits associated with natural mentoring relationships.

An additional study limitation includes the relatively small number of participants in the LE natural mentoring relationship profile which may limit our statistical power for group comparisons. Yet given that this profile was characterized by shorter relationship duration, infrequent contact, and low levels of closeness, it is not surprising that we found fewer

participants with these types of natural mentoring relationships. Nonetheless, our null findings for this group are consistent with theory and previous research, suggesting that these findings may be valid in spite of limitations in our power to detect significant differences. In the current study, we did not have a large enough sample to evaluate separate models by participants' gender, race, or level of educational attainment; however, we have no reason based on theory or previous research to suspect that the pathways tested in the current study operate differently according to these demographic factors. Though our measure for assessing depressive symptoms has demonstrated acceptable psychometric properties and is widely used (Derogatis, 1993), the use of more current and in-depth measures of depressive symptoms in future research exploring associations between natural mentoring and depressive symptoms may be preferable. Caution should be used when attempting to generalize the findings of the current study to other populations. The current study comprised predominantly Black, working class, young adults who had been deemed at-risk of high school incompletion. It is worth noting, though, that most participants in the current study did go on to complete high school. Further, most research on natural mentoring relationships among late adolescents and emerging adults has focused on college-enrolled youth. Thus, the current study allowed for an investigation of potential long-term benefits of natural mentoring relationships among a population who has received little research attention to date.

Conclusions

Overall, the results of the current study speak to the significant role natural mentoring relationship characteristics may play in shaping youth outcomes, and, in particular, underline the potential importance of emotional closeness in promoting more positive outcomes among mentees. In our study, emotional closeness appeared to be fostered by either long-standing relationships with less frequent contact or newer relationships with more frequent contact. We also identified the potential of natural mentoring relationships characterized by closeness and longer relationship duration or more frequent contact to improve mentees' experiences of support from important others, thereby relating to greater life satisfaction in early adulthood. This finding suggests that natural mentoring relationships may provide long-term benefits that manifest in young adults' relationships with important others and relate to their psychological well-being.

Efforts to foster relational closeness in natural mentoring relationships may benefit young people who have loosely connected natural mentoring relationships. Encouraging the formation of these relationships early in youths' development may promote secure, enduring relationships. Our results, however, suggest that beneficial natural mentoring bonds can be formed through emerging adulthood, particularly if mentors and mentees maintain frequent contact with each other. This finding is consistent with previous research showing that close intergenerational bonds between youth and nonparental adults may be more likely to develop in the context of collaborative activities that require regular interaction and cooperation to achieve shared goals (Zeldin, Christens, & Powers, 2013) Thus, youth who haven't developed a natural mentoring bond by late adolescence may want to continue to actively seek out opportunities for the development of these relationships into emerging adulthood. It is possible that new educational or occupational settings may present

opportunities for the formation of close natural mentoring ties. Similarly, adults who regularly come into contact with youth and emerging adults in their families, work environments, or larger communities could more actively pursue mentoring roles with the young people in their everyday lives. The benefits of their involvement in the lives of these youth could be multiplicative as recent research findings suggest that parents who are more involved in the lives of other youth are also more receptive to the involvement of other (nonparental) adults in the lives of their own children (Kesserling, De Winter, Horjus, Van de Schoot, & Van Yperen, 2012). Once formed, maintaining frequent contact and forming close emotional bonds appear to be instrumental to the success of these natural mentoring relationships.

Interventions aimed at fostering strong ties between young people and the nonparental adults they experience in their everyday lives may hold promise for bolstering the psychological well-being of marginalized populations who may be less likely to seek traditional mental health services. By promoting improved psychological well-being, natural mentoring relationships may help to prevent the onset of psychopathology or reduce the need for services among marginalized groups. Health care professionals who provide services to working-class, predominantly African American communities may want to assess for the presence of natural mentoring relationships and encourage the formation of these close-knit relationships among their adolescent or emerging adult clients and the supportive, older adults in their communities.

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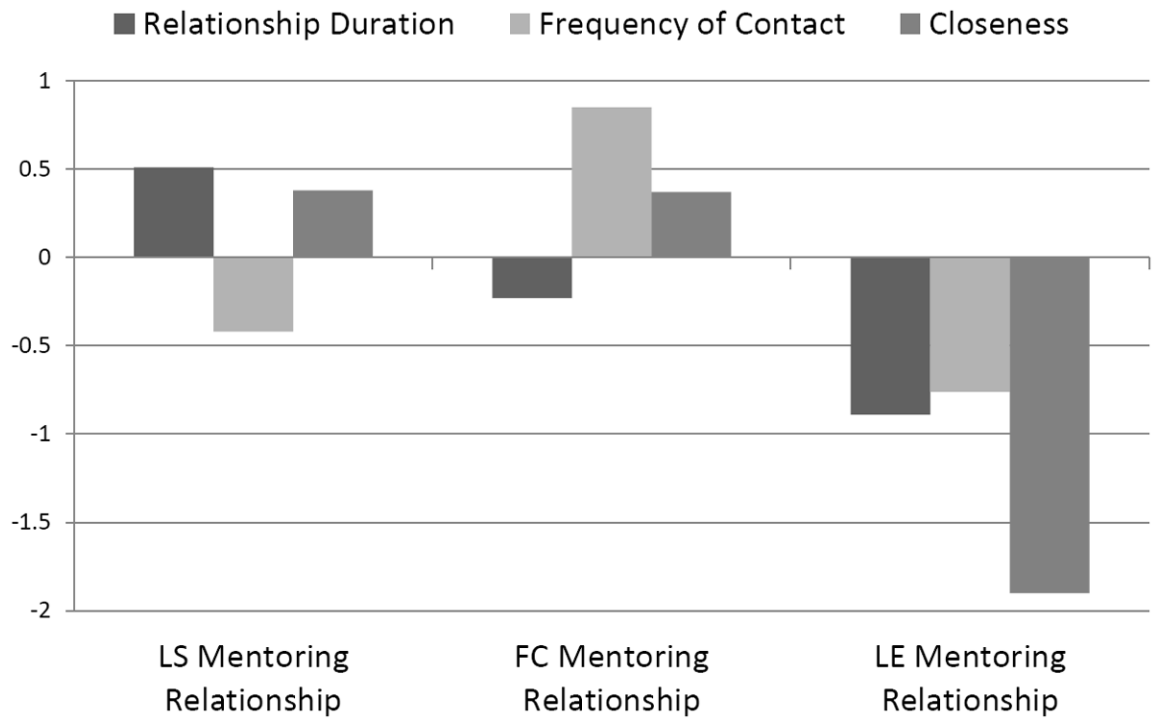
Figure 1.
Summary of natural mentoring profiles (standardized means).
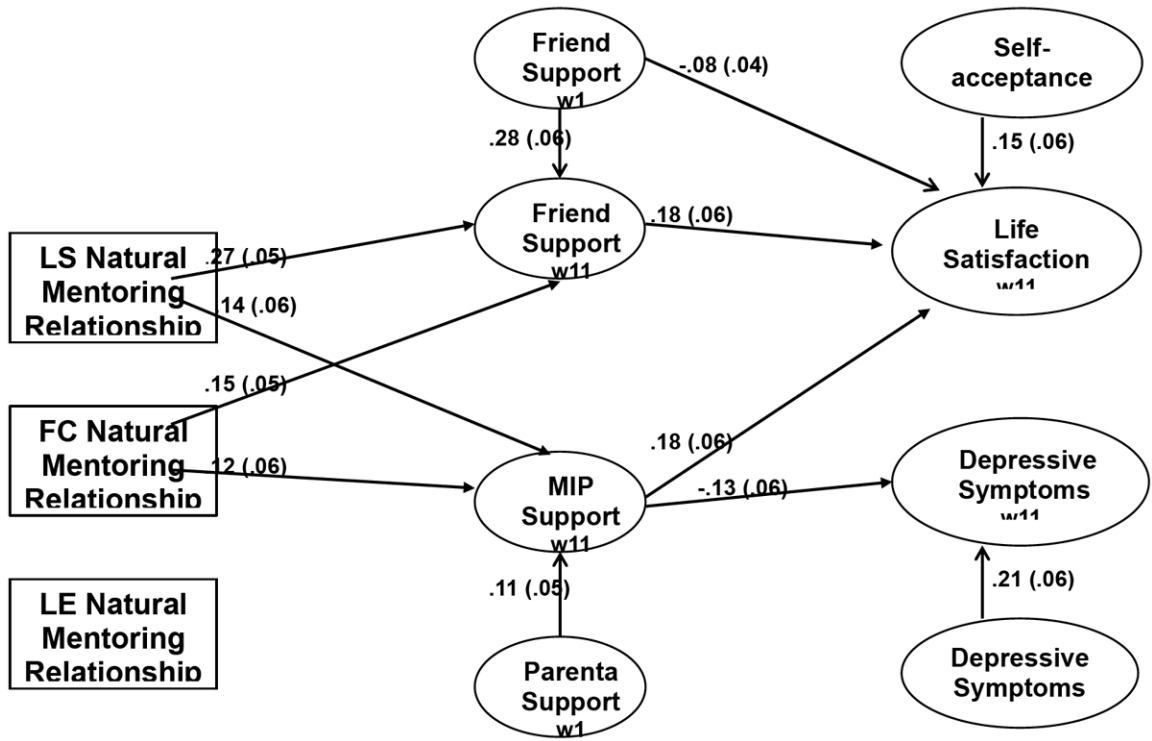LS = Long-standing, FC = Frequent-contact, LE = Less-engaged

Figure 2.
Associations between mentoring relationship profiles (in comparison to no mentoring relationship) and participants' friend support, MIP support, life satisfaction, and depressive symptoms adjusted for participants' race, gender, and educational attainment.
$\chi^2(df = 300 \; n = 396) = 402.5$, $p < .01$; CFI = .98, TLI = .97, RMSEA = .03 (95% CI for RMSEA = .02, .04)
Note: LS = Long-standing, FC = Frequent-contact, LE = Less-engaged, MIP = most important person. Model displays standardized coefficients and standard errors (in parentheses) for significant paths only. Not shown in the model are the correlated disturbance variances between friend support and MIP support ($r = .14$; $p < .05$) and between life satisfaction and depressive symptoms ($r = -.47$; $p < .05$).

Table 1

Descriptive Statistics for Study Variables

Variable	M	SD	α
Friend Support W1	3.20	.93	.79
Friend Support W11	3.33	1.01	.86
Parental Support W1	3.90	1.04	.90
MIP Support W11	4.47	.69	.86
Depressive Symptoms W1	1.73	.71	.77
Depressive Symptoms W11	1.63	.74	.87
Self-Acceptance W1	4.44	.71	.65
Life Satisfaction W11	3.01	1.04	.82

Table 2

Model Fit Indices for 1-, 2-, and 3-Profile Solutions

Variable	1-profile solution	2-profile solution	3-profile solution
BIC	2529.92	2324.32	2274.32
Sample-size adjusted BIC	2510.91	2292.64	2229.96
Entropy	n/a	.94	.95

Note. BIC = Bayesian information criteria

Table 3

Descriptive Characteristics of Natural Mentoring Relationships and Natural Mentors

Variable	LS Mentoring Relationship $n = 95$	FC Mentoring Relationship $n = 79$	LE Mentoring Relationship $n = 35$	
Relationship Duration	8.49_a (1.16)	6.75_b (2.48)	5.20_c (2.64)	$F(2, 206) = 38.31, p < .05$
Frequency of Contact	4.46_a (1.32)	6.58_b (.69)	3.89_c (1.86)	$F(2, 206) = 85.01, p < .05$
Closeness	4.78_a (.42)	4.76_a (.46)	2.69_b (.63)	$F(2, 206) = 281.48, p < .05$
Participants' Age at Relationship Start	1.49_a (1.05)	2.16_b (1.51)	2.46_b (1.63)	$F(2, 206) = 8.87, p < .05$
% Familial Mentors	56%	38%	17%	$\chi^2(2) = 16.73, p < .05$
% Gender-matched Mentors	78%	72%	71%	$\chi^2(2) = .98, ns$
% Racially-matched Mentors	92%	87%	63%	$\chi^2(2) = 17.18, p < .05$

Note. Means with differing subscripts differ significantly based on Tukey post hoc comparisons. LS = Long-standing, FC = Frequent-ontact, LE = Less-engaged

Table 4

Correlations Among Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. LS mentoring relationship	-												
2. FC mentoring relationship	-.28*	-											
3. LE mentoring relationship	-.18*	-.16*	-										
4. Friend Support W1	.14*	-.07	-.01	-									
5. Friend Support W11	.25*	.07	-.03	.28*	-								
6. Parental Support W1	.14*	.02	-.01	.24*	.12*	-							
7. MIP Support W11	.12*	.09	-.03	.08	.17*	.14*	-						
8. Depressive Sympt W1	-.11*	.03	.01	.01	-.03	-.23*	.01	-					
9. Depressive Sympt W11	-.07	.05	.01	.08	.01	-.05	-.11*	.18*	-				
10. Self-acceptance W1	.08	.08	-.09	.10*	.12*	.25*	-.03	-.32*	-.18*	-			
11. Life Satisfaction W11	.07	.02	-.02	.04	.21*	.03	-.19*	-.08	-.41*	.16*	-		
12. White	-.05	-.03	-.08	.06	.08	-.04	.01	-.04	.02	-.18*	.11*	-	
13. Male	.03	-.04	.05	-.23*	-.11*	.16*	.01	-.23*	-.11*	.10*	-.01	.04	-
14. Educational Attainment	.14*	-.04	.01	.04	.17*	.02	.06	-.14*	-.16*	.08	.23*	-.03	-.11*

Note. LS = Long-standing, FC = Frequent-contact, LE = Less-engaged

*
$p < .05$