The Interplay of Friends and Parents in Adolescents' Daily Lives: Towards A Dynamic View of
Social Support

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Abstract

This daily diary study investigated the interplay of perceived friend and parent support in adolescents' everyday lives. Specifically, we tested the interactive effects of friend and parent support on adolescent well-being at both the intra- and inter-individual level. A diverse sample of 119 adolescents ($M_{\text{age}}=15.36$) completed diary reports for two weeks. Multivariate multilevel models demonstrated that on days adolescents felt more supported by their friends or parents, they experienced increases in their happiness and social connectedness. Additionally, parent support emerged as a protective factor for youth lacking friend support, although patterns differed at the intra- versus inter-individual level. The findings underscore the dynamic nature of social support in adolescents' daily lives and highlight the interactive roles of friends and parents in promoting youth well-being.

Keywords: social support; friendship; parents; adolescence; daily diary

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Feeling supported and understood by close others appears to be a developmental necessity (Baumeister & Leary, 1995; Hartup, 1989; Rueger, Malecki, Pyun, Aycock, & Coyle, 2016). During adolescence, as youth place increasing value on their interpersonal relationships, perceiving high levels of social support may be especially critical in promoting their sense of social connection and overall happiness (Meehan, Durlak, & Bryant, 1993). Relatedly, youth's social worlds undergo a significant transformation across the adolescent years with increased salience of peer relationships (Brown & Larson, 2009); friends (or "chums"; Sullivan, 1953) become particularly important attachment figures (Collins, 1997; Helsen, Vollebergh, & Meeus, 1999). That is, as adolescents seek to individuate from parents, friendships offer newfound opportunities to experience validation and support. Such positive experiences, in turn, can have a marked impact on adolescents' short- and long-term well-being (Bagwell & Schmidt, 2011). Indeed, during adolescence, time spent with close friends becomes increasingly rewarding and mood-enhancing (Masten, Telzer, Fuligni, Lieberman, & Eisenberger, 2012; Weinstein, Mermelstein, Hedeker, Hankin, & Flay, 2006), and youth who feel supported and understood by their close friends experience less loneliness and emotional distress (Hartup & Stevens, 1999; Spithoven et al., 2017).

Although the literature on adolescence frequently describes a developmental reorientation away from the family and towards the peer group (Laible, Carlo, & Raffaelli; Rueger et al., 2016), this is not to say that over time friends *replace* parents as important socializing forces (Moreira, Tashjian, Galván, & Silvers, 2018). Rather, the function of parents and friends become more differentiated across adolescence, with friendships increasingly fulfilling adolescents' affiliative needs while parents serve as a continuing source of nurturance (Collins, 1997). Recognizing the co-existence of multiple relationships in adolescents' social worlds, theoretical

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perspectives on adolescent social development thus posit that the significance of adolescents' friendships likely vary as a function of their parental relationships (Brown & Bakken, 2011; Furman & Buhrmester, 1985; Gauze, Bukowski, Aquan-Assee, & Sippola, 1996). Yet, despite such recognition that both friend and parent support function as important predictors of adolescents' social satisfaction and emotional well-being, research on these two relationship domains have largely developed separately. Additionally, although some adolescents generally experience more social support than others, this does not necessarily mean that these adolescents always feel supported—that is, perceptions of support (and corresponding adjustment) may vary on a day-to-day basis. Important questions that follow are whether support from friends confers differential benefits to adolescents depending on their perceived support from parents and how such support processes unfold in daily life.

Figure 1 illustrates different theoretical models that have been proposed to explain different types of social support processes (McElwain, Halberstadt, & Volling, 2007) and, more specifically, how parent support may (or may not) alter the effects of friend support on adolescent outcomes (Helsen et al., 2000; Raja, McGee, & Stanton, 1992; Young, Berenson, Cohen, & Garcia, 2005; Zhang, Baams, van de Bongardt, & Dubas, 2018). First, one possibility is that friend and parent support have independent, or “additive,” contributions to adolescents' well-being, but they do not operate in an interactive manner (see Figure 1a). Indeed, evidence suggests that adolescents who feel more satisfied with their friend and parent relationships, respectively, experience less emotional distress (Feldman, Rubenstein, & Rubin, 1988; Weinstein et al., 2006; Zhang et al., 2018). Second, it is possible that parent support “reinforces” friend support (Figure 1b), such that youth who feel supported by both their friends and parents experience better well-being than those feeling supported in only one or no domains. That is,

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high levels of parent support may augment the benefits of friend support. Findings from several studies are consistent with a reinforcement model. For example, adolescents' perceived friend support protects against depressed mood in the context of high, but not low, levels of parent support (Sentse & Laird, 2010), and youth's high-quality friendships protect against alienation under conditions of low, but not high, family stress (Ciairano et al., 2007). These findings suggest that the benefits of supportive friendships for adolescents are optimized in the context of positive parental relationships. Third, parent support may "compensate" for friend support (Figure 1c). This model, also referred to in past work as a "buffering" model (McElwain et al., 2007), suggests that youth feeling unsupported by friends are protected from decrements in well-being if their parents can meet their social and emotional needs. Evidence for a compensatory model comes from studies demonstrating that high levels of attachment to parents can "make up for" low attachment to peers (e.g., Laible, Carlo, & Raffaelli, 2000; Rubin et al., 2004) and that positive parenting buffers against increases in internalizing symptoms among youth with low quality friendships (Gaertner, Fite, & Colder, 2010; Rubin et al., 2004). These findings reflecting a compensatory process indicate that feeling supported by parents can promote youth's emotional well-being, even in the absence of friend support.

Thus, a continued theoretical question of interest emerging from these models is whether--and how--adolescents' perceived parental support alters the relationship between perceived friend support and adjustment. Although some empirical evidence exists to support each of the aforementioned patterns, several gaps remain in our understanding. First, although these theoretical models have typically been applied to studies focusing on friend and parent influences on adolescents' negative outcomes (e.g., depressive symptoms; Young et al., 2005; Zhang et al., 2018), considerably less is known about how support from these different sources

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promotes adolescents' well-being, such as their happiness and social connectedness. Given that youth who lack social support experience risk for depressive symptoms (e.g., sadness, loneliness; Rueger et al., 2016), it is plausible that the presence of social support in general or on a day-to-day basis, in turn, enhances happiness and feelings of social connection. However, this has yet to be directly tested. Understanding factors that contribute to adolescents' psychological well-being, rather than just those that minimize ill-being, is important insofar as both happiness and social connectedness have been longitudinally linked to overall life satisfaction and health, independent of mental health difficulties (Jose, Ryan, & Pryor, 2011; Hoyt, Chase-Lansdale, McDade, & Adam, 2012).

Second, most studies of social support in adolescence focus on adolescents' global perceptions of support, typically by administering a single self-report measure that asks youth to broadly evaluate how supported they feel by friends and/or parents. Unfortunately, one-time, global self-reports of social support are vulnerable to a range of biases, including but not limited to memory bias (e.g., salience of recent argument with mom) and current shifts in mood (e.g., feeling sad).

Third, past research has typically taken a between-person approach to studying adolescents' perceived support. Although between-person studies can tell us meaningful information about individual differences in adolescents' perceived support and well-being, they obscure potentially meaningful *intra*-individual variability in perceived support across adolescents' everyday lives. For example, a teen can feel comforted and encouraged by their friends or parents on one day but not the next, and recognizing such fluctuations in perceived support may offer significant insight into the dynamics of adolescent social-emotional functioning. Thus, here we suggest the utility of also adopting a within-person approach using

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daily diaries and focusing on intra-individual fluctuations in social support as they relate to changes in adolescent well-being from day-to-day. In this view, adolescents should not only feel happier and more socially connected when they perceive greater “absolute” levels of support from close others, but also when they experience *relative* increases in support in daily life. Although several studies have considered how within-person changes in support relate to fluctuations in distress over the course of months or years during adolescence (e.g., Hazel, Oppenheimer, Technow, Young, & Hankin, 2014; Weinstein et al., 2006; Zhang et al., 2018), to our knowledge no studies have examined the independent and interactive effects friend and parent support on adolescents’ day-to-day social and emotional well-being. Examining such daily processes is particularly important for identifying concrete and more attainable targets of intervention that seek to promote adolescents’ happiness and feelings of connectedness, especially as they navigate the inevitable ups and downs of the teenage years.

The Present Study

The overarching goal of the current study was to investigate how inter- and intra-individual differences in perceived support across two developmentally salient relationships (friends and parents) relate to adolescents’ emotional and social well-being (happiness and social connectedness). Our first main aim was to evaluate an *additive* model of friend and parent support (Figure 1a) by testing whether perceived support from friends and parents were uniquely related to adolescent well-being at both the between-person (individual) and within-person (daily) level. At the between-person level, consistent with past research, we expected that adolescents who typically perceived more support from their friends and/or parents across the two-week diary period would also report greater average well-being than adolescents who typically perceived less support from their friends and/or parents across the two-week period.

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Extending from recent longitudinal research demonstrating positive effects of within-person increases in social support (Zhang et al., 2018), we hypothesized a parallel pattern at the daily level. Specifically, we expected that adolescents would exhibit greater increases in well-being on days that they perceived more support from friends and/or parents compared to days that they perceived less support (relative to their average level) from friends and/or parents.

Our second main aim was to investigate if and how friend and parent support interacted to predict adolescent well-being. In doing so, we tested competing theoretical models and corresponding hypotheses regarding the role of parent support in altering links between friend support and well-being. Whereas a *reinforcement* model suggests that high levels of both friend and parent support are necessary to promote optimal well-being (Figure 1b), a *compensation* model suggests that high levels of parent support can “make up for” the costs of feeling unsupported by friends (Figure 1c). Moreover, to further elucidate how such interactive effects may vary between versus within individuals, we examined these competing models at multiple levels of analysis. Consistent with the approach used in most past research, we first examined a between-person model to test whether and how individual differences in parent support (across the diary period) moderated associations between person-level friend support and well-being. Additionally, to determine how relative, within-person *fluctuations* in social support from friends and parents related to fluctuations in adolescents’ happiness and social connectedness on a day-to-day basis, we also considered whether and how daily parent support moderated associations between daily friend support and well-being. Finally, we considered the possibility that the day-to-day effects of friend support on well-being may vary as a function of global, but not daily, parent support. Thus, we also tested a cross-level effect to determine whether and how individual

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differences in parent support moderated daily associations between friend support and well-being.

We investigate these aims among a diverse community sample of adolescents while incorporating strict controls (e.g., prior-day well-being; within- and between-person differences in time spent with friends and parents) and capitalizing on the methodological strengths of daily diaries for evaluating social support (i.e., as opposed to global one-time questionnaires).

Additionally, we extend past work which has focused on relations between interpersonal support and negative outcomes (e.g., depressive symptoms) to consider daily relations between interpersonal supports and positive outcomes. Such an approach is in part guided by recent theoretical accounts of social support that emphasize attention to social relationships contexts for social and emotional thriving, rather than exclusively minimizing negative outcomes (Feeney & Collins, 2015). Conceptually, understanding the daily dynamics of perceived support across these developmentally salient relational contexts can provide important insight into interventions that seek to identify the specific social conditions giving rise to adolescents feeling emotionally and socially fulfilled.

Method

Overview

The current study relies on data from a larger longitudinal study examining family influences on adolescent adjustment. Participants in the Los Angeles metropolitan area were recruited through word-of-mouth, flyers, and other advertisements. The study included two cohorts. Cohort 1 families entered the study at Wave 1 when the child was aged 9-10. In order to increase the study's sample size, Cohort 2 entered the study approximately 4 years later (Wave 3). Cohort 2 was recruited to be demographically similar to Cohort 1, including grade-level (i.e.,

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in middle school), and received identical procedures to Cohort 1. To be eligible, parents were required to have lived together for at least 3 years (see Margolin, Vickerman, Oliver, & Gordis, 2010, for more details). The data presented here were part of daily diary assessments from Wave 4.

Participants

Of the 169 families invited to participate in Wave 4 of the study, 126 youth (74.6%) completed the Wave 4 data collection procedures examined here. Youth who did not complete at least two consecutive days of daily diaries ($n=3$) and youth who did not provide any information on time spent with friends, time spent with parents, support from parents, or support from friends ($n=4$) were excluded from all analyses, resulting in a final analytic sample of 119 adolescents. Independent samples t -tests and chi square tests indicated that there were no significant age, gender, or ethnic/racial differences between Wave 4 participants included in the current analytic sample ($n=119$) compared to Wave 4 participants who were excluded ($n=50$) due to limited diary data ($n=7$) or nonparticipation in the diary procedures ($n=43$). Adolescents were between 13 and 18 years old ($M=15.36$, $SD=.78$) and 52% were boys. They were ethnically and racially diverse; for ethnicity, 32% identified as Hispanic or Latinx, and for race, 40% identified as White, 27% as Multiethnic, 18% as Black/African American, 8% as Asian, 1% as American Indian/Alaska Native, and 6% not reporting. Within the analytic sample, there were no significant demographic differences between participants from cohort 1 versus 2 with one exception—cohort 2 participants ($M_{\text{age}}=15.53$) were significantly older than those in cohort 1 ($M_{\text{age}}=15.23$), $t(117)=-2.09$, $p=.039$. Almost all participants lived with both parents, although seven participants had parents who were divorced or separated, and one participant had a deceased parent. About half of participants' parents were college educated. Specifically, approximately 5% of mothers and 3%

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of fathers had not finished high school, 22% of mothers and 24% of fathers finished high school or received a GED, 28% of mothers and 18% of fathers completed some college or trade school, 28% of mothers and 31% of fathers finished college, and 16% of mothers and 24% of fathers had a graduate degree.

Procedure

During Wave 4, adolescents and their families participated in a lab session involving several tasks unrelated to the current study. At the end of their visit, participants received instructions for completing the daily diaries and filled out the first daily questionnaire for the immediately preceding day. Participants were instructed to complete the daily diary at the end of each day for 14 total days. All adolescents were given the option of completing the daily surveys online or on paper. Among our analytic sample, adolescents on average provided 12.9 days of data, with 85% of youth providing 12 or more daily reports. Overall, youth completed some portion of 1,535 of the possible 1,666 (92.1%; 119 youth X 14 days) daily diary reports.

Measures

The daily measures we present below were created specifically for this study. All main predictors were examined as both day-level and person-level variables. Consistent with past related daily diary research, we used single-item measures of daily perceived support (e.g., Gleason, Iida, Shrout, & Bolger, 2008), to reduce participant burden while gathering information about their social interactions across multiple relationship contexts. Daily outcomes were measured with 3-item scales, and their within- and between-person reliabilities were calculated using multilevel confirmatory factor analysis (MCFA) recommended for repeated measures data. Using this approach, two fully saturated MCFAs are specified to derive separate within- and between-cluster covariance matrices, and these estimates can then be used to derive two different

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reliability estimates using standard formulas for calculating alpha (Geldhof, Preacher, & Zyphur, 2014).

Daily perceived support. Daily perceived support from *friends* was based on participants' responses to the single item "Today I felt supported or understood by a friend." Daily perceived support from *parents* was calculated by averaging participants' responses to the items "Today my mom was supportive and understanding" and "Today my dad was supportive and understanding". These items were all rated on a 0-3 scale (0=*not at all*, 3=*a lot*). Participants were instructed to skip the relevant perceived support items on days that they did not spend any time with parents or friends. Missing responses on days that participants reported spending no time with parents/friends were recoded as zero; we controlled for time spent with parents and friends in all analyses. This resulted in 1390 total days of friend support data and 1423 total days of parent support data.

Average perceived support. Average perceived support from *friends* was calculated as a within-person average of participants' daily perceived friend support, and average perceived support from *parents* was calculated as a within-person average of participants' daily perceived parent support. These variables indicate adolescents' typical level of perceived support from parents and friends across the two-week diary period.

Daily well-being. Daily *happiness* was calculated as the average of 3 items where participants rated how happy, optimistic/upbeat, and excited they felt that day (0=*not at all*, 3=*a lot*). The happiness measure had good within-person ($\alpha = .70$) and between-person ($\alpha = .78$) reliability. Daily *social connectedness* was calculated as the average of 3 items where participants rated how much they felt connected with others, liked by others, and

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outgoing/friendly that day (0=*not at all*, 3=*a lot*). The social connectedness measure had good within-person ($\alpha=.69$) and excellent between-person ($\alpha=.95$) reliability.

Covariates. Within-person covariates included the daily diary reporting day, whether it was a weekday or weekend, prior-day well-being, and participants' self-reported number of hours spent with parents and friends each day. Between-person covariates included participant age, gender, and average time (in hours) spent with parents and friends across the diary period.

Analytic Plan

Data analysis proceeded in several steps. To provide descriptive data on the study's main variables, we first conducted analyses at the individual level, using mean scores for each type of perceived support and time spent together averaged across the 2 weeks of diaries. Specifically, we test for a) mean differences in levels of support and time spent together as a function of relationship context (friends vs. parents) and b) mean differences in support and time spent together as a function of participant gender. We also present bivariate correlations between the study variables. Next, to determine the degree of day-to-day variability in perceived support and well-being across the diary period, we tested unconditional (i.e., empty) random intercept multilevel models and calculated intraclass correlations (ICCs).

For our main analyses, we then tested two sets of two-level multilevel models, with repeated measures nested within participants, to examine the between-person and within-person effects of perceived support from parents and friends on adolescents' well-being (Bryk & Raudenbush, 1992). Analyses were conducted in Mplus (Muthén & Muthén, 2016) using maximum likelihood estimation with robust standard errors (MLR). An advantage of multilevel random effects models with longitudinal data is that they do not require that every participant provide complete data across the 14 days to be included in analyses (Hedeker & Gibbons, 1997).

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Given the strong correlation and conceptual relatedness between the two outcome variables (happiness and social connectedness; within-person $r=.63$, $p<.001$; between-person $r=.85$, $p<.001$), multilevel models were tested within a multivariate framework. By testing predictor effects on both happiness and social connectedness simultaneously, multivariate models control for residual covariation between the two outcomes.

Our first set of multilevel models tested the unique (main) effects of average perceived friend and parent support on adolescents' overall well-being, as well as daily perceived friend and parent support on day-to-day changes in well-being, while conservatively controlling for prior-day well-being, reporting day number, weekend versus weekday, and daily time spent with friends and parents at the within-person level, as well as age, gender, and average time spent with friends and parents at the between-person level. By controlling for prior-day well-being, we were able to assess how daily support predicted *changes* in well-being from one day to the next. Given that the first data point (i.e., Day 1 diary) had no previous day, all multilevel analyses were conducted on a reduced dataset (i.e., reflecting 13 days). Continuous within-person variables were all group-mean centered to represent participants' daily deviations from their averages (e.g., higher or lower friend support than *usual*), and continuous between-person variables were all grand-mean centered to facilitate interpretation. Thus, these analyses investigated whether friend and parent support effects were consistent with an additive model, wherein each type of support was independently related to well-being.

To determine whether such additive effects, if present, were qualified by interactive patterns, our second set of multilevel models added three interaction terms to examine the interplay between perceived friend and parent support. Mirroring the between-person approach used in most past research, an average (between-person) friend support X average (between-

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person) parent support interaction tested whether individual differences in associations between average friend support and well-being varied as a function of average parent support. To determine whether the day-to-day effects of friend support varied as a function of day-to-day changes in parent support, a daily friend support X daily parent support interaction was included at the within-person level. Finally, to consider whether day-to-day increases in friend support were differentially related to well-being depending on typical parent support across the two weeks, we tested the cross-level interaction between daily friend support and average parent support. Thus, we test competing hypotheses about reinforcement versus compensatory models by considering individual differences in both friend and parent support, day-to-day fluctuations in friend and parent support, and the interaction between them.

Results

Descriptive Comparisons

To examine mean differences in perceived support as a function of relationship source (parents vs. friends) and participant gender while controlling for average time spent with parents and friends, a two-way mixed ANCOVA was conducted. Results from the ANCOVA indicated that there was a significant within-person effect of relationship source, such that adolescents typically perceived significantly more support from their parents ($M=1.27$, $SD=.68$) compared to their friends ($M=1.17$, $SD=.73$) across the diary period, $F(1, 115)=20.20$, $p<.001$, even after controlling for the average number of hours spent with parents and friends. There was no effect of participant gender on perceived support, $F(1, 115)=2.12$, $p=.149$, nor a gender X relationship source interaction, $F(1, 115)=1.02$, $p=.314$. As seen in Table 1, the two types of support were moderately positively correlated at the between-person level ($r=.551$, $p<.001$), suggesting that adolescents who typically felt more supported by their friends across the diary period were more

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likely to also perceive high levels of support from their parents. Perceived support from friends and parents were only weakly positively correlated at the daily level ($r=.067$, $p=.015$), suggesting that on days adolescents felt supported by friends they were only slightly more likely to also feel supported by parents.

Inter- and Intra-Individual Variability

Four separate two-level random intercept-only (i.e., unconditional) models were analyzed to determine the proportion of variance in perceived support from parents and friends as well as feelings of happiness and social connectedness attributable to within-person versus between-person differences. Intraclass correlations indicating the percentage of total variance in variables explained by between-person differences (i.e., $1-ICC$ =within-person variance) revealed substantial variation both within and between participants: $ICC_{\text{friendsupport}}=.30$, $ICC_{\text{parentsupport}}=.41$, $ICC_{\text{happiness}}=.39$, $ICC_{\text{socialconnectedness}}=.44$. That is, perceptions of social support and well-being differed between individual adolescents but also—and even more so—within individuals across days.

Multilevel Models

Main effects model. As seen in Table 2 (Models 1a and 1b) and consistent with an additive model, there were significant between- and within-person effects of perceived support from friends and parents on adolescents' well-being. Similar to past research, there were individual differences in well-being as a function of perceived support—adolescents who reported greater support from their friends and parents across the two weeks also typically felt happier and more socially connected during the diary study compared to adolescents who felt less supported by friends and parents across the two weeks. We also replicated this pattern at the within-person level; adolescents experienced increased happiness and social connectedness on

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days during which they perceived greater support from their friends as well as their parents compared to days during which they perceived less support from their friends and parents, even after controlling for prior-day well-being and how much time youth spent with their friends and parents each day. Thus, youth who generally felt supported by close others experienced greater happiness and social connectedness, and even day-to-day increases in perceived support (compared to one's typical level of perceived support) enhanced emotional and social well-being.

Interactions model. As seen in Table 2 (Models 2a and 2b), there were also several interactions between friend and parent support. Specifically, average (but not daily) parent support emerged as a consistent moderator of links between friend support and well-being. Focusing first on the interaction at the between-person level displayed in Figure 2, consistent with a compensatory model, friend support was positively related to well-being at low and average but not high levels of parent support. That is, perceiving lower levels of friend support only predicted worse well-being among youth who also felt unsupported by their parents; high levels of perceived parent support, on the other hand, could “close the (well-being) gap” between youth who perceived less compared to more friend support. As seen in the figure, there was also indication that higher levels of friend support could compensate for low levels of parent support—even youth lacking parent support were protected from lower levels of well-being if they typically perceived high levels of friend support.

We did not document a parallel pattern at the within-person level. That is, although adolescents experienced increased well-being on days they felt supported by their friends compared to days that they did not feel supported by their friends, this association did not vary as a function of whether or not they also felt supported by parents that same day. However, there

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were significant cross-level interactions, such that the effects of daily perceived friend support on well-being varied as a function of *average* (individual differences in) perceived parent support. Reflecting a compensatory process, lower levels of daily friend support predicted the greatest decreases in well-being among youth who generally perceived low levels of parent support, whereas this association was attenuated among those experiencing higher levels of parent support (see Figure 3). Similar to the pattern at the between-person level, this suggests that high levels of overall parent support could “make up for” the absence of friend support on any given day. In turn, within-person increases in daily friend support predicted the greatest increases in well-being among youth who generally felt unsupported by their parents compared to those who generally felt supported by parents—that is, youth lacking parent support appeared most positively responsive to daily support from friends.

Discussion

The current study investigated the how friend and parent support jointly contribute to adolescents’ happiness and social connectedness in daily life. To our knowledge, this is the first study to simultaneously examine how perceived friend and parent support promote adolescents’ well-being in general *and* on a day-to-day basis. We demonstrated that adolescents’ perceptions of social support from both friends and parents exhibit substantial day-to-day variability and that each make unique contributions to adolescents’ feelings of happiness and social connectedness. Moreover, we found evidence for an *additive* model of social support at the intra-individual level, whereas we found evidence of a *compensatory* model of social support at the inter-individual level as well as when examining interactions between intra- and inter-individual differences in support. The findings have important implications for understanding the developmental significance of positive peer and family interactions during adolescence.

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At the inter-individual level, we found evidence for a compensatory process, wherein parent support moderated between-person associations between friend support and well-being. Compared to youth who generally felt supported by their friends, youth who typically felt unsupported by their friends felt less happy and socially connected *unless* they typically perceived high levels of support from their parents across the diary period. As seen in the figures, the reverse pattern was also true—for adolescents who typically perceived low levels of support from parents, high levels of friend support served a compensatory function. Thus, consistently feeling supported and understood by parents appeared especially critical among adolescents who generally lacked such positive affordances from friends, and vice versa. These findings align with past work that has found buffering effects of parent support on the internalizing symptoms of youth reporting lower friendship quality (e.g., Gaertner et al., 2010; Laible et al., 2000) and the importance of positive peer relationships among youth exposed to negative parenting (Lansford, Criss, Pettit, Dodge, & Bates, 2003). Notably, in the current study we captured between-person differences in social support by aggregating across two weeks-worth of adolescents' daily reports of perceived support. Thus, we derive adolescents' "typical" support from friends and parents based on an aggregation of multiple day-to-day reports, rather than a one-time global measure that asks them to generally rate their relationship quality. Given the fluctuating nature of adolescents' perceptions of their social worlds (van Roekel, Scholte, Engels, Goossens, & Verhagen, 2014), we can be more confident that the current results do not reflect an assessment disproportionately impacted by momentary salient events or current mood but benefit from a broader assessment window.

In addition to considering individual differences in adolescents' perceived support and well-being, an important strength of this study was the investigation of within-person changes in

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support and well-being on a day-to-day basis. Although research among adults has long recognized and investigated intraindividual variability in social support processes (e.g., Shrout, Herman, & Bolger, 2006; Bolger, Zuckerman, & Kessler, 2000), most studies focusing on adolescents' positive interactions with peers and family members focus on individual differences in support or relationship quality (e.g., Helsen, et al., 2000; Gaertner et al., 2010; Sentse & Laird, 2010). Moreover, while a number of recent studies among children and adolescents have considered how negative interpersonal processes—such as conflict or aggression—fluctuate within individuals on a day-to-day basis (e.g., Chung, Flook, & Fuligni, 2011; Timmons & Margolin, 2015; Vannucci, Ohannessian, Flannery, De Los Reyes, & Liu, 2018), far fewer have examined positive interpersonal experiences as a dynamic and changing phenomenon. Here we proposed that although some adolescents indeed experience more support within their relationships than others, perceptions of support can nevertheless fluctuate even on a day-to-day basis as adolescents navigate the ups and downs of daily life. Indeed, we saw significant intraindividual variability in perceptions of support from both friends and parents, which aligns with past studies documenting substantial within-person changes in perceived support over the course of months or years (Hazel et al., 2014; Zhang et al., 2018). Additionally, the fact that there was considerable day-to-day variability in both friend and parent support suggests that fluctuations in support were not merely a product of changing friendship contexts from day-to-day (e.g., some friends more supportive than others). These fluctuations are important to recognize because they suggest that even adolescents who typically feel supported by friends and family may have days where they feel less supported *than usual*. Such fluctuations in perceived support, however, are obscured when focusing on adolescents' global perceptions of support at a single time point. Moreover, these fluctuations are meaningful insofar as we found that day-to-

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day changes in perceived support from friends and parents contributed to changes in well-being, even after accounting for individual differences in adolescents' average level of support from each source. Such findings provide evidence for additive effects of support at a daily level, wherein day-to-day increases in friend and parent support, relative to one's typical level of support, uniquely contributed to increases in adolescent well-being.

We did not find evidence for interactive effects at the daily level—that is, daily friend support was related to well-being, regardless of daily parent support. In contrast to the pattern demonstrated at the inter-individual level, these results suggest that feeling supported by parents one day does not “make up for” the absence of same-day friend support (compensatory model), nor does it augment the social-emotional benefits of receiving same-day friend support (reinforcement model). Interestingly, as evidenced by our cross-level interaction effect, *average* parent support did moderate daily associations between friend support and well-being, consistent with a compensatory model. Although adolescents experienced decreases in happiness and social connectedness on days that they felt less supported by friends than usual, these links were weakened among youth who typically felt more supported by their parents across the two-week period compared to those who typically felt less supported by their parents across the diary period. These results suggest that whereas discrete (i.e., daily) instances of parent support may not be enough to compensate for a same-day lack of friend support, feeling consistently supported by parents over time may be important in minimizing the daily negative impact of low friend support on any given day. Supportive parent relationships may provide a generally protective context within which adolescents navigate their peer relationships (Brown & Bakken, 2011; Nickerson & Nagle, 2005); in turn, this familial “safety net” might help lessen the blow of feeling unsupported or misunderstood by friends at a particular moment in time.

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The current study had a number of theoretical and methodological strengths. First, by simultaneously examining adolescents' friendships and parent relationships, we were able to investigate important developmental questions about the independent and joint roles of peers, mothers, and fathers during a time characterized by significant social reorientation (Furman & Buhrmester, 1985). Although we are by no means the first to recognize the importance of studying interplay between peer and family contexts, studies that consider combined influences of friends and parents remain limited. Additionally, stemming from recent calls to consider how interpersonal relationships can promote psychological thriving (Feeney & Collins, 2015), we focused on identifying the social conditions that maximized adolescents' happiness and feelings of social connection in everyday life. Methodologically, findings from the current study were documented after accounting for a number of important contextual covariates. For example, all analyses controlled for adolescents' prior-day well-being, allowing us to examine how perceived support contributes to relative increases in well-being from day-to-day. Additionally, we accounted for the number of hours adolescents spent—each day and on average—with friends and parents. In turn, we can be confident that our findings do not merely reflect variability in adolescents' opportunities to receive support from close others, and that the benefits of perceived support are not simply a byproduct of general interpersonal interaction.

Nevertheless, the current study also had a number of limitations that should be addressed in future research. First, we relied on a single item assessment of social support in order to reduce participant burden in the context of daily surveys. In turn, it is unclear *how* and *why* friends or parents made youth feel supported and understood. For example, past work among adult samples has demonstrated important distinctions between instrumental and emotional support (Morelli, Lee, Arnn, & Zaki, 2015) and visible versus invisible support (Gleason et al.,

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2008). Relatedly, although we did not document any age-related variations in levels of perceived support from friends or parents, it is possible that the specific *type* of support received changes across developmental contexts (Bokhorst, Sumter, & Westenberg, 2010). It will therefore be important to track age-related differences in these patterns using longitudinal assessments spanning from childhood through late adolescence and differentiating between types of support that may be more or less developmentally relevant (e.g., homework help vs. social advice; De Goede, Branje, Delsing, & Meeus, 2009; Weinstein et al., 2006).

Second, here we presumed that participants did not perceive support on days that they did not spend time with parents or friends, so we do not necessarily capture all support transactions that unfold through digital media. As online interactions become an increasingly common means of interpersonal interaction, studies that directly compare online and offline support processes can further refine our understanding.

Third, we relied on an average index of parent support rather than looking separately for mothers and fathers in order to make a clearer comparison between friend and parental influences. However, investigating whether day-to-day support from mothers and fathers carry the same weight, and how this might vary as a function of friend support, could provide further nuance into the current findings. On a related note, participation in the larger longitudinal study from which these data were drawn required both parents to be living together at study start; given this limitation of sample representativeness, our findings cannot necessarily generalize to other family contexts (e.g., one-parent households).

Fourth, although we included gender as a covariate and did not document any gender differences in support or well-being, it is nevertheless possible that day-to-day support processes unfold differently for boys and girls and as a function of relationship context (e.g., fathers versus

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mothers). We did not have any specific hypothesis regarding gender differences and tests of moderation were beyond the scope of the current study, but this is an issue that should be considered in future work. Finally, because these data only capture two weeks in the lives of adolescents, the relative stability of support—even at the between-person level—will require further investigation.

Taken together, the findings from this study highlight the dynamic nature of social support in adolescents' daily lives, while also underscoring the independent and interactive effects of both friends and parents during this developmental period. Although adolescents' friendships become increasingly important and salient during the teenage years, parents nevertheless continue to function as meaningful attachment figures. Moreover, our results highlight that a supportive parental context is particularly critical for youth who may lack support from friends—both on an episodic and more sustained basis. This suggests that strengthening adolescents' relationships with their parents is one potential mechanism through which to help maintain their psychological thriving, even in the face of peer difficulties. Studies that examine how parent support might function as a protective factor for youth not only experiencing fluctuations in friend support, but also conflict, victimization, or rejection, will be critical for better understanding the dynamic interplay of parents and peers in adolescents' everyday lives.

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Table 1. Between-person correlations among continuous variables.

	1.	2.	3.	4.	5.	6.
1. Friend Support						
2. Parent Support	.551***					
3. Happiness	.589***	.597***				
4. Social Connectedness	.679***	.689***	.846***			
5. Friend time	.532***	.038	.231*	.289***		
6. Parent time	.191*	.285***	.212*	.233*	.152	
7. Age	.074	.029	.007	.082	.082	-.199*

* $p < .05$; *** $p < .001$

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Table 2. Multilevel multivariate models predicting adolescent well-being from daily and average perceived friend and parent support.

	1a. Happiness	1b. Social Connectedness	2a. Happiness	2b. Social Connectedness
	<i>b</i> (SE)	<i>b</i> (SE)	<i>b</i> (SE)	<i>b</i> (SE)
Intercept	1.349(.08)***	1.539(.08)***	1.388(.08)***	1.604(.08)***
Within-Person Predictors				
Daily Friend Support (DFS)	.147(.03)***	.172(.03)***	.165(.03)***	.195(.03)***
Daily Parent Support (DPS)	.178(.03)***	.174(.03)***	.165(.03)***	.159(.03)***
Daily Friend Time	.020(.01)	.039(.01)**	.016(.01)	.036(.01)**
Daily Parent Time	-.002(.02)	-.002(.01)	-.003(.02)	.001(.01)
Report Number	.003(.01)	-.007(.01)	.004(.01)	-.005(.01)
Weekend vs. Weekday	.063(.05)	.097(.02)	.073(.05)	.113(.05)*
Prior-Day Happiness	.136(.04)***	-.012(.04)	.129(.04)**	-.011(.04)
Prior-Day Social Connectedness	-.010(.04)	.102(.04)*	-.010(.04)	.102(.04)*
DFS X DPS	--	--	.018(.03)	.012(.03)
Between-Person Predictors				
Average Friend Support (AFS)	.326(.07)***	.350(.09)***	.328(.07)***	.346(.08)***
Average Parent Support (APS)	.333(.07)***	.479(.08)***	.337(.07)***	.501(.07)***
Average Friend Time	-.014(.02)	.003(.02)	-.027(.02)	-.008(.02)
Average Parent Time	.022(.02)	.023(.02)	.025(.02)	.020(.02)
Gender	.027(.08)	.065(.08)	.043(.08)	.057(.08)
Age	-.036(.05)	.043(.04)	.015(.04)	.063(.04)
AFS X APS	--	--	-.210(.08)**	-.289(.07)***
Cross-Level Interaction				
DFS X APS	--	--	-.093(.03)**	-.111(.03)**

Note. Shaded lines signify interactions testing reinforcement vs. compensatory models. *** $p < .001$, ** $p < .01$, * $p < .05$. Model 1 tests main effects of support on happiness (1a) and social connectedness (1b); Model 2 tests interactive effects of support on happiness (2a) and social connectedness (2b).

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Fig. 1 Competing models of friend and parent support.

a) Additive model

b) Reinforcement model

c) Compensation model

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Fig. 2 Person-level interaction between average perceived friend support and average perceived parent support predicting a) average happiness and b) average social connectedness.

a)

b)

Note. *** $p < .001$.

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Fig. 3 Cross-level interaction between daily perceived friend support and average perceived parent support predicting a) daily happiness and b) daily social connectedness.

a)

b)

Note. $***p < .001$