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## Supportive Non-Parental Adults and Adolescent Psychosocial Functioning: Using Social Support as a Theoretical Framework

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### Abstract

Supportive Non-Parental Adults (SNPAs), or non-parental adults who provide social support to youth, are present in the lives of many adolescents; yet to date, a guiding framework for organizing the existing literature on the provision of support provided by multiple types of SNPAs, such as teachers, natural mentors, and extended family members, as well as to inform future research efforts, is lacking. The aim of the current paper is to utilize the well-established lens of social support to integrate, across this broad range of literatures, recent findings regarding associations between SNPAs and four indices of adolescent psychosocial adjustment: academic functioning, self-esteem, and behavioral and emotional problems. Beyond offering an integrative framework for understanding the link between SNPAs and adolescent functioning, the issues reviewed here have potentially far-reaching consequences for adolescents and their families, as well as the professionals working with adolescents and their families in the health care, school, and community settings.

### Keywords

adolescents; non-parental adults; academic outcomes; psychological adjustment

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The American family has witnessed considerable changes over the past fifty years. Fewer adults are getting married and the rates of households containing non-married cohabitating (40%) and single (28%) parents are at their highest levels (Popenoe & Whitehead, 2007). Consequently, only 67% of U.S. children are living with both their biological parents (U.S. Census, 2006). In contrast to previous years, more children today are living in diverse family structures, including single-parent households, step-families, and cohabitating families.

Consistent with these social changes, recent empirical work has demonstrated that youth form relationships with non-parental adults as part of normative development.

Most adolescents indicate the presence of a significant non-parental adult in their lives, with rates ranging from 54 to 82% across studies (Beam, Chen, & Greenberger, 2002). In addition, adolescents report that significant non-parental adults differ from peers and parents in unique ways (Beam et al., 2002). For example, they report that non-parental adults are able to offer resources that peers are unable to provide (e.g., giving advice based on experience) and that they are able to tell non-parental adults about situations (e.g., relationships, sexual activity) they would not tell their parents for fear of embarrassment or punishment (Beam et al., 2002). Several types of non-parental adults have been examined in empirical work, including the following: “natural mentors”, defined as individuals who youth believe care about them and who provide them with guidance (Beam et al., 2002; Cavell, Meehan, Heffer, & Holladay, 2002; Klaw, Rhodes, & Fitzgerald, 2003); “very important nonparental adults” (VIPs), or adults who adolescents report have a significant impact on them or who will “be there” for them if needed (Farruggia, Greenberger, Chen & Heckhausen, 2006; Greenberger, Chen, & Beam, 1998); “non-parental adults” who adolescents identify as being in their social support network or who provide social support, whether in their family or in the community (e.g., teachers) (Bogard, 2005; Casey-Cannon, Pasch, Tschann, & Flores, 2006; Malecki & Demaray, 2003); and adults in their families (e.g., grandmothers, uncles) who provide kinship support, or social support provided by family members (Barone, Aguirre-Deandreis, & Trickett, 1991; Colarossi, 2001; Lamborn & Nguyen, 2004).

The current review integrates and extends this discussion of the involvement of non-parental in the lives of youth in the following ways. First, this paper integrates findings across several distinct, but interrelated literatures involving non-parental adults, including the natural and formal mentor, VIP, kinship support, social support, social network, grandparent, and teacher literatures. To highlight the interrelated nature of this work, an umbrella term, supportive non-parental adults (SNPAs), will be used to describe individuals in these various categories who are over the age of 20 and provide social support to adolescents. In addition, this review will focus on the impact of SNPAs during adolescence (between ages 10 and 20; Steinberg, 2002), a stage marked by rapid social, psychological and neurocognitive changes (Kahn & Antonucci, 1980; Erikson, 1959; Levitt et al., 2005; Spear, 2003), which may facilitate relationships with non-parental adults, and at the same time by increased risk for academic, emotional, and behavior problems, which significant adults may be helpful in curbing (e.g., Johnston, O'Malley, & Bachman, 2000; Substance Abuse and Mental Health Services Administration, 2008; Steinberg, 2007). Last but not least, the primary focus of this review is to highlight the utility of social support as a framework for understanding the processes by which SNPAs impact the well-being of youth (Barrera & Bonds, 2005; Scales & Gibbons, 1996; Spencer, 2007; Zimmerman et al., 2005), this paper will integrate findings related to types of social support provided and four indices of youth psychosocial functioning, academic functioning, self-esteem, and behavior and emotional problems. The perceptions of adolescents regarding social support, rather than more objective reports of social support or reports by other informants, have been found to be most associated with their well-being (Gottlieb, 1988; Malecki & Demaray, 2003b; Wolchik, Beals, & Sandler,

1989); therefore, only findings involving adolescent-report of relationships with SNPAs are included in this review. This review seeks to contribute to the current base of knowledge regarding SNPAs by identifying specific types of social support that may promote specific youth outcomes.

## **Social Support: A Conceptual Model for Understanding the Role of SNPAs**

Although the literatures on various SNPAs (e.g., teachers, mentors, extended family members) are distinct, one commonality beginning to be acknowledged is that their relationships with youth may involve the provision of social support. However, the lack of an explicit attempt to integrate, through a conceptual framework, these relatively disparate literatures makes it difficult to summarize findings across studies and, in turn, to inform interventions aimed at improving youth well-being.

The broad theoretical and empirical social support literature provides a previously established framework (Barrera & Bonds, 2005; Zimmerman, Bingenheimer, & Behrendt, 2005) within which to understand the potential significance of non-parental adults in the lives of youth. Social convoy theory (e.g., Kahn & Antonucci, 1980; Levitt, et al., 1993; Levitt et al., 2005), one specific social support theory, posits that, throughout the lifespan, individuals are surrounded by social networks consisting of a variety of individuals, including non-parental adults, who provide social support. This social support is, in turn, directly associated with individual well-being, and also has indirect effects by working as a buffer against risk factors. Several types of social support exist including instrumental support (i.e., concrete aid), emotional support (i.e., offering care and comfort), informational support (i.e., providing advice or guidance), and esteem/appraisal support (i.e., affirming another person's sense of value and competence) (Furman & Buhrmester, 1985; House, 1981; Malecki & Demaray, 2003b).

The extent to which studies of non-parental adults directly measure the provision of social support varies depending on how closely the studies are linked to the social support literature. Both studies of adults in social networks and studies of kinship support typically provide an explicit, though not always comprehensive, account of the types of non-parental adult social support (e.g., emotional support, informational support) provided (Colarossi & Eccles, 2003; Lamborn & Nguyen, 2004). Alternatively, the types of social support provided by natural mentors and VIPs are usually not stated explicitly, although often they can be gleaned from the way the contributions of these adults are defined by investigators. For example, as mentioned above, natural mentors are typically defined as individuals who youth believe care about them and give them guidance (Cavell, Meehan, Heffer, & Holladay, 2002; Klaw et al., 2003), suggesting that, at minimum, natural mentors offer youth emotional and informational support. Similarly, VIPs are usually defined as adults who adolescents believe have had a significant impact on them and on whom they can rely in times of need (Farruggia, Greenberger, Chen & Heckhausen, 2006; Greenberger, Chen, & Beam, 1998). In other words, although not explicitly discussed in the literature, VIPs by definition provide emotional and/or instrumental support to adolescents. In addition, studies of VIPs have often examined specific behavioral variables, such as warmth provided to youth and disapproval of youth misconduct (Farruggia et al., 2006, Greenberger et al.,

1998), which allow for the further identification of the types of social support they offer to youth.

## SNPAs and Youth Psychosocial Functioning

The primary outcomes examined in studies of SNPAs to date include academic functioning, self-esteem, and emotional and behavior problems. For organizational purposes, our discussion of the types of support provided by SNPAs will be organized by outcome. Themes regarding the types of support provided by SNPAs to youth across outcomes will be discussed later in this review.

### Academic Functioning

Adolescents who report the presence of an SNPA in their lives exhibit higher levels of several indicators of positive academic adjustment, including academic attitudes, motivation, academic self-concept, school attendance, and academic achievement. These patterns of association have been observed across a variety of types of SNPAs and adolescents.

**Positive attitudes about school**—Empirical work to date suggests that adolescents who receive non-parental adult social support have more positive attitudes, or cognitive and affective appraisals, toward school, with indications that all four types of support discussed here may be helpful. For example, social support from adults affiliated with schools has been linked to greater engagement in and satisfaction with school (Demaray & Malecki, 2002; Somers, Owens, & Piliawsky, 2008; Kalil & Ziol-Guest, 2008). In a study of 118 African American 9<sup>th</sup> grade students from urban, high-poverty neighborhoods (66% female), teacher support, measured as a combination of the four types of social support described above, was correlated with endorsing education as a personal value (Somers et al., 2008). Similarly, teachers who provide higher levels of a combination of the four types of social support have also been linked to more positive school attitudes among Latino (71%) and African American (16%) adolescents ( $n = 125$ ) in 6<sup>th</sup> through 8<sup>th</sup> grades from low-income neighborhoods (Demaray & Malecki, 2002). In addition, a recent study (Kalil & Ziol-Guest, 2008) examined teacher support provided to 64 low-income teenage mothers ( $M$  age = 17), with participants being split roughly in half with regard to African American and Caucasian race/ethnicity. Adolescents who reported higher levels of teacher support, measured using items, that seem, at face-value, to tap emotional support (e.g., “How many of your high school teachers try to help you when you are sad or upset?”), also reported more positive attitudes toward school. Finally, in a recent study of 848 Latino middle-school students ( $M$  age = 13, 51% male), a majority (76%) of whom were from low-income families, higher levels of teacher support, which seemed to involve the provision of, at least, emotional support (e.g., “My teachers care about me”) were associated with greater satisfaction with school (Woolley, Kol & Bowen, 2009).

While the studies described above were all cross-sectional, a longitudinal study of school support (Demaray, Malecki, Davidson, Hodgson, & Rebus, 2005) has demonstrated similar findings. Specifically, the provision of a combination of all four support types from school personnel, overall, was found to predict greater emotional connection to and satisfaction

with school a year later among a sample of 82 6<sup>th</sup> and 7<sup>th</sup> grade students from urban, low-income neighborhoods, a majority of whom were Latino (76%) and female (65%).

Support from non-parental adults not affiliated with academic environments (e.g. extended family, community members) also may be linked to a host of positive academic attitudes, such as belief in the importance of school for future success and feelings of connection or belonging to school, as found in several cross-sectional studies (Sanchez, Esparza, & Colon, 2008; LaFromboise, Hoyt, Oliver, & Whitbeck, 2006; Lamborn & Nguyen, 2004; Pallock & Lamborn, 2006; Zimmerman, Bingenheimer, & Notaro, 2002). For example, among a sample of 140 urban Latino adolescents from low-income neighborhoods, adolescents who reported receiving higher levels of a combination of emotional, informational, and instrumental support from natural mentors, as well as those who reported having a larger number of natural mentors, endorsed higher levels of school belongingness (Sanchez, Esparza, & Colon, 2008). Similarly, Pallock and Lamborn (2006) examined kinship support, which appeared to take the form of informational, instrumental support, and, perhaps, emotional support (e.g., “When we have to make important family decisions, we ask our relatives for advice,” “We can count on our relatives for help when we have problems,” “We go out with our relatives for fun”) among 164 African American (63%) and Caucasian (37%) high school students (60% female) in 9<sup>th</sup> and 10<sup>th</sup> grades. They found that adolescents who reported receiving higher levels of kinship support placed more value on school. In addition, among a sample of 770 mostly (80%) African American (52% female) first-year high school students, adolescents who reported the presence of a natural mentor reported more positive school attitudes (Zimmerman et al., 2002). As mentioned above, these adults, by virtue of their nomination as natural mentors, may have provided emotional and informational support to the youth in this study. Finally, LaFromboise and colleagues (2006) examined the influence of concern that community members displayed for academic, athletic and cultural engagement, which may be a form of informational support, among 212 Native American adolescents (54% boys, *M* age = 12) living on or near reservations. They found that adolescents reporting higher levels of community concern were more likely to be classified as resilient, a construct including positive attitudes toward school, among other characteristics. It is important to note that community concern may be a more diffuse measure of relationships with non-parental adults than other studies mentioned here, as it is not clear that adolescents were reporting on directly experiencing this concern from adults.

In addition to a direct association with youth academic attitudes, empirical attention is beginning to examine other patterns of SNPA influence on youth. For example, in a study described above (Zimmerman et al., 2002), natural mentors buffered adolescents from the negative effect on academic attitudes of having friends who exhibited poor school functioning (e.g., cutting class, getting poor grades). Another study (Lamborn & Nguyen, 2004) examined kinship support among 158 African American 9<sup>th</sup> and 10<sup>th</sup> grade students (65% female) from lower and middle SES backgrounds, and found that higher levels of kinship support, appearing to take the form of a combination of informational, emotional, and instrumental support, was associated with higher levels of school orientation, which, in addition to being a measure of value placed on school, also was a measure of the extent to which the adolescent received emotional support from teachers (e.g., “teachers are willing to

take time to talk things over with me”). That is, social support from non-parental adults in one context (i.e., the family) was associated with adolescents receiving social support from non-parental adults in another context (i.e., the school).

While attitudes toward school is a variable for which adolescent-report is likely to be most accurate, in all of the above studies, adolescents were the reporters of both social support and the outcomes, which increases the likelihood the associations were partly due to common method variance. Consistent with this idea, in a study discussed above, (Lamborn & Nguyen, 2004), adolescent-report of kinship support was not associated with teacher-report of the value adolescents place on school. However, both the number of studies showing significant associations between the presence of SNPAs and positive attitudes toward school and the idea that adolescents may be the most reliable reporters of their own opinions toward school begin to suggest the importance of SNPAs in the forming of positive youth academic attitudes.

**Motivation/Academic self-competence**—In addition to being related to more positive attitudes toward school, the presence of SNPAs may also be associated with greater youth motivation and feelings of self-competence. In two of the studies described above (Lamborn & Nguyen, 2004; Pallock & Lamborn, 2006), social support from adult extended family members was cross-sectionally associated with higher levels of youth work orientation, defined as feelings of satisfaction towards completing challenging tasks, and self-reliance, or a sense of control over what happens in one's life. In addition, in the study conducted by Sanchez and colleagues (2008), Latino adolescents who reported having a natural mentor possessed higher expectations for success in school. Similarly, in a study of mostly (87%) Caucasian adolescents (50% female) from rural and urban neighborhoods in 7<sup>th</sup> through 12<sup>th</sup> grades, adolescents who reported receiving a combination of all four types of social support described here endorsed higher levels of academic self-competence (Malecki & Elliott, 1999).

In addition to cross-sectional associations, the relation between non-parental adult social support and academic motivation and self-competence has also been observed in longitudinal work. Roeser and Eccles (1998) examined teacher support among a large sample ( $n = 1, 046$ ) of African American (67%) and Caucasian (33%) adolescents from diverse socio-economic backgrounds. They found that perceptions of higher levels of teacher regard, which appeared to be related to esteem support (i.e., “your teachers think you are a good student”), at the beginning of 7<sup>th</sup> grade, were associated with possessing a more positive academic self-concept at the end of 8<sup>th</sup> grade. Taken together, these findings suggest that adolescents who report the presence of SNPAs may derive more satisfaction from striving toward goals, as well as may feel more optimistic about their ability to accomplish those goals.

**School attendance**—In addition to their association with academically-related psychological constructs, SNPAs may also positively impact academic behaviors, such as school attendance. For example, in a study described above (Sanchez et al., 2008), Latino adolescents who reported receiving higher levels of total support from natural mentors, as well as those who reported the presence of higher numbers of natural mentors, attended

school more consistently. In addition, the presence of a natural mentor has been found to be associated with a higher likelihood of remaining in or graduating from high school among 198 African American adolescent mothers ( $M$  age = 16 years), the majority of whom were from low SES backgrounds (Klaw et al., 2003). Similarly, a study of over 310 adolescents in foster care ( $M$  age = 16 years old, 57% female) of diverse racial/ethnic backgrounds (65% Caucasian, 23% African American, 11% Latino, 5% Native American, 4% Asian) found that adolescents who reported having a natural mentor, particularly mentors in a professional role (e.g., a teacher, minister, counselor), were more likely to attend college (Ahrens et al., 2008).

**Academic achievement**—In addition to increased attendance, some studies have also found support from various SNPAs to be associated with higher levels of academic achievement. For example, in another study mentioned above (Malecki & Elliott, 1999), adolescents who reported receiving a combination of all four types of social support discussed here from teachers had higher GPAs. Similarly, among a diverse sample (43% Latino, 39% Caucasian, 12% African American) of early adolescents in 5<sup>th</sup> through 8<sup>th</sup> grades living in urban, rural, and suburban geographic regions, adolescent-report of emotional support from teachers was associated with teacher-ratings of academic competence (Malecki & Demaray, 2003b). Of note, the relation of academic competence to GPA or standardized test scores is somewhat unclear. In addition, among a sample of 164 urban adolescents in middle school, most of whom identified as Latino (65%) or African American (19%) and were from low-income families (67%), higher levels of teacher support, a combination of the four types of social support described above, were associated with higher GPAs, but only for low-income students (Malecki & Demaray, 2006). The link between SNPA support and academic achievement has also been observed in longitudinal work. In a study mentioned above (Roeser & Eccles, 1998), adolescents who reported higher levels of teacher regard, which appears to tap esteem support, at the beginning of 7<sup>th</sup> grade, had higher grade point averages (GPA's) at the end of 8<sup>th</sup> grade. The authors noted, however, that this association was small when other predictors, such as family income and previous achievement, were taken into account. In addition to the findings from quantitative studies, in a qualitative study, interviews with 10 Mexican American first year college students ( $M$  age = 19, 50% girls) revealed the adolescents perceived the presence of a natural mentor to be associated with improvements in their grades (Sanchez et al., 2006), although more objective data, such as school records, were not examined longitudinally to complement this finding.

Beyond the provision of support, specific characteristics of the SNPA's themselves also may be associated with academic achievement. In the study by Sanchez and colleagues (2008), those adolescents whose natural mentors had higher levels of educational attainment achieved higher GPAs. Conversely, in a cross-sectional study of youth from diverse racial/ethnic backgrounds (41% African American, 39% Latino, 12% Caucasian, 8% other/mixed) in the foster care system and matched controls ( $n = 326$  total,  $M$  age = 18 years, 54% female), Farruggia and colleagues (2006) found that VIP exhibition of problem behaviors (e.g., substance use, aggression) was linked to lower levels of academic achievement, with this pattern being stronger among adolescents in foster care than children not in foster care.

Finally, some recent findings also point to possible patterns of mediation in the link between non-parental adult social support and academic achievement. For example, in a study discussed above (Woolley et al, 2009), the association between emotional support from teachers and grades was mediated by youth satisfaction with school and school behavior. In addition, lower levels of support from non-parental adults may also help explain the association between psychological difficulties and lower levels of academic achievement. For example, in a study of 521 students in 6<sup>th</sup> grade from diverse racial/ethnic backgrounds (44% Caucasian, 26% African American, 10% Latino; 52% boys), lower levels of social support from adults in one's social network mediated the association between youth depressive and conduct symptoms and lower school-reported GPA's (Rockhill, Stoep, McCauley, & Katon, 2009). However, whether support from a non-parental adult (i.e., extended family member) was a unique mediator in this study can not be determined as it was combined with family support.

In contrast to associations with higher levels of academic achievement, a few studies have not found a positive association between SNPA support and grades. For example, a study of 31 Latino early adolescents in 6<sup>th</sup> grade found no link between youth-report of the provision of emotional support from teachers and GPA (Azmitia, Cooper, & Brown, 2009), although this finding could be the result of a small sample size which may have suppressed the ability to find a significant association. In addition, in the study by Farruggia and colleagues (2006), the presence of a VIP, which as suggested above, may involve the provision of emotional and/or instrumental support, was not associated with adolescent-reported grades. However, consistent with work on effective teaching practices (see Hattie, 2009 for a review), one possible explanation is that grades may only be impacted by specific combinations of support types, such as informational support combined with esteem support, which are often not compared to the effects of single types of support or to other combinations of support in the SNPA literature.

In summary, support from non-parental adults has been linked to a number of indices related to academic functioning, including higher levels of positive academic attitudes, motivation, school attendance, and academic achievement. Empirical work to date suggests that all four types of support, emotional, esteem, informational and instrumental, may be helpful to academic functioning (e.g., Demaray et al., 2005; Lamborn & Nguyen, 2004; Somers et al., 2008). Limited attention has been given to whether the strength of association differs depending on the types of support or specific combinations of support and outcome measured. Examination of additional school-related behaviors, such as improvement in study skills or more frequent communication with teachers, may also help identify mechanisms of associations with academic adjustment. Finally, these findings should be considered a foundation from which to conduct future research, as the vast majority of the work to date has been conducted using cross-sectional designs, precluding the determination of direction of causality.

### **Self-Esteem/Self-Concept**

The links between SNPA support and feelings and thoughts about the self, self-esteem and self-concept, respectively, is another area that has received empirical attention. In cross-

sectional studies described above, VIPs who are perceived as warm (Farruggia et al., 2006) and relationships with natural mentors (Ahrens et al., 2008; Sanchez et al., 2006) were found to be linked to higher levels of self-esteem and more positive self-concept. In addition, Franco and Levitt (1998) examined social support from non-parental adult family members among a sample of 185 early adolescents who were in the latter part of 5<sup>th</sup> grade ( $M$  age = 11, 51% girls) and represented roughly equal numbers of three racial/ethnic groups (33% African American, 35% Latino, 33% Caucasian). Early adolescents who reported higher levels of support from adult relatives, which appeared to tap emotional (e.g., “Are there people you talk to about things that are really important to you), instrumental (e.g., “Are there people who would take care of you if you were sick?”), and esteem (e.g., “Are there people who make you feel special or good about yourself”) support reported higher levels of self-esteem. Finally, among a sample of 877 adolescents ( $M$  age = 17, 49% female, ethnicity unspecified), the presence of adult co-workers at part-time jobs who provided informational support was associated with higher levels of self-esteem (Vazsonyi & Snider, 2008).

An association between higher levels of non-parental adult social support and higher levels of self-esteem has also been found in longitudinal work. Among 217 mostly (92%) Caucasian middle-class adolescents ( $M$  age = 17 years, 58% girls), emotional and esteem support from a teacher was associated with higher levels of self-esteem a year later (Colarossi & Eccles, 2003). Similarly, among a large sample ( $n = 2, 585$ ) of mostly (82%) Caucasian middle-class adolescents in middle school (50% girls), adolescents who reported higher levels of teacher social support, which appeared to encompass mostly emotional and instrumental support (e.g., “teachers take a personal interest in students,” “teachers go out of their way to help students”) in 6<sup>th</sup> grade, reported higher levels of self-esteem in 8<sup>th</sup> grade (Reddy et al., 2003). Finally, additional evidence suggests the potential positive impact of SNPAs when combined with support received from other sources (e.g., parents). Levitt and colleagues (2005) conducted a longitudinal study of 691 early adolescents from diverse racial/ethnic backgrounds (32% African American, 28% Caucasian, 41% Latino) who were in 4<sup>th</sup> and 6<sup>th</sup> grades ( $M$  age = 10 and 12, respectively) at the first wave of data collection. The combination of higher levels of social support, representing emotional, instrumental and esteem support, as in the Franco and Levitt (1998) study, from both extended and nuclear family members predicted higher levels of self-esteem two years later than support received only from the nuclear family (Levitt et al., 2005).

It is important to note that a few studies have not found SNPAs to be associated with higher levels of self-esteem. In the study mentioned above conducted by Farruggia and colleagues (2006), although VIP warmth was associated with more positive mental health, overall social support from parents, peers and VIPs was not associated with mental health. Importantly, as this finding involved a latent construct of general mental health, the applicability of this finding solely to self-esteem is not clear. In addition to VIP warmth and social support, VIP engagement in problem behaviors has also been examined as predictors of youth self-esteem. VIP problem behaviors have been found to be associated with decreased youth self-esteem among a racially/ethnically diverse (53% Caucasian, 16% Latino, 12% Asian American, 11% African American) sample of 201 adolescents ( $M$  age =

17, 54% female) (Chen, Greenberger, Farruggia, Bush & Dong, 2003). In another study described above, VIP problem behaviors was associated, more strongly in a foster care than non-foster care sample, with poorer mental health (Farruggia et al., 2006).

In addition to self-esteem being an outcome in its own right, some initial findings suggest that it may also mediate the association between the presence of SNPAs and youth adjustment. Moran and DuBois (2002) conducted a study of non-parental adult social support among 347 African American (54%) and Caucasian (46%) adolescents (*M* age=12 years, 52% girls), half of whom were from low-income families, and found that self-esteem partially mediated the association between a latent variable of social support, measured by three scores referring to family, school personnel, and peer social support, and youth behavior and emotional problems. From the information provided, the measure of social support used appears to tap, at least, instrumental support (e.g., “My family notices and gives me help when I need them to”). Self-esteem has also been shown to mediate the association between social support and emotional and behavior problems in longitudinal analyses with a similarly ethnically and socioeconomically diverse sample of 350 early adolescents (*M* age = 12, 51% girls) (DuBois, Burk-Braxton, Swenson, Tevendale, Lockerd, & Moran, 2002). It should be noted that in both of these studies support received from more than one source were combined, which may confound the results and limit conclusions that can be uniquely drawn regarding non-parental adults.

In general, barring SNPA display of aggression or substance use (Chen et al., 2003, Farruggia et al., 2006), the presence of SNPAs appears to be associated with higher levels of youth self-esteem among diverse samples of adolescents in cross-sectional (Ahrens et al., 2008; Franco & Levitt, 1998; Sanchez et al., 2006), as well some longitudinal work (Colarossi & Eccles, 2003; Reddy et al., 2003). While emotional and esteem support have been highlighted in a few studies as possible links to higher levels of self-esteem (Colarossi & Eccles, 2003; Farruggia et al., 2006), as is the case for academic functioning, too little attention is given in this work to operationalizing the type(s) of support provided. Self-esteem may also mediate the relationship between social support and behavior and emotional problems (Dubois et al., 2002, Moran & Dubois, 2002), although the extent to which support from non-parental adults makes a unique contribution to this pattern is unclear.

### **Behavior Problems**

In addition to being associated with increased levels of positive youth outcomes, the presence of SNPAs may also be associated with decreased levels of negative outcomes, such as behavior problems. The presence of SNPAs has been found to be associated with lower levels of conduct problems, substance abuse and sexual activity.

**Conduct Problems**—The presence of natural mentors and VIPs has been linked cross-sectionally to lower levels of misconduct (Malecki & Demaray, 2003; Zimmerman et al., 2002; Woolley et al., 2009). For example, in a study described above, Zimmerman and colleagues (2002) found that adolescents who reported having a relationship with a natural mentor reported engaging in lower levels of non-violent delinquency than youth who did not

endorse having a natural mentor. Similarly, among a sample of mostly (77%) Latino adolescents (51% girls) in 6<sup>th</sup> through 8<sup>th</sup> grades, adolescents who reported receiving higher levels of social support, a combination of the four types of support described here, from a teacher were less likely to carry a weapon at school than adolescents who endorsed receiving lower levels of support (Malecki & Demaray, 2003). Finally, in the study by Woolley and colleagues (2009), teacher support, which may have taken the form of emotional support, primarily, was associated with lower levels of behavior problems at school, a variable which included cutting class, getting in physical fights, and receiving an out-of-school suspension. In addition, the presence of SNPAs may have a particularly positive impact when compared to support from peers. In a study described above (DuBois et al., 2002), adolescents who received more social support from peers than adults had higher levels and rates of growth of behavior problems.

Qualitative work has also highlighted the positive impact of SNPAs. In a study of 12 racially/ethnically diverse (3 Caucasian, 5 African American, 3 Latino, 1 biracial) male adolescents living in single mother families who reported on their relationships with formal mentors, the majority of youth reported that the mentors helped them deal with anger more effectively. For example, one adolescent stated, “If you want, you can vent to somebody and not just like take it out on somebody and hurt them” (Spencer, 2007, p. 193). Similarly, in a qualitative study of Mexican American older adolescents described above (Sanchez et al., 2006), adolescents reported that one benefit of relationships with natural mentors was helping them stay out of trouble.

Looking beyond the presence or absence of SNPAs, some researchers have investigated specific aspects of the youth-SNPA relationship that may decrease youth behavior problems. In a study described above (Chen et al., 2003), perceptions of adolescents that their VIP would disapprove of delinquent behaviors, which may be a form of informational support (i.e., the VIPs may have communicated that such behaviors lead to negative consequences), have been found to be associated with lower levels of aggression and vandalism among adolescents.

In contrast, some work has failed to find a positive impact of SNPAs on youth behavior problems. For example, in the study conducted by Farruggia and colleagues (2006), warmth from non-parental adults was not associated with lower levels of youth misconduct. Moreover, adolescents who perceive that their VIPs are themselves engaged in problem behaviors have been found to exhibit higher levels of conduct problems (Chen et al., 2003; Farruggia et al., 2006; Greenberger et al., 1998). This finding suggests that, in addition to the presence/absence of SNPAs, characteristics of SNPAs may be important factors to investigate as well.

**Substance Use**—Associations between SNPA presence and lower levels of substance abuse have also been observed. In studies described above, youth with natural mentors have been found to exhibit lower levels of marijuana (Zimmerman et al., 2002) and alcohol (Sanchez et al., 2006) use. In addition, specific VIP attributes may be associated with decreased use. Youth who perceive that their VIP would disapprove of problem behaviors, which, again, may be similar to informational support, have been found to be less likely to

engage in substance abuse (Chen et al., 2003). In addition to direct associations, potential moderators of associations between the presence of SNPAs and youth substance use are beginning to emerge. For example, the context through which adolescents know SNPAs may impact associations between SNPA presence and youth substance use. Among 374 affluent (median annual income = \$101, 965) 7<sup>th</sup> grade students (*M* age = 13, 54% male) most (92%) of whom identified as Caucasian, although a main association between non-parental adult support and adolescent drug use was not significant, a significant three-way interaction involving youth gender, closeness with the same-gender parent, and SNPA relationship to youth was evident. For boys reporting low father closeness, support from adult extended family members was associated with decreased substance use. However, girls who reported low closeness with their mothers, but received support from adults at school, exhibited lower levels of substance use (Bogard, 2005).

**Sexual Activity**—SNPAs may also impact decisions youth make regarding whether to engage in sexual activity, a topic that has mostly been studied among youth considered at-risk for some negative psychosocial outcomes (e.g., Native American youth, youth in foster care, African American youth). For example, Oman and colleagues (2006) examined social support among a sample of 134 Native American adolescents (*M* age = 15, 50% male), who are more likely to be sexually active than American youth in general (i.e., averaging across all racial/ethnic groups) (Abma, Martinez, Mosther, & Dawson, 2004). Adolescents who reported having a non-parent role-model were less likely to be engaged in sexual activity. It is important to note that the presence of non-parental adult role models was measured using one item, which may be an example of esteem support (i.e., “you know adults that encourage you often,”). Similarly, in a study mentioned above (Ahrens et al., 2008) of youth in foster care, who also have been found to engage in riskier sexual behaviors than youth who live with their biological parents (Gramkowski, Kools, Paul, Boyer, Monasterio, & Robbins, 2009), adolescents who reported the presence of a natural mentor also were less likely to contract a sexually transmitted infection. Most recently, a longitudinal study of 615 African American older adolescents (*M* age at Time 1 = 17.5, 53% girls) (Hurd & Zimmerman, 2010), reported as engaging in higher levels of risky sexual behavior than Caucasian adolescents (Eaton, Kahn, Kinchen et al., 2006), found that adolescents with a natural mentor exhibited lower levels of engagement in risky sexual behavior at baseline, as well as demonstrated greater linear decreases in risky sexual behavior, particularly in the two years after high-school.

In conclusion, initial evidence suggests that the presence, as well as characteristics, of SNPAs is associated with lower levels of behavior problems including misconduct, substance abuse, and engaging in sexual activity (Bogard, 2005; Sanchez et al., 2006; Zimmerman et al., 2002). Findings suggest that emotional and informational support may be particularly helpful for reducing behavior problems. However, increases in negative outcomes associated with the presence of certain types of SNPAs also need to be considered when conceptualizing their overall potential influence on youth and clinical implications. Finally, the ability of SNPAs to exert a buffering influence on the association between risk (e.g., economic disadvantage, being a member of certain ethnic groups) and behavior warrants further investigation.

## Emotional Problems

SNPAs may also be helpful in decreasing emotional problems among youth. An association between the presence of SNPAs and lower levels of adolescent depressive symptoms has been found in cross-sectional studies involving a variety of non-parental adults (Greenberger, Chen, & Beam, 1998; Ruiz & Silverstein, 2007; Suldo, Friedrich, White, Farmer, Minch, & Michalowski). For example, in a study of 925 older adolescents and young adults, 43% of whom were older adolescents (18-20 years old), from diverse socio-economic backgrounds (the ethnicity of the majority of the participants was not specified), participants who reported higher levels of emotional closeness with their grandparents (i.e., how likely they would be to talk to one of their grandparents if they had a major decision to make or felt depressed or unhappy), which may be closely related to emotional support, reported lower levels of depressive symptoms (Ruiz & Silverstein, 2007). Importantly, as this study included both adolescents and young adults, whether this finding can be generalized solely to adolescents may be questionable. Similarly, in a study described above (Greenberger et al., 1998), VIP warmth and acceptance was linked to lower levels of depressive symptoms among girls. In addition, in a recent study which examined all four types of social support discussed here separately, emotional and instrumental support from teachers each contributed to a unique, small proportion of the variance in depressive symptoms among 401 middle school students (60% female, 54% Caucasian, 14% Latino, 14% African American, 10% multi-racial, 5% Asian) from diverse socio-economic backgrounds (Suldo et al., 2009). Importantly, in addition to main associations, non-parental adult social support has been found to interact with paternal depression and substance use, as well as youth ethnicity, to predict adolescent depression. In a study of 290 Mexican American (49%) and Caucasian (51%) adolescents ( $M$  age = 14, 56% boys), for Mexican American girls, non-parental adult social support was more protective in the context of lower levels of paternal depression and substance use. In contrast, for European American girls, non-parental adult social support was more protective in the context of higher levels of paternal depression and substance use. This interaction did not emerge among boys (Casey-Cannon, Pasch, Tschann, & Flores, 2006).

Some longitudinal studies described above (Colarossi & Eccles, 2003; Hurd & Zimmerman, 2010; Levitt et al., 2005; Reddy et al., 2003) have also demonstrated an association between the presence of SNPAs and fewer emotional difficulties. For example, Colarossi and Eccles (2003) found that higher levels of a combination of emotional and esteem support from teachers predicted lower levels of depression among older adolescents a year later. Reddy and colleagues (2003) also reported that increases in teacher support from 6<sup>th</sup> to 8<sup>th</sup> grades predicted decreases in depressive symptoms over that time period. In addition, in the study by Hurd & Zimmerman (2010), older adolescents who had a natural mentor exhibited steeper declines in depressive symptoms over time. Finally, among early adolescents, close relationships with adult extended family members have been found to predict lower levels of loneliness two years later (Levitt et al., 2005).

Despite these findings, there is also evidence that SNPAs may not be associated with lower levels of emotional problems. Some studies discussed above have found no association between the presence of SNPAs, such as VIPs and natural mentors, and youth emotional

problems (Greenberger et al., 1998; Oman et al., 2006; Zimmerman, 2002). Moreover, in a few studies, SNPAs have even been found to be associated with higher levels of emotional difficulties. VIP depressed mood has been linked to higher levels of youth depression (Chen et al., 2003). In addition, affluent adolescent males who report the presence of an SNPA in the context of low levels of closeness with their parents have been shown to exhibit higher levels of depression (Bogard, 2005). Having a natural mentor has also been found to be associated with higher levels of overall psychiatric symptoms in a sample of 62 first-year college students ( $M$  age = 19, 28% males, 82% Caucasian) who were children of alcoholics (COAs; Cavell, Meehan, Heffer, & Holladay, 2002). Thus, in certain contexts, the presence of SNPAs may not necessarily be linked to a decrease in emotional difficulties.

Of the outcomes that have received attention in the SNPA literature, the most ambiguous findings are those related to associations between SNPAs and youth emotional problems, with some initial evidence that emotional support may be one specific type of support associated with lower levels of emotional problems. Some work has demonstrated a negative association between the presence of SNPAs and emotional problems (Casey-Cannon et al., 2006; Ruiz & Silverstein, 2007). However, other work has not found an association or has found a positive one, particularly among youth who either have a less close relationship with parents, have a parent who abuses substances, or have a VIP who is depressed (e.g., Bogard, 2005; Cavell et al., 2002; Greenberger, 1998). These findings suggest the need for continued investigation of the contexts within which non-parental adult support is provided, and how those contexts influence associations between non-parental adult support and the emotional functioning of youth.

### Advancing Theoretically Grounded Studies of SNPAs

The primary purpose of this paper was to propose that social support theory, and, in particular, the content of the support received, be used to integrate the various literatures that examine relationships between adolescents and non-parental adults. The types of social support provided in non-social support studies was identified based on definitions of the various SNPAs written by the study authors, as well as additional characteristics of the SNPAs studied. Further conceptual integration (e.g., use of common terms, operationalization of variables) across the specific types of social support delivered by the SNPAs in the lives of youth will eventually provide an opportunity to build upon this theoretical review with a meta-analytic review.

In addition, although findings related to the four areas of adolescent adjustment discussed in this review (academic functioning, self-esteem, behavioral difficulties, emotional difficulties) were presented separately, it is important to acknowledge that the SNPA literature is beginning to include investigations of relationships *among* these outcome variables as well. For example, youth self-esteem and emotional and behavioral problems recently have been combined and used as indicators of an overall latent construct of mental health in a study of the impact of VIP's (Farruggia et al., 2006). In addition, the influence of levels of one outcome on another (e.g., behavior problems on academic achievement, self-esteem on behavior problems) has also been included in some work (e.g. Moran & Dubois, 2002; Dubois et al., 2002; Rockhill et al., 2009). These studies highlight the complexity of

associations between SNPAs and adolescent psychosocial adjustment and the need to continue to examine associations among different areas of adolescent functioning.

Theoretically-grounded empirical work on the moderators of SNPA support would also improve our understanding of youth-SNPA relationships by delineating under which circumstances SNPA support is most likely to be beneficial to youth. A few authors (e.g., Bogard, 2005; Casey-Cannon et al., 2006) have examined interactions of SNPA support with various constructs (e.g., youth, parental and SNPA characteristics), but often it has been difficult to ascertain a rationale for the specific interaction patterns observed, presenting a challenge to the interpretation of the findings as well as to understanding whether it is reasonable to expect them to emerge in future studies. Conversely, recent theoretical work has predicted particular patterns of moderation, but increased empirical investigation of these interactions is needed before they can be fully supported. For example, while some authors have put forth attachment theory as a framework for understanding how relationships with parents can facilitate or hinder the formation and maintenance of relationships with SNPAs (Barrera & Bonds, 2005; Zimmerman et al., 2005), additional empirical work examining this interaction pattern will provide clarification of whether these processes occur. Recent research also suggests that the value youth place on social support varies by gender, ethnicity, age, and disability status (e.g., girls and younger youth state that social support is more important than boys and older youth) and is another factor warranting further investigation as a moderator (Demaray & Malecki, 2003; Demaray, Malecki, Rueger, Brown, & Summers, 2009).

In addition to moderators, continued investigation of mediators, as well as longitudinal associations, of the relation between SNPAs and youth well-being would increase our understanding of main associations between SNPA support and youth functioning. Rhodes and colleagues (2006) have proposed a theory which suggests three mechanisms by which non-parental adults may influence youth psychosocial outcomes including: (1) enhancing the social relationships and emotion regulation skills of youth, (2) helping to improve the cognitive skills of youth, and (3) promoting positive youth identity development. Investigation of the extent to which these increased competencies mediate the relation between SNPA support and youth psychosocial functioning would benefit the SNPA field. Moreover, additional longitudinal investigations would help isolate the direction of causality between SNPAs and youth well-being. Specifically, these examinations could determine whether SNPAs are more likely to promote youth adjustment, whether youth who exhibit more positive adjustment elicit more social support from non-parental adults, or whether both factors predict each other in an iterative fashion over time. In addition, given that social convoys change as adolescents mature (Kahn & Antonucci, 1980), it will be important to examine how those changes impact adolescent functioning at different stages of development.

## Conclusions

More empirical work is needed to determine how SNPA support can be helpful to adolescents, which adolescents may benefit the most from SNPA support, and whether there are cases in which SNPA support may be associated with maladjustment. However, as this

information is discovered, intervention and prevention efforts may be tailored to include recruitment and involvement of SNPAs for youth. Youth and parenting interventions could be expanded to include components that encourage youth and parents to seek out SNPAs who may provide the types of social support that would be most helpful for particular youth outcomes. Individuals in the natural contexts of youth (e.g., extended family, school) also could be informed of how they could most likely exert a positive influence on youth. In addition, although structural aspects of formal mentoring relationships that may be associated with youth outcomes, such as contact frequency and attention to tasks that promote positive development, are beginning to be identified and included in mentoring programs (DuBois, Holloway, Valentine & Cooper, 2002), adding training to increase the provision of the specific types of social support associated with positive youth outcomes may also increase the effectiveness of these programs. As the contexts surrounding adolescents continue to evolve over time, it is important to attend to and investigate the various interpersonal relationships in their environments which may promote psychosocial well-being and development.

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