DEVELOPMENT DURING MIDDLE SCHOOL: AN ECOLOGICAL-TRANSACTIONAL, CROSS-SECTIONAL EXAMINATION OF EARLY ADJUSTMENT

by

RACHEL SUSAN WHITE
M.S. University of Central Florida, 2009
B.S. University of Central Florida, 2004

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Major Professor: Kimberly Renk

ABSTRACT

This study utilized an ecological framework to investigate the types of variables that influence adolescent adjustment during middle school and how influences change or stay the same depending on grade level. A cross-sectional approach was taken in which students entering the beginning of their Sixth Grade year and students nearing the end of their Eighth Grade year were administered a comprehensive questionnaire including items about psychological adjustment, parenting characteristics, community support characteristics, ethnic identity, acculturation status, and socio-economic status. Findings suggest that Sixth and Eighth Graders' experience of emotional and behavioral problems is influenced differently. This is particularly salient as it pertains to parenting support and acculturation variables. Findings support the notion that individualized, multi-systemic style interventions are valuable even within the developmental period of adolescence as important changes in risk and protective factors are taking place as one moves from early- to mid-adolescence.

Dedicated to my husband, John J. White. Without you, none of this would have been possible.

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INTRODUCTION

Early adolescence (which ranges generally from 11- to 14-years) is a unique developmental period. Adolescents in this developmental period are still very dependent upon adults for a variety of needs (e.g., food, shelter, emotional support), but they also begin to strive for independence in a number of ways. For example, these adolescents are beginning to place a greater amount of importance on peer relationships than their pre-adolescent peers. Additionally, early adolescence is a time in which individuals' identity becomes increasingly important (Sussman, Pokhrel, Ashmore, & Brown, 2007). The middle school environment, in particular, provides a context in which early adolescents can learn about themselves and their relationships with others (Way, Reddy, & Rhodes, 2007). Given the number of systems in which early adolescents are integrated, understanding their achievement of developmental milestones in the context of these systems is vitally important. In particular, by understanding how early adolescents develop in the context of these systems, mental health and other professionals who work with early adolescents and their families can become more aware of how to foster positive adjustment for these adolescents.

In fact, as adolescents begin to adjust to the significant psychosocial changes that occur during this developmental period along with the accompanying physical, hormonal, and neurological changes, they are placed at heightened risk for the increase of both internalizing and externalizing difficulties (Dishion & Stormshak, 2007). Previous research has examined a multitude of protective and risk factors related to the development of psychological difficulties during adolescence. In general, several overarching variables that can be conceptualized within an ecological-transactional framework were identified as being predictive of adolescents'

adjustment. These variables included parenting characteristics within the microsystem

(Baumrind, 1991), the school environment within the exosystem (Wang, 2009), family

socioeconomic status that bridges the macrosystem with other levels of ecological models (Dihn,

Roosa, Tein, & Lopez, 2002), and acculturation status within the macrosystem (Acock &

Kiecolt, 1989). Less is known, however, about the significance of each of the above variables as

adolescents progress through their middle school years. This lack of information makes it

difficult for intervention and prevention efforts to target specific variables that may be

particularly protective at given ages. For example, it is likely that 10- and 11-year old children

entering Sixth Grade have very different needs relative to their Eight Grade counterparts

preparing to enter High School. Therefore, a better understanding of the intricate ways in which

parenting characteristics, school environments, family socioeconomic status, and acculturation

status work together to protect early adolescents against emotional and behavioral difficulties

during different time points of the middle school years is warranted.

THE ECOLOGICAL-TRANSACTIONAL MODEL

Bronfenbrenner (1979) was one of the first researchers to develop a transactional framework or ecological model. Based on this model, individuals' interactions with their environment, their changing physical or social setting, the relationships among the settings frequented by these individuals, and society's impact on these settings all play a role in the development of different behaviors. According to this model, each individual is involved in four systems that can be arranged in concentric circles. These systems include the microsystem (i.e., the social relationships and physical settings in which each individual is involved each day), the mesosystem (i.e., the interrelationships among the various settings in which each individual is submerged), the exosystem (i.e., social structures that affect directly or indirectly each individual), and the macrosystem (i.e., the cultural patterns of a society). Given the interactions of these systems, family management practices occur in the context of the community and the culture in which the family lives. In turn, family management practices are related to children's behavior, such as the exhibition of emotional and behavioral problems. Thus, variables representing each of these systems are important to measure when examining adolescents' emotional and behavioral problems.

Similar to the suggestions proposed by Bronfenbrenner's (1979) ecological model, the work of Mason, Cauce, Gonzalez, Hiraga, and Grove (1994) supported an ecological model. Mason and colleagues (1994) suggested that children's emotional regulation is learned and reinforced constantly within the context of the family. This process also occurs within the context of greater social forces, with social and community forces impacting the family, specifically the behavior of parents. Thus, according to this model, children are influenced

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directly by their family (i.e., the microsystem) and influenced indirectly by the social network to which they and their parents belong (i.e., the mesosystem). Given these interrelationships, Mason and colleagues (1994) indicated that the social environment does play a role in the development of children's externalizing problems. Thus, with regard to ecological models, children's behavior is influenced by the many interrelated contexts that are included in this model, ranging from more immediate familial influences to more indirect community and societal influences.

In line with work supporting a transactional conceptualization of adolescent development, several key factors at each level of a transactional framework were examined in the current study. In particular, parenting characteristics (e.g., parenting style, discipline techniques, parents' warmth/control), perceived community support (i.e., from teachers, peers, and neighborhood adults), and cultural characteristics (e.g., socioeconomic status, acculturation level) were examined in conjunction with one another. Thus, the current study provided a unique look at the specific aspects of the transactional model in the development of internalizing and externalizing problems in middle school aged adolescents. Finally, differing levels of socioeconomic status were examined to better understand whether adolescents from varying walks of life draw differently from familial and community characteristics during their development.

ADOLESCENTS' ADJUSTMENT

As mentioned above, psychological symptoms can be conceptualized as belonging to two distinct dimensions: internalizing and externalizing problems (Achenbach, 1992). These categories came into fruition through multiple factor analytic studies of parent-, teacher-, and child-reported symptoms. Dishion and Stormshak (2007) argued for the usage of the alternative terms 'social maladaptation' and 'emotional distress,' both of which are considered more neutral and connote less psychodynamic thinking. These terms were used interchangeably throughout this review to be consistent with the research cited here.

Behaviors included in the domain of externalizing problems generally are thought to place adolescents in conflict with other individuals. In other words, adolescents who exhibit externalizing problems are causing disruption to the external environment around them. Similarly, social maladaptation can be described as behaviors that undermine adolescents' adjustment at home, such as aggression and delinquency. Adolescents who begin exhibiting externalizing problems during preadolescence are at increased risk for displaying delinquent and antisocial behavior (Beyers, Bates, Pettit, & Dodge, 2003) as well as other problematic psychological and emotional outcomes (Brame, Nagin, & Tremblay, 2001; Loeber & Farringon, 2000). In fact, the development of externalizing problems in preadolescence is a risk factor for later juvenile delinquency, adult crime, and violence (Betz, 1995; Farrington, 1989; Moffitt, 1993). Development of externalizing problems during adolescence is a more common developmental course than during pre-adolescence (McGee, Freehan, Williams, & Anderson, 1992) and is associated typically with engagement in illegal activities and other status crimes (e.g., truancy, running away; Moffitt, 2006). Adolescents who exhibit behaviors in these

categories typically have less problematic outcomes than peers who developed such behaviors

during pre-adolescence unless they are incarcerated (Moffitt, 2006).

Loeber and Hay (1994) developed and tested a model that helps to describe the

progression of externalizing problems. This Triple Pathway Model suggests that maladaptive

behaviors progress along multiple pathways, including overt (e.g., bullying, physical fighting,

sexual assault), covert (e.g., lying, vandalism, burglary), and authority conflict (e.g.,

stubbornness, defiance, truancy) pathways. Although different pathways were included in this

model, it should be noted that the behaviors categorized in each pathway have the potential to

disrupt several of the systems in which adolescents operate. A greater percentage of youth

exhibit maladaptive behaviors at the earlier stages of each pathway than the percentage of youth

exhibiting behaviors at later stages (Loeber & Hay, 1994), suggesting that the development

process involved in each pathway is important to understand.

In contrast to externalizing problems, adolescents suffering from internalizing behavior

problems are thought to be taking their emotional difficulties out on themselves. For example,

emotional distress describes psychological discomfort, such as depression, anxiety, and somatic

complaints (Dishion & Stormshak, 2007). Internalizing behavior problems can take on a number

of forms and often can cause inner turmoil, including feelings of restlessness, worry, fear, panic,

and difficulty concentrating, among other symptoms (Barlow, 2002; Barrios & O'Dell, 1998).

Although adolescents who suffer from anxiety disorders may not affect their environment

negatively, they may have impaired functioning in other domains, such as academic difficulties,

poor quality peer relationships, low self-esteem (Velting & Albano, 2001), and underdeveloped

coping skills (Dishion & Stormshak, 2007). Other associated issues include suicide attempts,

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substance use, and self-injurious behavior (Dishion & Stormshak, 2007). Thus, even though

adolescents' internalizing behavior problems may seem to less obviously affect their surrounding

environments, such problems may disrupt the systems in which adolescents operate as is the case

with externalizing behavior problems.

The manifestation of internalizing behavior problems tends to follow a developmental

course as well, although research in this area is considerably less developed than research

regarding externalizing problems (Dishion & Stormshak, 2007). For example, difficulties related

to separation anxiety and specific phobias are more common in pre-adolescence but, in most

cases, subside by middle childhood. However, high levels of shyness during the elementary

school years may evolve into social phobia in the middle school and high school years.

Additionally, the adolescent age period is a particularly concerning time for the onset of

depression, given that the prevalence rates of depression steadily increase between the Seventh

and Twelfth Grade (Wight, Sepulveda, & Aneshensel, 2004) before leveling off in early

adulthood. Finally, adolescents between the ages of 12- to 18-years who develop depression are

more likely to experience subsequent episodes of depression in young adulthood (i.e., ages 19- to

24-years; Lewinsohn, Rohde, Klein, & Seeley, 1999). Thus, understanding the developmental

manifestation of internalizing behavior problems in middle school aged adolescents may be as

important as that of externalizing problems.

Unfortunately, internalizing and externalizing disorders are highly comorbid (Hinshaw,

1987; Liu, 2004), and adolescents (who range in age from 12- to 18-years) who experience co-

occurring internalizing and externalizing problems are thought to be at the highest risk for

problematic outcomes (Patterson, Reid, & Dishion, 1992). For example, adolescents who range

in age from 12- to 18-years with comorbid internalizing and externalizing are more susceptible to disagreements and interpersonal issues within their families. Additionally, they are more likely to display hostility (Granic & Lamey, 2002), experience peer difficulties in early adolescence (i.e., from ages 11- to 14-years; Capaldi, 1992; Dishion, 2000), and abuse substances (Capaldi, 1992). It has been proposed that preadolescents who experience co-occurring internalizing and externalizing problems follow a specific course of development. It is likely that behavior problems experienced during preadolescence are related to peer rejection and academic difficulties (Dishion, 1990). These difficulties then are related to adolescents' development of depressed mood or other internalizing behavior problems (Boivin, Poulin, & Vitaro, 1994) as well as with early adolescents' association with deviant peers (Dishion, 2000). These difficulties, in turn, are associated with more problematic or antisocial behaviors in adolescence. Thus, it may be the case that internalizing and externalizing problems have intertwined trajectories as children reach early adolescence.

Given the major implications for adolescents who suffer from both internalizing and externalizing problems, a better understanding of risk and protective factors across their development is warranted. In general, research has supported the position that many factors work together to protect against maladjustment in childhood and adolescence. What is less understood is how and through what mechanisms such factors are working and how they differ for internalizing and externalizing problems across early adolescent development (i.e., for middle school aged adolescents). As a result, these factors deserve to be studied further.

THE PROPOSED MODEL

Previous Examinations of the Model and Their Limitations

Recent research by White and Renk (2012) examined the contribution of variables at each level of an ecological-transactional framework to the development of externalizing problems in middle school aged adolescents in the Sixth through Eighth Grades. Two hundred eight middle school aged adolescents who ranged in age from 10- to 15-years reported on their perceived relationships with their mothers and fathers, their perceived levels of support from individuals in their communities (e.g., teachers, peers, and others), their acculturation status, their perceived personal competencies, and their behavior problems. Results of the hierarchical multiple regression analyses performed for this study identified factors at each level of the model that contributed significantly and uniquely to adolescents' externalizing problems. Specifically, middle school aged adolescents' perceived sense of support from their community, maternal warmth, maternal emotional availability, overall parental availability, social acceptance, and global self-worth were each significant predictors of their externalizing problems. This study is valuable in that it provides clear evidence of the continued importance of the family for middle school aged adolescents as well as the importance of community support for middle school aged adolescents as they develop. This study also provides further evidence of the importance of multiple contexts in contributing to middle school aged adolescents' adjustment as well as support for the development and implementation of multisystemic interventions such as those utilized by Henggeler (1999). Although White and Renk's (2012) study is unique and contributes substantially to the extant literature, it is not without limitations.

First, this study collected data only at one point in time (i.e., at the beginning of the school year), and all grade levels were analyzed together. It is likely that adolescents entering Sixth Grade differ significantly from adolescents exiting Eighth Grade with regard to the perceived importance of different levels of ecological models. For example, research revealed that, as children move from preadolescence to adolescence, there is a decrease in the amount of parental management and contact with adolescents and an increase in adolescents' reliance on peers for relationships and support. Dishion and Stormshak (2007) indicated that, if this interaction effect occurs too soon (e.g., premature autonomy), children are placed at risk for engaging in deviant friendships and for exhibiting high levels of antisocial behavior. Previous research also suggested that internalizing and externalizing problems are experienced differently throughout the lifespan (Dishion & Stormshak, 2007). Therefore, it is likely that prevention efforts would benefit from specialized focus on different nuances of risk factors and psychological symptoms that develop in conjunction with specific developmental levels; however, more research in this area is needed. As a result, the current study examined two different developmental levels: middle school aged adolescents in the Sixth Grade and middle school aged adolescents in the Eighth Grade. It was hypothesized that the older cohort would begin to experience emotional distress in different ways relative to their younger counterparts. A statistical comparison of the relative importance of each variable across the Sixth and Eighth Grades hopefully will be helpful in developing multisystemic treatments that are tailored to middle school aged adolescents' differing developmental levels.

Second, White and Renk's (2012) study solely examined the development of externalizing problems in the context of an ecological-transactional framework. This focus was

fairly consistent with the adolescent literature examining adjustment within a transactional-ecological framework. For example, there is a large body of research that uses an ecological-transactional model to examine the effects of exposure to community violence on youths' development of antisocial or violent behaviors (for a review, refer to Overstreet & Mazza, 2003). Findings from this body of research strongly supported the idea that each level of the ecological model is influential in the experiences of youth who are living in violent communities, from personal or ontogenic contexts to familial contexts to the greater social context. In contrast, there is a paucity of research examining the development of internalizing behavior problems or emotional distress during adolescence, especially within a multilevel ecological-transactional framework (Dishion & Stormshak, 2007). Although Dishion and Stormshak (2007) called for research in this area, no new studies that address this question could be located. One study took a transactional approach in attempting to understand the development and maintenance of depression in low-income urban early adolescents (who had a mean age of 11.4-years) by simultaneously accounting for "life stressors" that an adolescent may experience at home and in the community (Clements, Aber, & Seidman, 2008). Findings of this particular study were not strong in predicting depressive symptoms, but it is likely that there were sample bias effects due to method variance. Further, this study primarily examined major and minor life stressors as opposed to adolescents' perceptions of support from multiple relationships and within the community, variables that may be better at predicting emotional distress.

Third, White and Renk's (2012) study consisted of a generally homogenous group of participants, most of whom were Caucasian, upper-middle class, and reportedly well-adjusted. Although information about this population is useful, it is unlikely that it applies to more

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heterogeneous populations. As a result, middle school aged adolescents from varied backgrounds should be examined further in order to truly understand how factors promoting hardship and emotional and behavioral difficulties (e.g., low socioeconomic status, living in impoverished or dangerous conditions, and family conflict and disorganization) are related to middle school aged adolescents' adjustment. Further, this previous study was unable to make strong conclusions with regard to influences from the macrosystem level, such as the economic resources of the surrounding community and population density. Given that economic resources is a second area in which there is a relative paucity of understanding, the current study attempted to use a heterogeneous sample consisting of adolescents from all levels of socioeconomic status and community experiences.

The Current Model

Consistent with previous literature (for a review, refer to Dishion & Stormshak, 2007) and the previously presented model (White & Renk, 2012), the current model suggests that middle school aged adolescents have experiences within numerous settings and relationships during their development. As such, the current model accounted for middle school aged adolescents' experiences at each level of an ecological framework so that the unique predictive value of each level could be understood in terms of their internalizing and externalizing problems. Early adolescents (who ranged in age from 11- to 14-year) experience psychopathology and adjustment differently than their older peers (who ranged in age from 15- to 19-years; Dishion & Stormshak, 2007) and likely need different types of supports and experiences from their environment to remain well adjusted. Therefore, two crucial time periods, the beginning of Sixth Grade and the end of Eighth Grade, were examined using regression

analyses. An attempt was made to understand which variables were the most important predictors at each developmental level and thus in need of the strongest focus during intervention and prevention efforts.

First, theoretical discussions of contextual and cultural factors suggested that cultural factors are pertinent to adolescents' development. In particular, cultural patterns appear to influence familial socialization practices and community activities (Granic & Dishion, 2003). Therefore, acculturation status, community level economic resources, and population density were examined at the macrosystem level. Second, serving as a bridge between the macrosystem and the other levels of the ecological framework, adolescents' reported socioeconomic status was included. In particular, socioeconomic status is related indirectly to adolescents' adjustment through parenting resources (Acock & Kiecolt, 1989) and community characteristics (Schneiders, Drukker, van der Ende, Verhulst, van Os, & Nicolson, 2003). Third, the exosystem level was examined through adolescents' perceptions of support within the community, namely via peer and teacher support. Finally, the role that parents play in middle school aged adolescents' adjustment was examined as part of the microsystem. Brief descriptions of each variable are provided in the following sections.

PARENTING CHARACTERISTICS

Previous research demonstrated consistently that parenting characteristics (e.g., parenting style, disciplinary styles, warmth, and support) are related significantly to the emotional and behavioral adjustment of children and adolescents. In particular, constructive parenting characteristics (e.g., consistent and fair discipline, parental warmth and involvement, parental monitoring) are implicated in the development of well-adjusted youth (Kerr, Capaldi, Pears, & Owens, 2009). Parenting characteristics are especially important in the current study given that parents and families are arguably the most proximal influence on children and adolescents when following a transactional framework. Early adolescents spend a significant amount of time with their parents and continue to rely on them for a number of their basic needs, both physical and emotional. Additionally, parental influence is evident from birth, and the perceptions that adolescents have of their parents are based often on life-long experiences. The following is a review of the literature regarding some of the most salient features of parenting that are related strongly to early adolescents' adjustment. In particular, parenting styles, disciplinary styles, support, and warmth are discussed.

Styles of Parenting

Baumrind's (1991) model of parenting styles is particularly well accepted in the psychology community as a gold standard of classification. In this model, four styles of parenting are derived from two major dimensions: degree of control and degree of warmth and acceptance. The four styles of parenting derived from these dimensions are authoritative, authoritarian, permissive, and neglectful parenting. Authoritative parents exert high levels of

control coupled with high levels of warmth and acceptance. These parents are generally considerate of their children's needs, generate and maintain a consistent set of rules and expectations, and are warm and accepting of their children (Baumrind, 1991). Conversely, authoritarian parents exert high levels of control and low levels of warmth and acceptance. These parents are more likely to use harsh or punitive forms of punishment and to be cold or rejecting toward their children (Baumrind, 1991). Parents classified as permissive exhibit low levels of control and high levels of warmth and acceptance. These parents are likely to allow their children to get away with inappropriate behavior and to generally allow their children to govern their own behaviors. These parents often behave more like friends toward their children or adolescents than parental figures (Baumrind, 1991). Finally, neglectful parents are low on both dimensions (i.e., low on both control and acceptance/warmth; Baumrind, 1991). Overall, different types of parenting styles are implicated in the levels of adjustment experienced by children and adolescents.

For the most part, the authoritative parenting style during childhood and adolescence is associated usually with the most favorable adolescent outcomes. Adolescents who grow up in authoritative families over time are more likely to be independent, confident, and prosocial and to report higher levels of life satisfaction during their adolescence than their counterparts (Milevsky, Schlechter, Netter, & Keehn, 2007; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). Additionally, these adolescents are more likely to excel academically, are less likely to get into trouble as a result of problematic behavior, and demonstrate higher levels of empathy than their peers who do not grow up in authoritative families (Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Blatt-Eisengart, & Cauffman, 2006). Some research

suggested that the authoritative parenting style may not be the most effective style across all cultures and backgrounds, however (Cauffman, 2006). In particular, Cauffman (2006) suggested that the authoritarian parenting style is more effective and has more positive outcomes with adolescents from a lower socioeconomic status and with minority adolescents relative to their Caucasian, middle class counterparts. In contrast, other studies indicated that the authoritative parenting style is most effective at reducing or preventing problematic behaviors across European American (Baumrind, 1983), African American (Bluestone & Tamis-LeMonda, 1999; Querido, Warner, & Eyberg, 2002), and Chinese (Chen, Dong, & Zhou, 1997) samples.

In contrast to authoritative parenting, outcomes during adolescence are less favorable in authoritarian households overall. These children are less confident both socially and academically (Lamborn et al., 1991). Further, research suggested that very young children raised in homes that lack warmth and emotional support are at risk for developing concerning behaviors (e.g., aggression, noncompliance, and delinquency) as they reach adolescence (McCarty, Zimmerman, Digiuseppe, & Christakis, 2005). Despite the problematic outcomes mentioned above, children raised by authoritarian parents are more likely to perform well in school and are unlikely to be involved with deviant peers. These characteristics are most likely due to the strict control that parents who adopt this style maintain over their children (Lamborn et al., 1991). This tendency may explain partially why some research indicated that children from families of lower socioeconomic status and children of minority backgrounds seem to benefit more greatly from this parenting style than children of higher socioeconomic status backgrounds (Cauffman, 2006). In other words, parents' strict control helps to protect children and adolescents from undesirable events that may be occurring in environments that may be impoverished in a variety of ways.

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Similar to authoritarian parenting, high school aged adolescents who report having permissive parents both positive and negative outcomes (Lamborn et al., 1991). In general, these adolescents tend to score relatively high on measures of social competence (e.g., perceived popularity, the ability to make friends) and self-confidence. In contrast, they are less engaged in school and are more likely to misbehave at school and to experiment with alcohol and other substances. Finally, adolescents whose parents adopt a neglectful parenting style are at the highest risk for problematic behaviors, including delinquency and alcohol and substance use. They also are less likely than their peers to be engaged in adaptive academic and occupational activities (Lamborn et al., 1991; Steinberg et al., 1994).

Not surprisingly, research demonstrated that differences exist in the parenting styles utilized commonly by mothers and fathers. Mothers are more likely than fathers to adopt an authoritative style, whereas fathers are more likely than mothers to adopt an authoritarian style (McKinney & Renk, 2008; Russell et al., 1998). Fathers also are less likely to develop a permissive parenting style relative to mothers (McKinney & Renk, 2008). Research suggested that mothers' and fathers' propensities toward specific parenting styles differ and that the protective nature of a particular parenting style varies depending on whether it is exhibited by either mothers or fathers. For example, Milevsky and colleagues (2007) examined high school aged adolescents' levels of depression, life satisfaction, and self-esteem. Results of this study suggested that, per adolescents' reports, authoritative mothering is related to lower levels of depression and higher levels of life satisfaction and self-esteem, whereas authoritative fathering is related only to lower levels of depressive symptoms. Results of this study also suggested that

permissive mothering is particularly more problematic with regard to adolescent outcomes relative to permissive fathering.

Simons and Conger (2007) explored a separate but related issue with regard to mothers' and fathers' parenting styles. In particular, different mother-father parenting style combinations and their relationships to adolescents' adjustment were examined. Using adolescents' report and observation ratings of family interactions, Simons and Conger (2007) indicated that the most common parenting style combinations are authoritative mother-authoritative father, permissive mother-permissive father, and neglectful mother-neglectful father. Interestingly, and not surprisingly, none of the families in the Simons and Conger (2007) study reported an authoritarian mother-authoritarian father combination. Regarding mother-father parenting style combinations and adolescents' adjustment, families with two authoritative parents have the most positive adolescent outcomes, including the lowest reported levels of depression and highest reported levels of school commitment. In contrast, authoritative mother-permissive father families and authoritative father-permissive mother families report the lowest levels of delinquency. In general, findings revealed that having at least one authoritative parent results in more positive outcomes; however, it was reported that the association between adolescent outcomes and authoritative fathering is not significant when mothers' styles are neglectful. As would be expected, neglectful mother-neglectful father combinations are associated with the poorest adolescent outcomes (Simons & Conger, 2007).

The likelihood of utilizing certain parenting styles also may be related to whether children or adolescents are male or female. For example, Conrade and Ho (2001) examined perceptions of parenting styles as reported by a sample of college students in Australia. Findings

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suggested that mothers are perceived to use an authoritative style more with their daughters than with their sons and to use a permissive parenting style with their sons more than with their daughters. Conversely, fathers are perceived to be more likely to use an authoritarian parenting style with their sons. More recent research supported these findings in a sample of American late adolescents (who ranged in age from 18- to 22-years), suggesting that late adolescent males report experiencing more permissive parenting than their female counterparts (McKinney & Renk, 2008).

In conclusion, the literature supported four distinct parenting styles (i.e., authoritative, authoritarian, permissive, and neglectful) that fall within the two dimensions of warmth and control. Authoritative parenting is associated with the most positive outcomes regarding adolescents' development and adjustment, whereas neglectful parenting is associated with the most problematic adolescent outcomes. Further, mothers and fathers may differ in their likelihood of adopting different styles of parenting with their sons and daughters. Although examining general parenting styles and their relationships to adolescent outcomes is valuable, more information can be gained by examining parents' specific behaviors. Given that the above-described parenting styles can be classified into two major dimensions (i.e., warmth and control), a close look at two characteristics (i.e., discipline and warmth/support) that are related to these particular dimensions is warranted.

Discipline

Disciplinary strategies are one of the primary ways in which parents manage the behavior of their children and adolescents. Parents of children and adolescents who exhibit problematic behaviors engage frequently in inconsistent disciplinary practices. Unfortunately, the use of

inconsistent discipline strategies is highly ineffective and may result in increased levels or persistence of behavior problems. Sometimes, parents unknowingly promote increases in their children's behavior problems by attending to these problems. For example, they may inadvertently use negative reinforcement strategies (e.g., giving in to a request) to decrease their children's aversive behavior, which ends up having the opposite effect by increasing children's use of aversive behaviors to obtain similar parent responses (e.g., giving in). Although each of these tactics is successful in the short run, they can backfire and create long-term difficulties (Patterson et al., 1992).

Patterson's (2002; Patterson et al., 1992) coercion theory provides a framework for how very early interactions between children and their parents can lead to a parent-child relationship that is problematic if not addressed. Coercion theory is tied closely to operant conditioning principles in that parents and their children become engaged in a negative reinforcement trap. For example, parents may give in to their children's aversive behavior (e.g., a temper tantrum). Although this response provides positive consequences for parents and their children in the short term, this pattern may increase children's future problematic behaviors. Patterson (2002) described this process as a 'five-step dance' in which children exhibit aversive behaviors (1). These behaviors are followed by parents exhibiting aversive behaviors (2). Children then escalate their aversive behaviors (3). Next, parents correct their responses (4), and children cease their aversive behaviors (5).

The unfortunate result of a coercive parent-child relationship, especially in children with disruptive behavior problems, is that parents may begin to resent their children. These feelings may be related to parents' spending less positive time with their children and to parents having

fewer chances for positive interactions with their children (Barkley, 1997; Loeber, 1990). As children grow into adolescents, coercive processes may increase. As a result, feelings of resentment between parents and their adolescents may become more pronounced. In these cases, problematic interactions may escalate quickly and result in problematic parental behaviors (e.g., back-handed compliments, sarcasm, aggressive behavior such as yelling or physical abuse) and problematic adolescent behaviors (e.g., property destruction, aggression; Barkley, 1997).

Similarly, youth whose parents use harsh or physical discipline are less likely to experience positive outcomes compared to their peers whose parents use other strategies (Gershoff, 2002; Kochanska & Thompson, 1997). Although physical punishment is associated strongly with immediate compliance by children, other problematic outcomes in children and adolescence can occur, including the potential for corporal punishment to escalate into physical abuse (Gershoff, 2002). Other outcomes revealed by Gershoff's (2002) meta-analysis included decreases in long-term compliance by preadolescents, decreases in the feelings of guilt following misbehavior, and a decline in attempts to make amends following harm toward others. Research demonstrated that, in addition to decreases in moral internalization, children whose parents use harsh control (e.g., physical discipline) are more likely to exhibit externalizing problems, including aggressive behaviors (Baumrind, 1993; Maccoby & Martin, 1983; Rothbaum & Weisz, 1994). Although many parents will decrease their usage of physical discipline by middle childhood (age 10) or adolescence (age 12), harsh and physical discipline remains stable or even increases for other parent-child pairs (Lansford et al., 2009).

As mentioned previously, the nature of the parent-child relationship likely is related to the types of disciplinary styles that parents develop. Children's characteristics (e.g., difficult

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temperament) also are implicated in the development of harsh, physical discipline techniques (Gershoff, 2002). Further, ecological risk (e.g., low family socioeconomic status, single parent households) increases the possibility for frequent usage of harsh, physical discipline (Giles-Sims, Straus, & Sugarman, 1995). Possibly even more concerning, children and adolescents who are raised with harsh or physical discipline are more likely to engage in such parenting practices with their own children, prompting a repetition of this discipline cycle (Kerr et al., 1999). In addition to disciplinary approaches, the nature of the parent-adolescent relationship (e.g., its level of warmth and supportiveness) is considered a strong protective factor for adolescents' adjustment. Thus, in addition to discipline, positive characteristics of this relationship should be considered.

Warmth and Support

Research demonstrated consistently that warm and supportive parenting characteristics are important predictors of the behavioral problems exhibited by children and adolescents (McCarty et al., 2005; Roelofs, Meesters, Ter Huurne, Bamelis, & Muris, 2006). In particular, harsh, uninvolved, and unsupportive parenting is related to problematic outcomes during adolescence. These outcomes may include antisocial behavior, delinquency, and substance use (Conger, Rueter, & Conger, 1994; Scaramella, Conger, Spoth, & Simons, 2002; Simons, Wu, Conger, & Lorenz, 1994). In contrast, warm and involved parenting is related to lower levels of externalizing behaviors during adolescence (Conger, Rueter, et al., 1994; Scaramella et al., 2002). Parental warmth is particularly protective for adolescents' well being in times of increasing stress. Given that adolescents are facing a number of life transitions that may be perceived as stressful, nurturing parenting styles can act as a defense against the development of

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problematic or negative behaviors (Conger, Elder, Lorenz, Simons, & Whitbeck, 1994). Given that parents' warmth and support are related closely to the style of parenting used by mothers and fathers and to adolescents' adjustment, the current study considers warmth and support to be imperative variables in the ecological framework.

Despite a greater reliance on peers and movement toward greater autonomy (Vander Zanden, Crandell, & Crandell, 2000), adolescents continue to rely heavily on their parents for emotional and other types of support (Malecki & Demaray, 2003; Scholte, van Lieshout, Cornelis, & van Aken, 2001). In many cases, support from parents continues to be significantly more important for adolescents' adjustment than support from other sources (e.g., from peers or teachers). In fact, adolescents who report high levels of perceived peer support but low levels of parental support continue to be at higher risk for behavior problems (Scholte et al., 2001). Other research suggested, however, that adolescents benefit from different types of support depending on the source (Malecki & Demaray, 2003).

Support can be defined as general or specific behaviors from within individuals' social networks that are perceived to augment individuals' functioning and protect them from undesirable outcomes (Malecki & Demaray, 2002). Research outlined four categories of support, including emotional support (e.g., feelings of trust and love), informational support (e.g., provision of information or advice), appraisal support (e.g., provision of evaluative feedback), and instrumental support (e.g., provision of resources such as spending time with someone or provision of materials or money; House, 1981). These different dimensions of support can be provided by a number of sources within adolescents' networks (e.g., parents, teachers, peers). Parental supportiveness refers to the emotional relationship that parents and their children and

adolescents share. Within the context of the parent-child relationship, parents' support behaviors may range from being warm, responsive, and child-centered to being rejecting, unresponsive, and failing to foster a connection between parents and their children. Malecki and Demaray (2003) examined these four different types of perceived support in an adolescent population. Results revealed that adolescents perceive parents to provide the highest levels of emotional and informational support relative to other potential sources of support (e.g., peers, teachers). Further, adolescents viewed parents' emotional support as being most important with regard to their adjustment. This finding further supported the belief that adolescents still rely on parents' support despite transitions toward increased independence. With regard to sex differences, Malecki and Demaray (2003) revealed that adolescent boys and girls perceive similar levels of each type of support (i.e., emotional, informational, appraisal, and instrumental) from their parents.

COMMUNITY SUPPORT

The second innermost level within a traditional ecological framework includes individuals'

relationships or experiences within the community. The current study considered the most salient

features of adolescents' community to be experiences with the schools that they attend. This

environment provides numerous opportunities for both positive and negative social interactions

to take place outside of the home. In particular, the support that adolescents receive from

individuals in their school communities (e.g., teachers, peers) may protect adolescents from

developing internalizing and externalizing problems (Maleckie & Demaray, 2002). Support

provided by teachers, classmates, and peers can be defined in an identical manner as that

provided by mothers and fathers (i.e., behaviors provided with the intention to enhance

functioning and positive outcomes; Malecki & Demaray, 2002). Support can be divided similarly

into four distinct categories, including emotional support (e.g., feelings of trust and love),

informational support (e.g., provision of information or advice), appraisal support (e.g., provision

of evaluative feedback), and instrumental support (e.g., provision of resources such as spending

time with someone or provision of materials or money; House, 1981).

Most adolescents spend a significant portion of their day at school where they interact

with teachers, classmates, and peers. Middle school, in particular, plays a crucial role in an early

adolescents' personal and interpersonal growth (Way et al., 2007). Early adolescents entering

Sixth Grade experience a major developmental change as their social and educational contexts

begin to shift (e.g., to a larger, less personalized environment; to a heightened focus on academic

competition; Eccles et al., 1993). A school's climate, particularly the perceived levels of support

and collective efficacy in a school environment, are especially important for adolescents'

adjustment (Roeser, Eccles, & Sameroff, 1998). In Roeser and colleagues' (1998) longitudinal study, participants were followed through their Seventh and Eighth Grade years. Findings supported the belief that positive experiences and expectations during the Seventh Grade year predict fewer psychological difficulties during the Eighth Grade year. Roeser and colleagues (1998) argued that middle school aged adolescents who value school and have positive, supportive experiences early on are at less risk for maladjustment. Further results revealed that adolescents who perceive their school environment to be encouraging and noncompetitive are more likely to maintain academic motivation and are less likely to experience emotional difficulties. These findings indicated that the experiences of adolescents during middle school can be formative, suggesting that a closer look at the types of support available during this time is important.

Further, teachers are a central authority figure in the lives of most adolescents. Therefore, understanding the ways in which perceived levels of teacher support are related to adolescents' adjustment is crucial. In general, supportive teachers care about their students, are willing to help their students, and are committed to the overall well-being of their students (Patrick, Ryan, & Kaplan, 2007; Wang, 2009). With regard to different types of support and their relationships to adolescents' adjustment, research suggested that adolescents perceive teachers as providing informational support (e.g., provision of information or advice) at higher rates than other types of support. Further, adolescents value informational support from teachers more than other forms of support. Curiously, adolescents' social skills and academic competence are related most closely to levels of perceived emotional support provided by teachers, even though students seem to value informational support more than emotional support (Malecki & Demaray, 2003). Hoge,

Smit, and Hanson (1990) provided evidence of the importance of perceived support from teachers in a study of Sixth and Seventh Graders. The students who reported having supportive teachers were more likely to report increased self-esteem after one semester. Way and colleagues (2007) provided further support for the importance of adolescents' perceptions of their school climate. They followed approximately 1,400 adolescents through the Sixth, Seventh, and Eighth Grades. Of particular relevance to the current study, Way and colleagues (2007) reported that adolescents' perceptions of teacher support decrease over time and that adolescents' decreasing perceptions of teacher support over time are related significantly to increases in adolescents' depressive symptoms and behavioral problems.

General school climate also may play a role in adolescents' perceptions of support. A particularly poignant study examined the associations between school climate (e.g., perceived support) and adolescents' perceived levels of social competence and psychological and behavioral difficulties using an ecological framework (Wang, 2009). Although Wang applied an ecological conceptualization to an extent, her study failed to take into account all levels of a traditional ecological model (e.g., factors at the familial and larger societal levels). Findings of Wang's study, however, provided further evidence that school support is an indubitably important factor when considering adolescents' development and adjustment. For instance, Wang revealed that adolescents who perceive themselves as less competent but who receive emotional support from their teachers are less likely to engage in deviant behaviors or to suffer from feelings of depression. Further, Seventh Graders who perceive school as a positive and supportive environment are more likely to report higher levels of psychological and behavioral adjustment.

The school environment provides a plethora of opportunity for adolescents to interact with peers from their greater community. Middle school provides an especially salient environment for adolescents to form peer relationships, develop and hone identities, and gain a sense of autonomy from their more proximal home or family context (Way et al., 2007). During adolescence, friendship functions to provide intimacy, trust, and modeling of norms (Rubin, Bukowski, & Parker, 1998). Additionally, adolescence is a developmental period in which reliance on friends for support increases (Furman & Buhrmester, 1992). In fact, Way and colleagues (2007) indicated that, similar to teacher support, adolescents' perceptions of high levels of peer support are related generally to positive emotional and behavioral adjustment. With regard to different types of support available from peers, adolescents reported that classmates and close friends provide emotional and instrumental support at higher levels than appraisal or informational support (Malecki & Demaray, 2003).

Garnefski and Diekstra (1996) also suggested that adolescents who have negative perceptions of peer support may experience emotional problems more than behavioral problems. In contrast, perceptions of school may be related more to behavioral problems. Another study used peer nominations to better understand the relationships between quality of friendship and adolescents' emotional and behavioral adjustment (Rubin et al., 1998). Results revealed that friendship quality predicts adolescents' social and emotional adjustment. Specifically, friendship quality is associated with self-esteem, perceived social competence, and internalizing problems. The finding that internalizing problems, more than externalizing problems, are predicted by levels of friendship quality is consistent with results from Garnefski and Diekstra's (1996) study examining peer support. Therefore, in line with other levels of a transactional framework

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discussed herein, the current study measured the specific construct of peer support as well as support provided by teachers.

Further, research suggested that gender differences do exist with regard to adolescents' perceptions of support and their adjustment. Recently, Rueger, Malecki, and Demaray (2008) explored this particular issue in detail. A large sample of middle school students was surveyed about their perceived levels of support from a variety of sources and their adjustment (per parents' reports). Results revealed that girls perceive more support than boys from classmates and friends, whereas boys and girls perceive support equally from teachers. Girls in this study also report actually receiving more support from friends than from other sources, a finding that is supported in the literature (Weigel, Devereux, Leigh, & Ballard-Reisch, 1998). Regarding perceived level of social support and adjustment, Rueger and colleagues (2008) demonstrated that classmate support predicts uniquely higher levels of leadership qualities in boys and lower levels of hyperactivity and depression in girls. Overall, research indicated that classmate support, defined as support from the general peer group, is related to positive psychosocial adjustment in boys and girls, albeit in different ways (Rueger et al., 2008). Finally, Rueger and colleagues (2008) revealed that lower levels of perceived teacher support predict higher levels of somatization in boys only. In summary, perceived support from members of adolescents' community, such as teachers and peers, has significant implications for adolescents' adjustment.

SOCIOECONOMIC STATUS

With a transactional model conceptualization, adolescents' most proximal levels of influence are parents' characteristics and community characteristics. Both of these groups of characteristics in the ecological framework are related further to economic characteristics (e.g., socioeconomic status). Socioeconomic status is defined as a construct that includes different facets of social class, including level of stature in the community, power, and financial wellbeing (Hoff, Laursen, & Tardiff, 2002; Oakes & Rossi, 2003) which usually is measured by income, education level, and type of occupation. Inclusion of socioeconomic status in the current study is important given the state of the economy in the United States over the past decade, which has been characterized as uncertain and unstable (see Conger, Conger, & Martin, 2010), with unemployment rates skyrocketing and family income (excluding the top 5% upper class) decreasing. Given the economic climate over the past decade, it is expected that socioeconomic status of the participants examined herein may have been unstable over time. However, the current study seeks to understand current socioeconomic status and its relationship to middle school aged adolescents' adjustment.

Research demonstrated consistently that families' socioeconomic status may be related to the types of parenting styles that mothers and fathers may utilize and how those parenting styles are related to adolescents' adjustment. Individuals who are raised in well-off economic conditions are afforded with higher levels of comfort and can access more easily resources that can be used for coping. In contrast, similar resources may not be available for families of lower socioeconomic backgrounds (Acock & Kiecolt, 1989). Further, socioeconomic status may be

related to where families can live, which then can be related indirectly to adolescents' adjustment. A review of the literature supporting these ideas follows.

Generally, research suggested that there is an indirect relationship between socioeconomic status and adolescents' development. First, economic deprivation is associated significantly with family disruption during childhood. This family disruption then predicts maladjustment in adulthood (Acock & Kiecolt, 1989). Similarly, lower levels of financial stability are related to family difficulties, such as disrupted routines. Disrupted routines predicted subsequently depressive symptomatology in a sample of African American adolescents (Taylor, Rodriguez, Seaton, & Dominguez, 2004). Other problematic adolescent outcomes (e.g., poor peer relations, somatic symptoms, conduct problems, low self-confidence, academic difficulties) also were reported (for a review, refer to Taylor et al., 2004). Lower socioeconomic status was implicated in lower levels of parental emotional support and harsh treatment (Dodge, Pettit, & Bates, 1994), factors described herein to have direct and significant negative impacts on adolescents' functioning.

Luthar and Latendresse (2005) also examined socioeconomic status at both extremes (i.e., very high and very low) in conjunction with adolescents' functioning. Findings indicated that adolescents living at both socioeconomic extremes benefit from perceived closeness to their mothers and fathers and from spending time with their mothers and fathers. Unfortunately, adolescents from economically disadvantaged families report higher levels of parental criticism and lower levels of parental supervision. These adolescents (i.e., those from economically disadvantaged homes) also are generally less likely to experience positive outcomes as a whole when compared to adolescents from economically advantaged families. Adolescents who are

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from families with economic advantage, however, showed variability in their adjustment. This finding supported the idea that other more proximal factors, such as parenting characteristics, also play a significant role in adolescents' outcomes, regardless of socioeconomic status.

Understandably, socioeconomic status often dictates where a family can afford to live, and the adverse effects of living in economically disadvantaged neighborhoods is documented. For example, research suggested that residency in economically disadvantaged neighborhoods is associated with increases in behavioral problems from childhood to adolescence and higher levels of reported overall emotional and behavioral problems during adolescence (Schneiders et al., 2003). Interestingly, this finding held true regardless of the reported socioeconomic status of the family. Therefore, it may be that other variables discussed previously (e.g., neighborhood support) play a more direct role in the emotional and behavioral adjustment of adolescents over and above socioeconomic status. Overall, research suggested that socioeconomic status plays an important, albeit likely indirect role, in the development of adolescents' emotional and behavioral problems. Furthermore, literature suggested that, over the course of development from childhood through high school, lower levels of socioeconomic status strongly influenced outcomes into adulthood (e.g., academic achievement, employment; Battle & Pastrana, 2007).

ACCULTURATION

Given that over three million children were classified as foreign-born and another 10 million were classified as second-generation (i.e., they were American born but had immigrant parents) in 1997 in the United States (Fuglini, 1998), the concept of the larger cultural context and its relationship to adolescents' adjustment also was addressed. In an ecological-transactional framework, culture serves as an overarching context. For the purposes of the current study, the level of acculturation (changes in behavioral patterns and belief systems that occur from interactions with the dominant culture over time; Sanchez-Johnson & Cuellar, 2004) may be of primary importance, as research demonstrated that acculturation status is related indirectly to adolescents' adjustment. For example, in a sample of Hispanic adolescents, the relationship between behavior problem proneness and acculturation is mediated by levels of parental involvement (Dihn, et al., 2002). In other research, the acculturation gap between adolescents and their parents causes distress in the parent-child relationship. Distress in the parent-child relationship, in turn, is related to the development of emotional difficulty in adolescents (Lim, Yeh, Liang, Lau, & McCabe, 2009).

English proficiency is one element of acculturation status that is related to adolescents' adjustment (Araujo Dawson & Williams, 2008). Araujo Dawson and Williams (2008) suggested that acculturative stress is linked closely to children's proficiency in their dominant language. Results from this study revealed that children in First Grade who are considered language deficient are much more likely to exhibit behavior problems by Third Grade. Additionally, Manaster, Chan, and Safady's (1992) study on children of Mexican descent revealed that factors such as living in a rural area, having parents who are born in Mexico, having been born in

Mexico themselves, and having higher levels of traditional Mexican values are related to academic difficulty and lessen the likelihood that these children will take positive risks for high academic achievement. Along the same lines, Atzaba-Poria and Pike (2008) demonstrated that Indian children living in Great Britain are more likely to experience difficulties related to internalizing problems when they hold more traditional Indian values as opposed to the majority values of Great Britain. Finally, research revealed that adolescents who are more aligned with the majority culture are more likely to have higher academic aspirations and to succeed academically (Carranza, You, Chhuon, & Hudley, 2009).

The news is not all bad, however, when examining children from immigrant families. In Fuglini's (1998) review of the literature, he indicated that, in many situations, children from immigrant families are better off than their American-born counterparts. Fuglini (1998) reported that, based on the National Longitudinal Study of Adolescent Health, children who are first-generation (i.e., foreign born) and second-generation (i.e., American born with foreign born parents) are less likely to engage in delinquency and other externalizing behaviors and are less likely to report emotional problems. Fuglini (1998) also indicated that factors such as socioeconomic status, the value of education, and an emphasis on family all play a role in protection against the development of maladjustment. This finding is consistent with the premise that acculturation status affects adolescents' adjustment in an indirect way, typically through other more proximally located variables in the transactional framework. In conclusion, adolescents' level of acculturation seems to be related indirectly to their adjustment. On the one hand, adolescents who are more aligned with modern or majority values and traditions seem to be better adjusted, have higher aspirations, and do better academically. On the other hand,

however, immigrant adolescents who hold strong, traditional family values also seem to fare better in the long run. Therefore, similar to socioeconomic status, acculturation level likely is related indirectly to the development of emotional and behavioral problems in adolescents.

THE CURRENT STUDY

The current study addressed limitations in the research literature and built upon a previously conducted study (White & Renk, 2012) by utilizing a cross-sectional approach to better understand the variables that are related to middle school aged adolescents' adjustment. More specifically, adolescents who were in the Sixth Grade and the Eighth Grade were targeted. Additionally, the current study sought to understand the development of both internalizing and externalizing problems, as opposed to the previous White and Renk (2012) study (which examined only externalizing problems). The first goal of the current study was to examine middle school aged adolescents' experiences at each level of an ecological model in an effort to better understand the unique relationships of each level to middle school aged adolescents' reported internalizing and externalizing problems. The second goal was to address developmental differences that exist between adolescents who were in the Sixth Grade versus the Eighth Grade. The third and final goal was to examine how differences between these groups may be related to the protective or risk factors available through an ecological model that could best predict adolescents' internalizing and externalizing problems.

Hypotheses

Hypothesis 1: Perceptions of Parenting. Hypothesis 1 stated that middle school aged adolescents' more positive perceptions of parents' authoritative parenting style, social support, and emotional support would be correlated negatively with self-reported internalizing and externalizing problems in both the Sixth and Eighth Grade cohorts. This hypothesis was supported strongly in the recent literature regarding both internalizing (Milevsky et al., 2007)

and externalizing (White & Renk, 2012) problems. It further was believed that the magnitude of association between parenting variables and adjustment variables would differ by grade, with Sixth Grader associations being stronger than Eighth Grader associations.

Hypothesis 2: Perceptions of Support from Community Members. Hypothesis 2 stated that middle school aged adolescents' reported high levels of perceived emotional support from within the community (i.e., from teachers, classmates, and peers) would be associated with lower levels of reported emotional and behavioral problems in both grade cohorts. This hypothesis was based on research demonstrating that emotional support provided by teachers, classmates (Malecki & Demaray, 2003), and peers (Way et al., 2007) is protective against the development of maladjustment. It further was believed that the magnitude of association between community variables and adjustment would differ by grade, with Eighth Grader associations being stronger than Sixth Grader associations.

Hypothesis 3: Socioeconomic Status. Hypothesis 3 stated that middle school aged adolescents reporting lower socioeconomic statuses would report significantly more emotional and behavioral problems than adolescents reporting middle or high socioeconomic statuses. This hypothesis was somewhat exploratory in nature given the mixed findings in the literature, even though there are studies that directly link socioeconomic status to emotional and behavioral problems (see, Wadsworth & Achenbach, 2005). No difference in magnitude between grade levels was expected.

Hypothesis 4: The Overarching Context of Ethnicity and Acculturation. Hypothesis 4 stated that middle school aged adolescents who feel more aligned with a minority culture (e.g., Hispanic culture) would report significantly higher levels of internalizing and externalizing

problems. This hypothesis was supported by the existing literature (Atzaba-Poria & Pike, 2008; Manaster et al., 1992). No difference in magnitude between grade levels was expected.

Final Hypothesis: The Overall Model. Finally, the current study sought to understand how parenting characteristics, perceived community support from teachers and peers, socioeconomic status, and acculturation variables might predict overall the emotional and behavioral functioning of middle school aged adolescents in the Sixth Grade versus the Eighth Grade. It was hypothesized that variables across each level of the ecological model would predict significantly both internalizing and externalizing problems across both grade cohorts. It further was hypothesized that Sixth Graders and Eighth Graders would differ in the types of variables that their respective statistical algorithm would select, with a greater number of parenting characteristics predicting Sixth Graders' internalizing and externalizing problems and a greater number of community variables predicting Eighth Graders' problems. It also was expected that no differences would be noted between cohorts for ethnicity, acculturation, or socioeconomic status variables.

METHOD

Participants

A total of 141 middle school aged adolescents participated in this study. This sample of adolescents was recruited from the sixth grades and eighth grades of a charter middle school in Port St. Lucie County, Florida. Participants were not compensated in any way. Participants ranged in age from 11- to 15-years, with a mean age of 12.33-years (SD = 1.22). Male participants made up 43.3% of the sample (N = 61), and female participants made up 56.7% of the sample (N=80). Further, 56.7% of the sample was in Sixth Grade, and 43.3% was in Eighth Grade. Examination of self-reported ethnic variables determined that 42.6% of participants were Caucasian, 25.5% were Hispanic, 21.3% were African American, 2.1% were Asian, 3.5% were multiracial, and 5.0% did not provide their ethnic background.

With regard to current family characteristics, most participants reported that their parents were married to each other (70.9%, N = 100; the remainder of adolescents had parents with some other relationship status). Many participants reported that they lived with various family members, with 89.1% reporting that they lived with at least one other sibling (N = 123), 11.3% of participants reporting that they lived with a stepparent (N = 16), 11.6% reporting that they lived with an aunt or uncle (N = 16), 17.4% reporting that they lived with a grandparent (N = 24), 2.9% reporting that they lived with a cousin (N = 4), and 1.4% reporting that they lived with a family friend (N = 2). Two participants also reported that they lived with a grandparent rather than their parents (1.4%). Thus, the family constellations of these participants varied.

Participants' current socioeconomic status was calculated in two ways, using the Family Affluence score (which ranges from 0 to 9; Boyce, Torscheim, Currie, & Zambon, 2006) and the Hollingshead (1975) Four Factor Index of Social Status (which ranges from 8 to 66). On average, families' scores were generally within the upper-middle echelon, with an average Family Affluence score of 5.67 (SD = 1.26) and an average Hollingshead score of 44.96 (SD = 12.16). Nonetheless, examination of the range and distribution of scores suggested that students were well represented across socioeconomic backgrounds. Specifically, although the distribution of Family Affluence scores were slightly skewed in a positive direction, participants across the spectrum of Family Affluence were represented, with scores ranging from 2 (a score considered to be within the lowest family affluence; Boyce et al., 2006) and 7 (a score considered to be within the highest family affluence; Boyce et al., 2006). Further, scores on the Hollingshead (1975) Four Factor Index ranged from 19 (a score considered to be within the very lowest range of the social strata; Hollingshead, 1975) to 66 (a score considered to be within the very highest range of the social strata; Hollingshead, 1975). With the exception of three outliers, scores were distributed evenly across the range of scores reported by participants.

Regarding parent education, 4.3% (N = 6) of mothers and 5.7% (N =8) of fathers had doctoral degrees, 15.6% (N = 22) of mothers and 12.1% (N = 17) of fathers had master's degrees, 17.7% (N = 25) of mothers and 12.1% (N = 17) of fathers had bachelor's degrees, 18.4% (N = 26) of mothers and 18.4% (N = 26) fathers had high school diplomas, and 5% (N = 7) of mothers and 9.2% (N =13) of fathers did not graduate high school. The remainder of the sample did not know their parents' education levels. Additional demographic information revealed that 99.3% (N = 140) participants' families owned a car, 92.2% (N = 130) of

participants' families owned their home, and 82.3% (N = 116) of participants had their own bedroom. Regarding family vacations in the last year, 15.6% (N = 22) of participants did not travel, 28.4% (N = 40) of participants traveled once, 53.9% (N = 76) of participants traveled two or more times, and 2.1% did not respond to this item. Thus, these characteristics appeared to suggest that the families represented in this sample varied in their educational and financial means. Finally, the majority of participants were primarily English speaking, as measured by the Language Scale. Note that there were no statistically significant differences between grades on any demographic variables with the exception of age. See Table 1 for a comparison of grade levels.

Table 1. Demographic Data by Grade-Level

Demographic	6th Grade (N = 80)	8th Grade (N = 61)	Overall (N = 141)
Age (years)			
Mean	11.38	13.57	12.33
SD	.513	.593	1.22
Minimum	11	13	11
Maximum	13	15	15
Gender			
Male	38 (47.5%)	23 (37.7%)	61 (43.3%)
Female	42 (52.5%)	38 (62.3%)	80 (56.7%)
Race			
Caucasian	28 (35%)	32 (52.5%)	60 (42.6%)
African Am.	18 (22.5%)	12 (19.7%)	30 (21.3%)
Hispanic	24 (30%)	12 (19.7%)	36 (25.5%)
Asian	2 (2.5%)	1 (1.6%)	3 (2.1%)
Multiracial	3 (3.8%)	2 (3.3%)	5 (3.5%)
SES (Hollingshead)			
Mean	42.69	47.55	44.57
SD	13.85	9.49	12.51
SES (FAS)			
Mean	6.36	7.8	7.55
SD	2.81	1.40	1.40
Family			
Married Par.	59 (73.8%)	41 (67.2%)	100 (70.9%)

Note: No statistically significant differences exist between grades on any demographic variables.

School Characteristics

The data analyzed herein were collected from a charter school in Port St. Lucie, Florida. The charter school enrolls students based on a lottery system. A description of the requirements of the school is provided on the school website, with the following being stated: "Florida Statues provides that the student body attending a university lab/charter lab school must reflect the racial and economic diversity of the state. To that end, a demographically based lottery is used to identify students for enrollment at the [Charter] School. Enrollment demographic targets, by

race, gender, and income level are provided by the Florida Department of Education in December each year." Thus, this school provided the opportunity to collect data from an economically and ethnically diverse sample of adolescents that was representative of the state of Florida.

Measures

  Demographics and Socioeconomic Status (Appendix C). This questionnaire assessed basic demographic information regarding the adolescents themselves (e.g., their sex, age, grade, race/ethnicity) and their parents (e.g., their parents' occupation, if known by the adolescents). Adolescents also were asked to provide information about their living situations, such as whether their family owned their own home and vehicle. In addition, information about parents' level of education and household income were assessed in accordance with the Hollingshead (1975) Four Factor Index of Social Status. It should be noted that the literature is somewhat mixed regarding the accuracy of adolescents' proxy reports of parents' socioeconomic status (Ridolfo & Maitland, 2011). In general, adolescents are considered to be generally accurate in their report of parents' socioeconomic status variables (Ridolfo & Maitland, 2011). Further, the literature suggests use of alternative measures of socioeconomic status (e.g., material indicators such as car ownership) in conjunction with more traditional measures (Wardle, Robb, & Johnson, 2002) to increase reliability of reporting. Thus, the current study uses both types of measures.

  Adjustment (Appendix D). The *Youth Self-Report* (*YSR*; Achenbach & Rescorla, 2001) is a widely used scale that assesses the social and emotional development of clinically referred and typically developing adolescents who range in age from 11- to 18-years. The YSR is a 120-item scale containing two major sections: competencies and behavior problems. With regard to

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the behavior problems portion of this measure, participants rated how well each item described them on a Likert-type scale, ranging from 0 (*Not True of Them*) to 2 (*Very True of Them*). Scores for internalizing, externalizing, and total problems can be derived from this measure. Generally, these score are computed as normalized T scores with a mean of 50 and a standard deviation of 10, with scores that fall at 60 or higher being considered clinically noteworthy relative to same-age peers.

The YSR had adequate reliability in assessing a broad range of emotional and behavioral problems experienced by adolescents in previous work. More specifically, the YSR had high concurrent validity (>.80) in previous studies and was associated significantly with criteria from the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV*; Achenbach, Howell, Quay, & Connors, 1991; American Psychiatric Association, 2000). Further, this measure is one of the most widely used with regard to adolescents' emotional and behavioral functioning.

Perceptions of Parenting. The *s-EMBU* (*Egna Minnem av Barndoms Uppfostram-Short Form [My Memories of Upbringing]*; Arrindell et al., 1999; Appendix E) is a scale developed to measure adolescents' perceptions of the upbringing behavior of their parents. This measure consists of 23 items that can be used to derive three factors (i.e., Rejection, Emotional Warmth, and Overprotection). Items are answered on a four-point Likert scale, ranging from 1 (*Never*) to 4 (*Always*). Items were completed by adolescents for both their mothers and their fathers. All factors within the EMBU had good internal consistency (alpha>.75 for Rejection, Emotional Warmth, and Overprotection) in a previous study. Additionally, the s-EMBU demonstrated good construct validity for all scales. Further, the s-EMBU was used in several countries and found consistently to retain its reliability and factor structure (Arrindell et al., 1999; Arrindell et al.,

2001). For the purposes of the current study, the Rejection (Cronbach alpha = .92) and Emotional Warmth (Cronbach alpha = .89) factors were examined.

The *Parental Authority Questionnaire* (*PAQ*; Buri, 1991; Appendix F) was used to assess adolescents' perceptions of their mothers' and fathers' permissive, authoritarian, and authoritative parenting. This scale was developed at a Sixth Grade reading level and provides valuable information regarding adolescents' perceptions of their mothers' and fathers' parenting styles. Items are answered on a five-point Likert scale, ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Each of the subscales of this measure demonstrated good reliability and validity in previous studies. With regard to reliability estimates, both test-retest reliability and Cronbach alpha coefficients were adequate in a previous study. Further, both discriminant-related validity and criterion-related validity were adequate (Buri, 1991). The current study examined all three parenting styles (i.e., permissive parenting [Cronbach alpha = .87], authoritarian parenting [Cronbach alpha = .89], and authoritative parenting [Cronbach alpha = .91]).

Perceived Support. The *Child and Adolescent Social Support Scale* (*CASSS*; Malecki & Demaray, 2002; Malecki & Elliott, 1999; Appendix G) was used to assess adolescents' perceived social support from their parents, teachers, classmates, and friends. The four factors of the scale include informational support, instrumental support, emotional support, and appraisal support and were combined into one total score. The scale has two versions: Level 1 for use with Third through Sixth Graders and Level 2 for use with Seventh through Twelfth Graders. Both scales are comprised of forty items, which can be used to derive four subscales: parents, teachers, classmates, and close friends. Given that both scales are almost identical with the exception of

the order in which the questions are presented, only the Level 1 scale was utilized for the current study. Each question is based on a six-point Likert scale. In a previous study, reliability ranged from .87 to .93 on the four subscales for Level 1. Evidence for moderate to high validity also was reported in a previous study (Malecki & Demaray, 2002). For the purposes of the current study, a global measure of support was used rather than individual factors. Reliability coefficients were high across parent support (Cronbach alpha = .93), teacher support (Cronbach alpha = .91), classmate support (Cronbach alpha = .94), and friend support (Cronbach alpha = .92).

Ethnic Identity and Acculturation. This study utilized the *MultiGroup Ethnic Identity Measure* (*MEIM-R*; Phinney & Ong, 2007; Appendix H) as a measure of adolescents' identification and/or adherence to their ethnic origin in general terms. The MEIM-R was developed to assess components of ethnic identity common to all ethnic/cultural groups, including individuals' sense of their group membership/affiliation and attitudes toward their own ethnic group. For the purposes of the current study, the global measure (rather than individual factors) was examined. This measure consists of six items, which can be used to derive two factors (i.e., exploration and commitment). The items take approximately five minutes to complete. The MEIM-R was derived from the ten-item MEIM, which had a Cronbach alpha of .83 for exploration and .89 for commitment in a previous study. Items that loaded poorly on the scale and that were considered unreliable predictors were dropped from the ten-item scale to create the MEIM-R. For this study, the exploration and commitment factors were combined into one total score (Cronbach alpha = .90).

Additionally, the *Psychological Acculturation Scale* (*PAS*; Tropp, Erkut, Garcia Coll, Alarcon, & Vazquez Garcia, 1999; Appendix I) was used as a measure of adolescents'

attachment and belonging to their minority cultural community versus the majority cultural community. This measure consists of ten items and is normed with Spanish and English speakers. The alpha coefficients in a previous study were .90 and .83 for the Spanish and English versions, respectively (Tropp et al., 1999). For the current study, the Cronbach alpha was .94.

Lastly, a *Language Scale* (adapted from Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987; Appendix J) was included to further assess adolescents' acculturation status. This scale was developed originally for adults from Hispanic backgrounds. The scale was revised to be more relevant for the current study in two ways. First, questions that pertained to parents or that were very similar to questions in other scales being used in the current study were eliminated, decreasing the number of questions from twelve to seven. Second, the language used in the scale was changed from specifically comparing usage of English and Spanish languages to incorporate all languages other than English. For example, instead of selecting "Only Spanish," participants would select "Only another language other than English (such as Spanish, French, or Chinese)." The Cronbach alpha in the current study was .83.

Procedure

Upon receipt of approval from the Institutional Review Board (IRB) of the University of Central Florida and from the Port St. Lucie County Public School System, the principal of the charter middle school was contacted via telephone so that the study could be explained and permission could be requested for student participation. Once verbal consent was obtained from the principal, the principal was provided with permission forms (see Appendix A) for each of the students in Sixth and Eighth Grade. Regarding time frames specific to each cohort, Sixth Grade students were recruited at the beginning of the school year, whereas Eighth Grade students were

recruited near the end of that same school year. This time frame was designed to maximize the age and developmental differences between cohorts for a richer picture of developmental differences between cohorts. This time frame also was meant to capture students characteristics as they were entering and exiting (respectively) middle school.

Permission forms were given directly to students and a deadline to return them (in about two weeks) was provided. Students returned their permission forms to a specified teacher on their respective education team. Teachers then saved the forms for the scheduled data collection dates, at which point they were provided to the research team. The primary investigator attended all data collection days and was accompanied by up to three graduate-level research assistants, depending on the size of the cohort participating on any particular day. Students completed the questionnaire packet in waves, with up to 20 students participating at one time. Data collection took place in a traditional classroom in the Sixth Grade wing. Prior to beginning the questionnaire, students were provided an assent form (no signature necessary; see Appendix B) and a brief explanation of the study. Each wave of students was explicitly informed that participation was voluntary and that they could stop participating at any time. Participants took 45-minutes on average to complete their questionnaires, with Sixth Graders taking slightly longer and Eighth Graders taking slightly less time.

RESULTS

Data Analytic Strategy

The purpose of this study was to better understand the ways in which young adolescents differ as they progress through their middle school years. Specifically, it was hoped that this study would provide an understanding of how factors across the different levels in an ecological framework were related to the internalizing and externalizing problems that adolescents experience and how those variables may differ as early adolescents develop. Thus, in line with the hypotheses proposed herein, the current study sought to look at how Sixth and Eighth Grade students differed in their perceptions of parenting variables, community support variables, acculturation variables, and socioeconomic status in a number of ways. All statistics were computed using the SPSS Grad Pack, with exceptions noted.

Descriptive Statistics

Regarding the overall sample, means for the Youth Self-Report Internalizing Problems and Externalizing Problems scores fell within the Nonclinical range on average ($M = 52.93$, $SD = 12.04$, and $M = 49.98$, $SD = 10.40$, respectively). Closer examination revealed that 25.2% of participants' Internalizing Problems scores fell within the Borderline or Clinical range of functioning and that 19.6% of participants' Externalizing Problems fell within the Borderline or Clinical range of functioning. These scores suggested that the current sample was diverse in terms of the types of behavior problems that they were experiencing. These frequencies were derived using the cutoff criterion set forth by the developers of the measure (Achenbach & Rescorla, 2001), in which scores from 0 to 59 range are considered to be Nonclinical, scores

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from 60 to 69 are considered to be Borderline, and scores from 70 and above are considered to be in the Clinical range.

The means for the My Memories of Upbringing Warmth scale scores were in the moderate range for mothers ($M = 2.99$, $SD = .69$) and fathers ($M = 2.89$, $SD = .77$), whereas the means for the Rejection scale scores were in the low range for mothers ($M = 1.45$, $SD = .58$) and fathers ($M = 1.40$, $SD = .63$). The range of possible scores on this measure is 1 to 4, with 1 indicating lower levels of the construct being measured. Therefore, these scores suggested that participants tended to view their parents as reasonably warm and as infrequently rejecting in their interactions. Examination of the means from the Parental Authority Questionnaire revealed that participants viewed their parents' style of childrearing to be moderate across Permissive Parenting by mothers ($M = 2.51$, $SD = .65$) and fathers ($M = 2.52$, $SD = .66$), Authoritarian Parenting by mothers ($M = 3.07$, $SD = .80$) and fathers ($M = 3.03$, $SD = .83$), and Authoritative Parenting for mothers ($M = 3.25$, $SD = .78$) and fathers ($M = 3.12$, $SD = .86$). The range of possible scores for this scale is 1 to 5, with 1 indicating rare use of the parenting style being measured.

Means from the Child and Adolescent Social Support Scale revealed that participants generally viewed their mothers' ($M = 4.82$, $SD = .96$), fathers' ($M = 4.45$, $SD = 1.24$), teachers' ($M = 4.58$, $SD = 1.05$), friends' ($M = 5.00$, $SD = .96$), and classmates' ($M = 4.49$, $SD = 1.18$) level of support as moderately high to high. Scores on this scale can range from 1 to 6, with 1 indicating little support and 6 indicating high support. The majority of participants were mostly neutral in their perceptions of ethnic identity, with mean scores falling in the moderate range (as measured by the Multi-Ethnic Identity Measure, for which scores can range from 1 to 5; $M =$

3.32, $SD = 1.01$). Participants generally identified equally with the American majority and their

ethnic background of origin (as measured by the Psychological Acculturation Questionnaire, for

which scores can range from 1 to 5; $M = 3.16$ $SD = .98$). See Table 2.

Table 2. Means and Standard Deviations by Adolescent Grade

Variable	Sixth Grade		Eighth Grade		Overall	
	M	SD	M	SD	M	SD
Age	11.38	.513	13.57	.593	12.31	1.22
Internalizing Problems	52.06	11.84	54.05	12.30	52.93	12.04
Externalizing Problems	47.83	10.48	52.72	9.70	49.98	10.40
Mother Warmth	2.91	.692	3.10	.678	2.99	.689
Father Warmth	2.81	.726	2.98	.826	2.89	.771
Mother Rejection	1.47	.651	1.41	.481	1.45	.583
Father Rejection	1.39	.669	1.42	.584	1.40	.632
Mother Support	4.79	1.09	4.85	.783	4.82	.963
Father Support	4.52	1.33	4.35	1.12	4.45	1.24
Permissive Mother*	2.45	.678	2.58	.601	2.51	.646
Permissive Father	2.48	.655	2.58	.678	2.52	.664
Authoritarian Mother	2.99	.832	3.17	.740	3.07	.796
Authoritarian Father*	2.84	.825	3.27	.781	3.03	.831
Authoritative Mother*	3.14	.771	3.39	.769	3.25	.778
Authoritative Father	3.04	.808	3.21	.909	3.12	.855
Teacher Support	4.65	1.13	4.50	.947	4.58	1.05
Classmate Support	4.34	1.27	4.68	1.03	4.49	1.18
Friend Support	4.86	1.01	5.17	1.03	5.00	.961
Socioeconomic Status	6.36	2.81	7.80	1.40	6.99	2.41
Language	1.32	.414	1.44	.617	1.37	.516
Ethnic Identity	3.23	.940	3.43	1.08	3.32	1.01
Acculturation Status	3.24	.944	3.05	1.02	3.16	.979

Note. * Indicates significant univariate effects between grade levels.

Differences Across Participants

A multivariate analysis of variance (MANOVA) was used to identify differences between

the two adolescent groups across variables (see Table 2). A 2 (sex: male versus female) by 2

(grade: Sixth versus Eighth Grade) by 3 (level of socioeconomic status: low affluence versus middle affluence versus high affluence; Boyce et al., 2006) MANOVA was conducted. Dependent variables were internalizing and externalizing problems; mothers' warmth and rejection; fathers' warmth and rejection; mothers' permissive, authoritarian, and authoritative parenting styles; fathers' permissive, authoritarian, and authoritative parenting styles; mothers, fathers, teachers, classmates, and friends' support; language; ethnic identity; and acculturation status.

Using Wilks' Lambda, there was a significant main effect for participants' grade, $\lambda = .61$, $F [20, 77] = 2.34$, $p < .004$, partial $\eta^2 = .39$. Significant main effects were not found for sex or socioeconomic status. Examination of the main effect for grade level revealed significant univariate effects for ratings of mothers' permissive parenting, $F (1, 96) = 12.07$, $p < .001$, fathers' authoritarian parenting, $F (1, 96) = 16.64$, $p < .001$, and mothers' authoritative parenting, $F (1, 96) = 9.81$, $p < .002$. As a result, grade was considered to be an important variable for further examination. No interaction effects were found.

Correlational Analyses

Correlational analyses were conducted by grade across all variables and were used to examine the relationships among adolescents' perceptions of their parents' characteristics (i.e., parenting styles, and warmth and rejection, parenting styles, social and emotional support), the support that they receive from community members, their socioeconomic status, their personal level of acculturation, and their self-reported internalizing and externalizing problems. See

Tables 3 and 4. Although all significant correlations are discussed here, correlations that remain

significant after a Bonferonni correction are noted in these tables.

Sixth Grade Correlations. Sixth Graders' self-reported Internalizing Problems were

related significantly to Mothers' Rejection, $r = .46$, $p < .001$, Fathers' Rejection, $r = .26$, $p < .02$,

Mothers' Authoritarian Parenting, $r = .37$, $p < .001$, Classmates' Support, $r = -.35$, $p < .003$, and

Ethnic Identity, $r = .25$, $p < .03$. No other variables were related significantly to Sixth Graders'

Internalizing Problems. Further, Sixth Graders' self-reported Externalizing Problems were

related significantly to Mothers' Rejection, $r = .51$, $p < .001$, Fathers' Rejection, $r = .42$, $p <$

$.001$, Mothers' Permissive Parenting, $r = .38$, $p < .001$, Fathers' Permissive Parenting, $r = .25$, p

$< .04$, Mothers' Authoritarian Parenting, $r = .44$, $p < .001$, and Fathers' Authoritarian Parenting,

$r = .33$, $p < .004$. No other variables were related significantly to Sixth Graders' Externalizing

Problems.

Eighth Grade Correlations. Eighth Graders' self-reported Internalizing Problems were

related significantly to their perceptions of Fathers' Warmth, $r = -.34$, $p < .01$, Mothers'

Rejection, $r = .53$, $p < .001$, Fathers' Rejection, $r = .52$, $p < .001$, Mothers' Authoritarian

Parenting, $r = .32$, $p < .01$, Fathers' Authoritarian Parenting, $r = .51$, $p < .001$, Fathers' Support, r

$= -.51$, $p < .001$, Teachers' Support, $r = -.31$, $p < .02$, and Friends' Support, $r = -.29$, $p < .03$. No

other variables were related significantly to Eighth Graders' Internalizing Problems. Further,

Eighth Graders' self-reported Externalizing Problems were related significantly to perceptions of

Mothers' Warmth, $r = -.33$, $p < .01$, Fathers' Warmth, $r = -.38$, $p < .004$, Mothers' Rejection, $r =$

$.39$, $p < .002$, Fathers' Rejection, $r = .33$, $p < .01$, Fathers' Authoritarian Parenting, $r = .32$, $p <$

$.02$, Fathers' Support, $r = -.41$, $p < .002$, Mothers' Support, $r = -.43$, $p < .001$, Teachers' Support,

r = -.50, *p* < .001, Classmates' Support, *r* = -.35, *p* < .006, and Friends' Support, *r* = -.30, *p* < .02.

No other variables were related significantly to Eighth Graders' Externalizing Problems.

Table 3. Correlations Part 1

	IP	EP	WM	FW	MR	FR	PM	PF	A_anM	A_anF
	1	.56***	-.10	-.09	.46***	.26*	.22	.18	.37**	.23
2. Externalizing Problems	.49***	1	-.21	-.22	.51***	.42***	.38**	.25*	.44***	.33**
3. Mother Warmth	-.17	-.33*	1	.82***	-.51***	-.31**	.10	.03	-.09	.16
4. Father Warmth	-.34*	-.38**	.81***	1	-.39***	-.36**	.17	.16	-.05	.21
5. Mother Rejection	.53***	.39**	-.40**	-.46**	1	.77***	.23*	.30*	.42***	.22
6. Father Rejection	.52***	.33*	-.47***	-.63***	.79***	1	.35**	.08	.24*	.32**
7. Permissive Mother	.10	.14	-.03	-.09	.02	.14	1	.71***	.39**	.56***
8. Permissive Father	.10	.18	.03	.01	.15	.02	.80***	1	.58***	.42***
9. Authoritarian Mother	.33*	.21	-.10	-.12	.47***	.40**	-.01	.04	1	.69***
10. Authoritarian Father	.51***	.32*	-.16	-.29*	.52***	.44**	.16	.19	.80***	1
11. Authoritative Mother	.04	-.15	.41**	.33*	-.13	-.13	.45***	.34*	.29*	.30*
12. Authoritative Father	-.01	-.21	.37**	.40**	-.14	-.14	.30*	.15	.30*	.12
13. Mother Support	-.23	-.43**	.39**	.29*	-.26*	-.27*	-.22	-.24	-.24	-.37**
14. Father Support	-.51***	-.41**	.41**	.62***	-.46***	-.54***	-.06	-.03	-.32*	-.47***
15. Teacher Support	-.31*	-.50***	.20	.15	-.28*	-.14	-.16	-.14	-.06	-.12
16. Classmate Support	-.23	-.35**	.10	.15	-.25	-.18	.06	-.04	-.13	-.27
17. Friend Support	-.29*	-.30*	.41**	.39**	-.08	-.19	.06	-.04	-.05	-.28*
18. Language	.09	.19	.01	-.14	.32*	.33*	-.06	.05	.09	.08
19. Ethnic Identity	-.13	-.08	.08	.17	-.02	-.17	.02	.03	.10	-.10
21. Acculturation	-.14	-.23	.25*	.25	-.12	-.30*	-.24	-.02	-.02	-.01
22. Socioeconomic status	.23	.07	.07	.09	-.04	-.03	-.20	-.20	-.01	-.12
23. Hollingshead	.17	-.19	-.02	.07	.09	.33	.19	-.03	.17	.13

Note: Sixth Grade correlations appear on the upper diagonal. Eighth Grade correlations appear on the lower diagonal
Note: * indicates significance at the $p < .05$ level. ** indicates significance at the $p < .01$ level. *** indicates significance at the $p < .001$ level.
Note: Bolded items remained significant after Bonferonni corrections were applied ($p < .001858$).

Table 4. Correlations Part 2

	A-ivM	A-ivF	MS	FS	TS	CS	FS	L	EI	AS	SES	HOL
	.04	-.01	-.15	-.02	-.08	-.35**	-.04	.00	.25*	-.05	-.07	.25
2. Externalizing Problems	.06	.02	-.08	-.18	-.18	-.21	-.03	.20	.15	-.12	-.15	.12
3. Mother Warmth	.44***	.49***	.57***	.47***	.18	.33**	.26*	-.20	.15	.30*	.19	-.19
4. Father Warmth	.41***	.60***	.41***	.68***	.35**	.26*	.31**	-.19	.23	.15	.10	-.11
5. Mother Rejection	-.16	-.10	-.31**	-.23	-.09	-.32**	.02	.10	.03	-.04	-.27*	.26
6. Father Rejection	-.07	-.10	-.09	-.27*	-.17	-.20	.09	.17	.09	.07	-.14	.12
7. Permissive Mother	.47***	.44***	.18	.18	.13	.14	.12	.25*	.20	.23	-.09	-.11
8. Permissive Father	.34**	.54***	.04	.31**	.17	-.06	.03	.05	.12	.22	-.14	17
9. Authoritarian Mother	.20	.18	-.11	.06	.17	-.16	-.03	-.05	.04	.18	-.08	.26
10. Authoritarian Father	.21	.41***	.11	.17	.19	.00	.11	-.04	.10	.15	-.14	.13
11. Authoritative Mother	1	.72***	.42***	.35**	.26*	.19	.13	.02	.09	.00	.07	-.04
12. Authoritative Father	.87***	1	.44***	.64***	.38**	.17	.16	-.04	.29*	-.07	-.06	.05
13. Mother Support	.06	.14	1	.50**	.43***	.62***	.53***	-.00	.25	.07	.22	.23
14. Father Support	.20	.37**	.55***	1	.48***	.29*	.41***	-.06	.38**	-.11	.04	.03
15. Teacher Support	.07	.13	.46***	.42**	1	.40**	.40**	.09	.25*	-.15	.10	.07
16. Classmate Support	.08	.22	.36**	.30*	.37**	1	.62***	.16	.17	.04	.14	-.08
17. Friend Support	.18	.32*	.46***	.50***	.37**	.39**	1	.06	.39**	.02	.05	.19
18. Language	.05	.10	-.11	-.15	-.25	-.27*	.06	1	.17	-.11	-.10	-.30
19. Ethnic Identity	.10	.32*	.10	.21	.02	.05	.15	.33*	1	.04	-.14	.00
21. Acculturation	-.11	-.18	.42**	.15	.38**	.12	.25	-.37**	-.17	1	-.01	-.19
22. Socioeconomic status	-.20	-.10	.15	.07	-.00	.17	.19	-.11	.15	.14	1	.17
23. Hollingshead	.38*	.39*	-.09	-.02	.10	.05	-.23	.23	.02	-.54	-.16	1

Note: Sixth Grade correlations appear on the upper diagonal. Eighth Grade correlations appear on the lower diagonal

Note: * indicates significance at the p < .05 level. ** indicates significance at the p < .01 level. *** indicates significance at the p < .001 level.

Note: Bolded items remained significant after Bonferonni corrections were applied (p < .001858).

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Fisher's *r-to-z* Analyses. Then, Fisher's *r-to-z* transformations were conducted utilizing the computerized program VassarStats (vassarstats.net) to test for significant differences across grades in the correlations listed above. These analyses allowed for the exploration of differences in magnitude of correlations across grade levels, as this information was related directly to the hypotheses described above. There were differences in the magnitude of correlation for a number of variables as they related to internalizing and externalizing problems.

First, the difference in magnitude of correlations examining the relationships between Sixth and Eighth Grade variables and internalizing problems was examined. The relationship between fathers' rejection and internalizing problems was stronger for Eighth Grade participants (*pr* = .52) than for Sixth Grade participants (*pr* = .26), *z* = -1.76, *p* < .04. The relationship between fathers' authoritarian parenting and internalizing problems also was stronger for Eighth Grade participants (*pr* = .51) than for Sixth Grade participants (*pr* = .23), *z* = -1.79, *p* < .04. Further, the relationship between fathers' support and internalizing problems was stronger for Eighth Grade participants (*pr* = -.43) than Sixth Grade participants (*pr* = -.08), *z* = 2.13, *p* < .02. In contrast, the relationship between ethnic identity and internalizing problems was stronger for Sixth Grade participants (*pr* = .25) than for Eighth Grade participants (*pr* = -.13), *z* = 2.17, *p* < .02. In summary, these analyses suggested that fathers' characteristics (e.g., their level of rejection, level of support, and authoritarian style of parenting) were correlated more strongly with internalizing problems in the Eighth Grade cohort than in the Sixth Grade cohort and that Sixth Graders' perceptions of ethnic identity were correlated more strongly with internalizing problems than Eighth Graders' perceptions of ethnic identity were.

Then, the difference in magnitude of correlations examining the relationships between Sixth and Eighth Grade variables and externalizing problems was examined. The relationship between mothers' support and externalizing problems was stronger for Eighth Grade participants ($pr = -.43$) than for Sixth Grade participants ($pr = -.08$), $z = 2.10$, $p < .02$. Additionally, the relationship between teachers' support and externalizing problems was stronger for Eighth Grade participants ($pr = -.50$) than Sixth Grade participants ($pr = -.18$), $z = 2.07$, $p < .02$. In summary, these analyses suggested that Eighth Graders' externalizing problems were correlated more strongly correlated with the support that they perceived from their mothers and teachers relative to Sixth Graders' perceptions of these characteristics.

Stepwise Regression Analyses

Finally, the present study examined overall models of adolescents' adjustment in both Sixth Grade and Eighth Grade. Specifically, the present study explored the extent to which parenting, community, and cultural variables predicted internalizing problems and externalizing problems for Sixth and Eighth Grade cohorts. Four stepwise regression analyses were conducted to examine the most parsimonious set of predictors that were effective in predicting internalizing and externalizing problems in the Sixth and Eighth Grade cohorts. Stepwise regression utilizes a statistical algorithm in which variables are added into a regression equation one at a time. Variables are added or removed by the statistical algorithm in steps, and the order of entry of variables is used as a measure of relative importance of the variables that are entered. For the current regressions, only variables that were related significantly to internalizing or externalizing problems in the correlational analyses (across one or both grades) were included.

Internalizing Problems. The first stepwise regression was conducted to identify which predictors were most important in predicting Sixth Graders' internalizing problems. The prediction took place in three steps. In the first step of the algorithm, Mothers' Rejection was entered into the equation and was a significant predictor, $R^2 = .25$, adjusted $R^2 = .24$, $F(1, 66) = 21.83$, $p < .001$. In the second step of the algorithm, the model remained significant when Ethnic Identity was entered, R^2 change $= .06$, $F(2, 66) = 14.39$, $p < .001$. In this step, both Ethnic Identity ($p < .02$) and Mothers' Rejection ($p < .001$) were significant predictors. Finally, in the third step of the algorithm, the model remained significant when Fathers' Rejection was entered, R^2 change $= .05$, $F(3, 66) = 11.97$, $p < .001$. In this final step, Fathers' Rejection ($p < .03$), Ethnic Identity ($p < .01$), and Mothers' Rejection ($p < .001$) were significant predictors. The other independent variables added little additional predictive power above that contributed by Mothers' Rejection, Ethnic Identity, and Fathers' Rejection and thus were excluded from the final model. See Table 5.

Table 5. Stepwise Regression- Predictors of Sixth Graders' Internalizing Problems

Variables	B	SE B	β	Δr^2
Step 1. $F(1, 66) = 21.83$, $p < .001$, $r^2 = .25$				.25
Mothers' Rejection	8.24	1.76	.50***	
Step 2. $F(2, 66) = 14.39$, $p < .001$, $r^2 = .31$				.06
Mothers' Rejection	8.05	1.71	.50***	
Ethnic Identity	2.76	1.18	.27*	
Step 3. $F(3, 66) = 11.97$, $p < .001$, $r^2 = .36$				.05
Mothers' Rejection	12.87	2.68	.78***	
Ethnic Identity	3.05	1.15	.27*	
Father's Rejection	-6.10	2.66	-.38*	

Note. *$p < .05$, **$p < .01$, ***$p < .001$

The second stepwise regression was conducted to identify which predictors were most important in predicting Eighth Graders' internalizing problems and took place in two steps. In

the first step of the algorithm, Fathers' Rejection was entered and was a significant predictor, R^2 = .26, adjusted R^2 = .24, $F(1, 49) = 16.78$, $p < .001$. In the second step of the algorithm, the model remained significant when Authoritarian Father was entered, R^2 change = .07, $F(2, 49) = 11.43$, $p < .001$. In this step, both Fathers' Authoritarian Parenting ($p < .03$) and Fathers' Rejection ($p < .005$) were significant predictors. All other independent variables added non-significant predictive power after Fathers' Authoritarian Parenting and Rejection were entered into the model. Thus, all other variables were excluded from the final model. See Table 6.

Table 6. Stepwise Regression- Predictors of Eighth Graders' Internalizing Problems

Variables	B	SE B	β	Δr^2
Step 1. $F(1, 49) = 16.78$, $p < .001$, $r^2 = .26$				.26
Fathers' Rejection	10.35	2.53	- .51***	
Step 2. $F(2, 51) = 11.43$, $p < .001$, $r^2 = .33$				.07
Fathers' Rejection	7.94	2.67	.39**	
Authoritarian Father	4.56	2.09	.29*	

Note. *$p < .05$, **$p < .01$, ***$p < .001$

Externalizing Problems. The third stepwise regression was conducted to identify which predictors were most important in predicting Sixth Graders' externalizing problems and took place in two steps. In the first step of the algorithm, Mothers' Rejection was entered was a significant predictor, R^2 = .26, adjusted R^2 = .25, $F(1, 67) = 23.58$, $p < .001$. The second step of the algorithm remained significant when Mother' Permissive Parenting was entered, R^2 change = .06, $F(2, 67) = 15.58$, $p < .001$. In this step, Mothers' Permissive Parenting ($p < .02$) and Mothers' Rejection ($p < .001$) were significant predictors. All other independent variables added non-significant predictive power after Mothers' Permissive Parenting and Rejection were entered into the model. Thus, all other variables were excluded from the final model. See Table 7.

Table 7. Stepwise Regression- Predictors of Sixth Graders' Externalizing Problems

Variables	B	SE B	β	Δr^2
Step 1. $F(1, 67) = 23.58, p < .001, r^2 = .26$				.26
Mothers' Rejection	7.98	1.64	.51***	
Step 2. $F(2, 67) = 15.58, p < .001, r^2 = .32$				.06
Mothers' Rejection	7.21	1.62	.46***	
Permissive Mother	3.94	1.63	.25*	

Note. *$p < .05$, **$p < .01$, ***$p < .001$

The final stepwise regression was conducted to identify which predictors were most important in predicting Eighth Graders' externalizing problems and took place in two steps. The first step of the algorithm entered Teachers' Support as a significant predictor, $R^2 = .30$, adjusted $R^2 = .29$, $F(1, 51) = 21.32$, $p < .001$. The second step of the algorithm remained significant when Fathers' Warmth was entered, R^2 change $= .09$, $F(2, 51) = 15.58$, $p < .001$. In this step, Fathers' Warmth ($p < .01$) and Teachers' Support ($p < .001$) were significant predictors. All other independent variables added non-significant predictive power after Teachers' Support and Fathers' Warmth were entered into the model. Thus, all other variables were excluded from the final model. See Table 8.

Table 8. Stepwise Regression- Predictors of Eighth Graders' Externalizing Problems

Variables	B	SE B	β	Δr^2
Step 1. $F(1, 51) = 21.32, p < .001, r^2 = .30$				.30
Teachers' Support	-5.28	1.14	-.55***	
Step 2. $F(2, 51) = 15.58, p < .001, r^2 = .39$				.09
Teachers' Support	-4.99	1.08	-.52***	
Fathers' Warmth	-3.49	1.30	-.30*	

Note. *$p < .05$, **$p < .01$, ***$p < .001$

DISCUSSION

As already noted, adolescence is a unique developmental period characterized by many biopsychosocial changes. The middle school years, in particular, mark a period of time in an adolescents' lives when they are experiencing unique transitions over a relatively brief period of time. For example, they are developing a stronger sense of autonomy, exploring their identities, developing relationships and support networks outside of the home, engaging in more rigorous academics in a less structured and contained setting, and experiencing hormonal changes. As such, they are at heightened risk for experiencing an increase in internalizing and externalizing problems. As a result, understanding the most important predictors of these problems as adolescents transition through their middle school years can be important for the development of interventions to address these problems.

Given that middle school aged adolescents are at a prime period in their life when they are coming into more direct contact with different levels of ecological systems, it makes sense to explore their adjustment within such a context. Although much is understood about the ecological context and the ways in which variables from different levels of such a model influence externalizing problems, much less is known about how internalizing problems may be interconnected to different variables in the ecological model. Further, there has been little research conducted to examine differences that occur across middle school aged adolescents as they enter and exit. Thus, the current study sought to answer such questions. Overall, using an ecological model as a well-rounded context for understanding adolescents who are making the

middle school transition and for future interventions that may be developed may add further to currently identified empirically supported treatments.

Specifically, the current study utilized a cross-sectional approach to better understand the variables that are related to middle school aged adolescents' adjustment. More specifically, adolescents who were in the Sixth Grade and the Eighth Grade were targeted. Additionally, the current study sought to understand the development of both internalizing and externalizing problems, as opposed to the previous White and Renk (2012) study (which examined only externalizing problems). The first goal of the current study was to examine middle school aged adolescents' experiences at each level of an ecological model in an effort to better understand the unique relationships of each level to adolescents' reported internalizing and externalizing problems. The second goal was to address developmental differences that exist between middle school aged adolescents who are in the Sixth Grade and the Eighth Grade. The third and final goal was to examine how those differences may be related to the protective or risk factors available through an ecological model in the prediction of middle school aged adolescents' internalizing and externalizing problems.

Hypothesis 1: Perceptions of Parenting

Internalizing Problems. The hypothesis that middle school aged adolescents' perceptions of adaptive parenting styles (e.g., higher authoritative parenting, lower authoritarian and permissive parenting) and higher perceived levels of emotional support and warmth would be correlated significantly with adolescents' reports of their internalizing problems in both the Sixth and Eighth Grade cohorts was supported. In both cohorts, perceived rejection from mothers and fathers was related positively to internalizing problems. Similarly, in both cohorts,

authoritarian parenting (by mothers only in the Sixth Grade cohort and by both mothers and fathers in the Eighth Grade cohort), characterized by harsh discipline and low levels of warmth, was related positively to internalizing problems. Finally, the Eighth Grade cohort demonstrated a significant relation between perceptions of fathers' warmth and support and internalizing problems. See Table 9 for a grade comparison of significant relationships.

Table 9. Parenting Variables Significantly Related to Internalizing Problems

Sixth Grade	Eighth Grade
Mothers' Rejection	Fathers' Warmth
Fathers' Rejection	Mothers' Rejection
Mothers' Authoritarian Parenting	Fathers' Rejection
	Mothers' Authoritarian Parenting
	Fathers' Authoritarian Parenting
	Fathers' Support

The part of the hypothesis regarding the magnitude of the associations was not supported, however. Closer examinations of the magnitude of correlations between parenting variables and internalizing problems revealed that Eighth Graders' perceptions of fathers' rejection, fathers' authoritarian parenting style, and overall support from parents was significantly stronger than these same relationships in the Sixth Grade cohort. Nonetheless, these findings provided important clues into the ways in which Sixth and Eighth Grade students were the same and different in their perceptions of parenting characteristics and self-reported internalizing problems. Although the original hypothesis focused primarily on participants' positive

perceptions of parenting (e.g., warmth and support), overall this cohort of adolescents reported that more negative parenting characteristics (e.g., parental rejection, authoritarian parenting style) were related significantly to their internalizing problems.

At first glance, one may assume that parental rejection is simply the opposite of parental warmth; however, a closer look at these variables may provide further insights. Rejection as measured by the EMBU-S (Arrindell et al., 1999) described a style of parenting in which children and adolescents feel shamed, criticized, unfairly punished, and actively disliked by their parents. Warmth, on the other hand, described children and adolescents who feel a sense of comfort and encouragement from their parents who are proud of them. Thus, children and adolescents who score lower in their perceptions of parental warmth do not necessarily experience active criticism and shame from their parents. It may be that children and adolescents who experience lower levels of warmth from their parents misbehave and act out as a way to gain attention and affection, whereas children and adolescents who experience harsh rejection from their parents experience inner experiences of anxiety and depression that could provide a safer emotional (although detrimental) experience relative to overt misbehavior.

This idea was supported by literature that suggested that children who experienced low levels of warmth and support were more likely to display externalizing problems (Baumrind, 1983; Scaramella et al., 2002), whereas parental rejection and control were related significantly to adolescents' diagnoses of Generalized Anxiety Disorder (GAD; Hale, Engels, & Meeus, 2006) and depressive symptoms (Hale, Van Der Valk, Engels, & Meeus, 2005). For example, in a large cohort of junior high and high school aged students (who were 12- to 19-years old), parental rejection and alienation were correlated with GAD and predicted GAD for males and females,

with sensitivity to rejection decreasing over time for male participants (Hale et al., 2006). In a second study in which risk factors for the development of depression were explored in a cohort of early adolescents, parents' emotional rejection, and not their lack of warmth, was named as a risk factor (Monshouwer et al., 2012).

In addition to the finding regarding parental rejection, both cohorts in the current study showed significant positive relationships between authoritarian parenting and internalizing problems as well. This finding complemented the association between parental rejection and internalizing problems, as authoritarian parenting is characterized by high levels of control and low levels of acceptance (Baumrind, 1991). Although the authoritarian parenting style can be beneficial in some ways (e.g., children were less likely to be involved with deviant peers and more likely to excel academically; Lamborn et al., 1991), the findings of the current study supported the position that emotional problems may ensue as well (Lamborn et al., 1991; Sharma, Sharma, & Yadava, 2010, 2011). In particular, children whose parents exhibited this style were less confident socially (Lamborn et al., 1991), were more likely to experience anxiety and depersonalization (Wolfradt, Hempel, & Miles, 2003), and were more likely to experience depression (Joshi, Sharma, & Mehra, 2009).

In the current study, it was noted that, in the Sixth Grade cohort only, mothers' level of authoritarian parenting was related to internalizing problems. In contrast, in the Eighth Grade cohort, both mothers' and fathers' authoritarian parenting was related to internalizing problems. It may be that, in the younger cohort, the effects of role differences between mothers and fathers were important. In our society, mothers are viewed as the conveyors of warmth and care, whereas fathers are viewed as providing discipline and financial stability (Hosley &

Montemayor, 1997). For younger adolescents, confusion and emotional difficulties may ensue when mothers take on a more detached and disciplinarian role, particularly in more traditional, ethnically and socioeconomically diverse families. Over time, it may be that the effects of either or both parents utilizing an authoritarian parenting style become more problematic, so that, by Eighth Grade, internalizing problems have developed, despite of the sex of the parent exhibiting this style.

Regarding the hypothesized differences in the magnitude of correlations across grades, interesting findings emerged. First, a notable trend was discovered in which perceptions of fathers' characteristics were stronger in magnitude for Eighth Graders than for Sixth Graders. This pattern was true across fathers' authoritarian parenting, rejection, and warmth. In other words, the strength of correlations between internalizing problems and fathers' characteristics was stronger in the Eighth Grade cohort than in the Sixth Grade cohort. Specifically, Eighth Graders were more likely than Sixth Graders to experience internalizing problems when their fathers exhibited authoritarian parenting and rejection. Thus, over time, fathers may play a more important role as adolescents proceed in their development. Revisiting role theory (Hosley & Montemayor, 1997), it may be that younger children rely more on their mothers for warmth and support and that fathers' role as disciplinarian is expected and accepted. However, as adolescents move through their middle school years and become more individuated (Sussman et al., 2007), such parenting practices may become more and more iatrogenic. Eighth Graders may look to take a more active role in determining their responsibilities and privileges. As a result, punitive and controlling practices from parents, particularly from fathers, may result in feelings of anxiety and depression. It also may be that, as adolescents develop through their middle school years,

experiences of rejection and harsh discipline from fathers begin to take a stronger toll on their

emotional well being, prompting the development of internalizing problems.

Taken together, the findings of the current study and supporting literature clearly

demonstrated that parents' characteristics and styles of parenting were related to middle school

aged adolescents' emotional well-being. Across the grades examined in this study, parental

rejection and authoritarian parenting were associated with internalizing problems. Thus, although

adolescents were developing and changing as they move through middle school, their

perceptions of their parents remained vitally important. As interventions for internalizing

problems are developed for middle school aged adolescents, parenting psychoeducation

components that target the use of balanced parenting styles and the decrease of rejecting

characteristics (particularly in the parenting of adolescents) will be helpful.

Individualized components meant to fit middle school aged adolescents' developmental

needs should be considered as well. For example, parents of Sixth Grade students would benefit

from psychoeducation about the importance of providing structure and containment for their new

middle school students. Further, the relationship between middle school aged adolescents and

their fathers should be targeted, given that fathers' characteristics were associated more strongly

with internalizing problems for Eighth Graders. Thus, future research examining internalizing

problems in middle school aged adolescents should focus on the development of prevention and

intervention programs that can be individualized based on adolescents' grade level and clearly

should include parenting components regardless of age.

Externalizing Problems. The hypothesis regarding parenting variables and externalizing

problems were similar to those regarding internalizing problems. Specifically, the expectation

that middle school aged adolescents' positive perceptions of their parents' style of parenting

(e.g., higher authoritative parenting, lower authoritarian and permissive parenting), emotional

support, and warmth would be correlated significantly with adolescents' reports of their

externalizing problems in both the Sixth and Eighth Grade cohorts and that parenting variables

would predict adjustment more strongly in the Sixth Grade cohort was supported partially. In

particular, the first part of the hypothesis (i.e., that both cohorts' levels of externalizing problems

would be correlated with more positive perceptions of parenting characteristics) was supported.

Specifically, mothers' and fathers' rejection and fathers' authoritarian parenting style were

correlated with externalizing problems in both Sixth and Eighth Graders in the expected

directions. Mothers' authoritarian parenting style, mothers' and fathers' support, and mothers'

and fathers' warmth were correlated with externalizing problems only within the Eighth Grade

group, however. Permissive parenting styles from both mothers and fathers only were correlated

with externalizing problems in the Sixth Grade group. See Table 10 for a grade comparison of

significant relationships.

Table 10. Parenting Variables Significantly Related to Externalizing Problems

Sixth Grade	Eighth Grade
Mothers' Rejection	Mothers' Warmth
Fathers' Rejection	Fathers' Warmth
Permissive Mother	Mothers Rejection
Permissive Father	Fathers' Rejection
Authoritarian Mother	Authoritarian Father
Authoritarian Father	Mothers' Support
	Fathers' Support

Unlike the findings regarding internalizing problems, perceptions of both parental warmth and rejection were important factors when adolescents experienced externalizing problems in Eighth Grade. The literature consistently supported these findings, suggesting that adolescents were less likely to experience externalizing problems when they experienced their parents as warm, accepting, and involved (Conger, Rueter, et al., 1994; Scaramella et al., 2002; White & Renk, 2012). Similarly, the finding that higher levels of perceived parental rejection were related to higher levels of externalizing problems also was supported by the literature. Specifically, adolescents who perceived their parents as rejecting were more likely to display aggressive tendencies (Akse, Hale, Engels, Raaijmakers, & Meeus, 2004), delinquency (Barnow, Lucht, & Freyberger, 2005), and overall externalizing problems (especially with particular temperament styles; Sentse, Veenstra, Lindenberg, Verhulst, & Ormel, 2009).

Interestingly, perceived support from parents was associated significantly with only Eighth Graders' externalizing problems. It may be that, as middle school aged adolescents move through their middle school years, their needs begin to shift, particularly with regard to their need and/or desire to experience certain parenting styles. In this particular sample, both cohorts' behaviors were related to parental warmth and rejection (i.e., both cohorts' externalizing problems were associated with how adolescents perceived their parents' level of acceptance and positive regard; Arrindell et al., 1999). Parental support, however, was encompassed not just by feelings of emotional warmth and acceptance, but also by parents' provision of information, feedback, and resources (House, 1981). Therefore, as middle school aged adolescents develop, they may look to their parents to provide these other types of support and begin to struggle behaviorally (e.g., rebel, use substances, turn to deviant peers; Kerr, Preuss, & King, 2006; Rueger, Malecki, & Demaray, 2010) when they perceive it to be lacking. Longitudinal research provided further insights, suggesting that Fifth through Eighth Graders' perceptions of reduced levels of support over a two year time period were related to increased behavioral and academic difficulties (DuBois et al., 2002). A similar phenomenon may be reflected in the findings for the current sample.

When parental warmth and support were considered together, they can be conceptualized as a style of parenting. Although the original hypothesis suggested that authoritative parenting (e.g., high warmth and support with high control) would be related significantly to lower levels of externalizing problems, the current study suggested that it is the perception of parents' authoritarian style (e.g., low warmth and support with high control) that was associated significantly with behavioral problems. Revisiting the literature, associations between

authoritarian parenting and adolescents' adjustment were somewhat mixed. Children whose parents utilize an authoritarian style were more likely to perform well in school and were less likely to associate with deviant peers (Lamborn et al., 1991); however, they were more likely to struggle with aggression, noncompliance, and delinquency as they get older (McCarty et al., 2005). Thus, authoritarian parenting may be an important target for achieving more positive adolescent adjustment.

Although authoritarian parenting was found to have similar associations across cohorts, Sixth and Eighth Graders differed in other ways. In line with findings regarding internalizing problems described above, permissive parenting was correlated significantly with Sixth Graders' externalizing problems only. The relation between permissive parenting and externalizing problems was supported in previous literature as well. Specifically, adolescents whose parents were high in emotional warmth and support and low in control experienced higher levels of misbehavior in school, a higher risk for substance use and experimentation, higher levels of delinquency, and a greater likelihood of associating with deviant peers (Lamborn et al., 1991). Children transitioning into their middle school environment were likely to need guidance, structure, and support from their parents as they learned to navigate a new environment and social context (Way et al., 2007). It is likely that, by the time middle school aged adolescents reach Eighth Grade and are about to transition to high school, the permissive parenting style is less problematic because Eighth Graders are more established within the school environment and have learned ways to obtain structure and guidance from members of the community (e.g., teachers and peers) or to create structure and a clear path themselves. These strategies then can

provide further facilitation of adolescents' next transition to their respective high school environments.

Given that strong support in the current study and extant literature existed regarding perceptions of parental warmth and rejection and their relation to externalizing problems, intervention and prevention efforts should target closely these variables for middle school aged adolescents across different grades. Parents are one of the most proximal factors of influence in children and adolescents' environments, and this study suggested that characteristics such as warmth, acceptance, and positive regard maintained importance across different grades for middle school aged adolescents. In addition, educating parents about the importance of providing other types of support to their middle school aged adolescents over time is an important component that should be considered in prevention and intervention programs for adolescent behavior problems given that parental support became an important correlate of behavior problems in the later middle school years. Finally, regarding parenting style, we see a sensitivity in the Sixth Grade cohort regarding permissive and authoritarian parenting, with significant relationships to externalizing problems. Future research may consider implementing prevention programs in the form of parental psychoeducation about effective parenting styles and behavior prior to adolescents entering their Sixth Grade year. For example, parents may need to be educated about the importance of providing continued structure and containment for their Sixth Graders as they learn to navigate a less structured and more complex academic environment.

Hypothesis 2: Perceptions of Support from Community Members

Internalizing Problems. The first portion of the hypothesis (i.e., that higher levels of perceived support from the community via teachers and peers would be associated with lower

levels of internalizing problems) was supported for both cohorts. Nonetheless, it should be noted that the type of community support that was important differed across grades. Specifically, Sixth Graders' internalizing problems were related significantly to Classmates' Support, whereas Eighth Graders' internalizing problems were related significantly to Teachers' Support and Friends' Support. The part of the hypothesis regarding magnitude of correlations was supported partially as well, with Eighth Graders' internalizing problems being correlated more strongly with friend support relative to this relationship for Sixth Grader students. See Table 11 for a grade comparison of these relationships.

Table 11. Community Significantly Related to Internalizing Problems

Sixth Grade	Eighth Grade
Classmates' Support	Teachers' Support
	Friends' Support

Findings from this study suggested that, as adolescents move through their middle school years, the type of community support that was related to their internalizing problems shifted. When adolescents were entering their Sixth Grade year, perceived support that was received from classmates was associated negatively with internalizing problems (i.e., higher perceived levels of classmate support was related to lower levels of internalizing problems). In contrast, as adolescents were moving closer to their transition to high school, their perceptions of teachers' and friends' support were correlated negatively with their internalizing problems. From a community standpoint, this finding was important because it highlighted the social changes that occur for adolescents as they age.

The literature also suggested that classmate support, in particular, was a protective factor against the experience of depression in adolescents (Demaray & Malecki, 2002; Rueger et al., 2010), above and beyond the buffering that support from friends and teachers could provide. In a recent longitudinal study examining the effects of peer, friend, and teacher support on adolescent adjustment over 1-year (Rueger et al., 2010), it was revealed that the significance of classmate support remained stable over time and that, overall, classmate support was related more strongly to boys' depression than to girls' depression. These findings may provide a clue about the associations between classmates' support and internalizing problems reported in this study. For example, it may be that sex plays a mediating role in the relationship between classmate support and internalizing problems and that the lack of significance in the Eighth Grade cohort was a reflection of the difference in stability for this construct across boys and girls.

Examination of longitudinal or cross-sectional relationships between classmate support and internalizing problems has been limited, however. In one study of middle school aged adolescents, classmate support was found to predict internalizing problems over time; however, only Sixth and Seventh Grade students were assessed (Demaray, Malecki, Davidson, Hodgson, & Rebus, 2005). Had the study extended to Eighth Grade students who were preparing for their transition to high school, results may have looked similar to those in the current study, with such findings reflecting that developmental changes that occur across the middle school years.

Regarding teacher support, it was noted that a significant relationship with internalizing problems only existed for Eighth Grade participants. Literature suggested that adolescents perceived less support from teachers over time (De Wit, Karioja, Rye, & Shain, 2011); however, there were no differences in perceptions of teacher support across grade levels in the current

study. Thus, it appears that some other phenomenon was occurring for this sample. Nonetheless, the significant negative relationship between teacher support and internalizing problems is supported within the literature. Specifically, it was found that negative perceptions of teacher support were related to higher depression and anxiety as well as to lower self-esteem (De Wit et al., 2011; Marcus & Sanders-Reio, 2001; Osterman, 2000). For instance, in Roeser and colleagues' (1998) longitudinal examination of Seventh and Eighth Grade adolescent perceptions of teacher support, it was demonstrated that quality of relationships with teachers significantly predicted emotional functioning (e.g., depression) one year later.

The discrepancy in significant correlations across cohorts found in the current study may be explained by the social changes that occur for middle school aged adolescents as they age. For example, it is likely that, as adolescents progress further into middle school, their sense of autonomy increases and dependence upon their parents for different types of support decreases. As such, Eighth Grade students may have begun to rely more heavily on the attachments that they have formed outside of their homes. Teachers may be among these attachments, as they (similar to parents) provide a model for regulating emotions, selecting adaptive coping strategies, and modeling socialization with peers (Marcus & Sanders-Reio, 2001). Therefore, it would make sense that perceptions of teacher support became more salient for middle school aged adolescents in the Eighth Grade.

A similar explanation can be made for the significant correlation between Eighth Graders' perceptions of support from friends and internalizing problems. Specifically, as adolescents individuate and become more dependent upon members of the community (e.g., peers, friends, teachers) for their emotional connections and sense of identity (Marcus &

Sanders-Reio, 2001), the relationship between perceptions of support from friends and internalizing problems would become stronger. Research regarding this overall relationship has been somewhat mixed, however. Some research suggested that, as adolescents' perceptions of support from their friends decreased, their symptoms of depression, such as guilt and hopelessness, increased (Calvete & Cardenoso, 2005). Other findings suggested that high levels of perceived support from friends were related to iatrogenic effects, such as delinquent behavior (Kerr et al., 2006). In other instances, perceptions of friends' support showed no relationship at all (Rueger, Malecki, & Demaray, 2011). Overall, more research in this area is warranted to better understand the social mechanisms that occur developmentally for adolescents as they progress through middle school.

Taken together, these findings highlighted the importance of community support for the emotional well being of middle school aged adolescents. It also emphasized the ways in which community support differed in conjunction with internalizing problems across middle school grades. From an ecological perspective, incorporating community factors into prevention and intervention efforts is crucial (Henggeler, 1999). The findings in this study supported the individualization of multisystemic prevention and intervention efforts depending on middle school aged adolescents' grade level, rather than grouping all middle school aged adolescents into one category. Future research should examine ways to create supportive and collaborative classroom environments early on in the middle school experience so as to provide a sense of security and foster self-esteem (Marcus & Sanders-Reio, 2001). In addition, implementing creative approaches to bolstering the perceptions of support provided by teachers and close peers

within the middle school environment should be explored, especially for students approaching their high school transition.

Externalizing Problems. Regarding externalizing problems, the first part of the hypothesis stated that middle school aged adolescents' perceived community support from teachers and peers would be associated with lower levels of reported behavior problems in both cohorts. This hypothesis was supported for the Eighth Grade participants only. A closer examination of the findings of this study suggested that the relations between teachers' support, classmates' support, and friends' support and externalizing problems all were significant for Eighth Graders only. Although it was expected that support from community members would be correlated significantly to externalizing problems in both cohorts, the finding that these relationship only were evident for Eighth Graders actually fit with the current study's overall conceptualization that the importance of each level of the ecological model would differ with grade level of the middle school aged adolescent and that community variables would become more important as for adolescents in the Eighth Grade. See Table 12 for a grade comparison of these relationships.

Table 12. Community Significantly Related to Externalizing Problems

Sixth Grade	Eighth Grade
None	Teachers' Support
	Classmates' Support
	Friends' Support

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Regarding teachers' support, some literature supported the current study's finding that higher levels of perceived support from teachers were associated with lower levels of externalizing problems. For example, in Roeser and colleagues' (1998) longitudinal study described earlier, it was revealed that, in addition to decreased internalizing problems, students were less likely to experience anger and school truancy when they perceived their teachers to be supportive. A second study suggested that, as rates of teachers' support increased, so did rates of understanding school rules, which then was related to lower rates of behavior problems (Way et al., 2007). Similarly, De Wit and colleagues (2000) suggested that Ninth Grade students' low perceptions of teachers' support were related to unfair school rules and student conflict. These variables then were associated subsequently with disciplinary problems and externalizing problems, such as Oppositional Defiant Disorder and Attention-Deficit/Hyperactivity Disorder (De Wit, Offord, Sanford, Rye, Shain, & Wright, 2000). Finally, Demaray and Malecki (2002) found that lower levels of perceived teacher support in a study of Hispanic middle school aged adolescents were related to higher levels of sensation seeking behaviors (i.e., behaviors that fall within the externalizing problems spectrum).

Although some literature linked lower perceptions of teachers' support to higher levels of behavior problems, such literature was scarce compared to the amount of support for the relationship between teachers' support and internalizing problems. A consistent finding that may help explain the significant correlations reported in the current study (e.g., that teachers' support was related to externalizing problems) was that perceptions of teachers' support was linked to self-esteem. It may be that a more complex relationship exists. In particular, adolescents who perceived less support from their teachers may experience lower levels of self-esteem, which

then is related to behavior problems and/or acting out behaviors (Hoge et al., 1990; Ryan, Stiller, & Lynch, 1994; Way et al., 2007). Future research should examine the unique ways in which teachers' support, self-esteem, and externalizing problems are intertwined. For example, it may be that self-esteem mediates the relationship between perceived teachers' support and externalizing problems (DeWit et al., 2000), a finding that was true in older cohorts. Future research also should incorporate teachers' perceptions of the support that they provide to their students and whether teachers' views differ for children who have behavior problems. Such research could provide further clues into the findings presented in the current study.

The finding that lower perceived classmate support was related to higher levels of externalizing problems in the Eighth Grade cohort also had some support in the literature; however, the majority of the literature examined more closely and supported the relationship between low classmate support and internalizing problems. De Wit and colleagues (2000) examined school culture and related behavior problems in Ninth Grade students and determined that low perceived classmate support was related to student conflict and low student autonomy. These variables then were related to Conduct Disorder, Oppositional Defiant Disorder, Attention-Deficit/Hyperactivity Disorder, and substance use. Although De Wit and colleagues' study (2000) examined Ninth Grade students, it may be that the sample was similar to the Eighth Graders in the current sample. Given the paucity of literature that directly linked externalizing problems to perceived classmate support, it may be that other factors better explain the significant relationship found between classmate support and externalizing problems in the current sample. For example, poor self-esteem, peer rejection resulting from behavior problems,

and social skills deficits could help explain such a relationship. Future research examining these potential relationships is warranted.

Lastly, the relationship between externalizing problems and perceptions of support from friends had mixed findings in the literature. Some research suggested that higher levels of perceived support from friends were related to higher levels of behavior problems, such as delinquency (Kerr et al., 2006). In fact, similar results were reported in another examination of middle school aged adolescents (White & Renk, 2012). Specifically, higher levels of perceived acceptance from friends were related to higher levels of externalizing problems. In the current study, however, the opposite association was found. Higher levels of perceived support from friends were related to lower levels of externalizing problems. Although few studies made the same link, research did support the idea that perceived support from friends was related to more positive self-concept and self-esteem (Demaray & Malecki, 2002). Given that middle school aged adolescents tend to have fewer adjustment difficulties overall when they experience positive self-regard (Ha, Petersen, & Sharp, 2008), it is likely that such constructs mediate the relationship between friendship and externalizing problems. It also may be that the current study started to identify important shifts that occur for students as they progress through middle school given its unique cross-sectional examination of Sixth Graders just beginning their middle school career and Eighth Graders nearing the end of the middle school experience.

Of particular importance to this study was the finding that all three community variables (i.e., teacher support, classmate support, and friend support) were related significantly to Eighth Graders' externalizing problems only. This finding supported the idea that, for adolescents in their Eighth Grade year, less proximal factors from an ecological model became more salient

with regard to reported behavior problems. Regarding teacher support, some research suggested that perceptions of teacher support decreased as adolescents moved from middle to high school (De Wit et al., 2011); however, the analyses reported in this study suggested that Sixth Graders and Eighth Graders did not differ across their perceptions of teacher support or any other community variables. Instead, the current study's belief that community variables differ in magnitude of importance between Sixth and Eighth Grade students is potentially a better explanation.

Regarding classmate support, longitudinal examinations suggested that, as perceptions of classmate support increased over time, behavior problems decreased (Dubois et al., 2002). It may be, therefore, that, for students whose lower perceptions of classmate support did not improve from Sixth to Eighth Grade, the relationship between their perceptions and externalizing problems became more salient. However, given that the current study was cross-sectional and not longitudinal, firm conclusions cannot be made and more research is needed in this area. Nonetheless, it is likely that changes occur regarding the importance of community variables for middle school aged adolescents as they advance in their schooling. In particular, a greater reliance on peers and other community members naturally may develop as adolescent students progress through school and spend less time with their parents and more times involved with peers, friends, and school activities. Adolescents who feel alienated, misunderstood, or rejected by members of the community within which they are trying to fit, while striving to develop an individual identity, are understandably at risk for misbehavior, oppositional and defiant acts, and interactions with deviant peers. With regard to multisystemic interventions, the current study highlighted the importance of teacher and peer relationships at the school level. Such

interventions, especially aimed at decreasing or preventing externalizing problems, should focus on enhancing support from classmates, close peers, and teachers throughout the middle school years with emphasis increasing over time.

Hypothesis 3: Socioeconomic Status

Internalizing Problems. Regarding internalizing problems, it was expected that for middle school aged adolescents reporting a mid- to high-socioeconomic status would report lower levels of emotional difficulties. This hypothesis was not supported in this study. Nonetheless, socioeconomic status has been the subject of many studies working to understand mental health difficulties during adolescence. Regarding internalizing problems, research suggested that an association does occur with socioeconomic status, with low socioeconomic status being associated with more emotional difficulties (Amone-P'olak et al., 2009; van Oort, van der Ende, Wadsworth, Verhulst, & Achenbach, 2011).

For instance, in a longitudinal study of children and adolescents (who ranged in age from 8- to 17-years), it was reported that incidences of anxiety and depression were higher for individuals with lower socioeconomic scores (Wadsworth & Achenbach, 2005). It has been suggested that such associations were a reflection of the environmental factors that affect individuals living within the lower echelon of socioeconomic status, such as adversity within the community or neighborhood, low access to social services, and other stressors (e.g., financial; van Oort et al., 2011). When mediational models of socioeconomic status were examined, it was determined that other factors, such as environment-related stressors, mediated the relationship between socioeconomic status and emotional problems. This finding, in conjunction with the finding reported herein, suggested that socioeconomic status may not have a direct effect on

psychological symptoms and that more proximal factors (e.g., parenting, community, environment) likely play more salient roles (Amone-P'olak et al., 2009).

Given these findings, it will be important for future research to continue to examine the specific environmental factors that may be related to lower socioeconomic status and that play significant roles in the development of internalizing problems. Clearer understandings of which factors will demonstrate the most important relationship to internalizing problems during middle school will allow the development of more effective and individualized multi-systemic prevention and intervention efforts. A better understanding of the factors affected by lower socioeconomic status also will be important from a public policy perspective. Often, families within the lower echelon of socioeconomic status have less access to mental health resources, live in more dangerous neighborhoods, and experience higher levels of stress and conflict. Thus, targeting communities at large with some provision for access to mental health care, parenting education, and prosocial activities for children likely be crucial for the prevention of internalizing problems overall.

Externalizing problems. Regarding externalizing problems, it was predicted that socioeconomic status also would be related negatively to such problems for both cohorts. In other words, it was expected that middle school aged adolescents who reported a mid- to high-socioeconomic status also would report lower levels of behavior problems. This hypothesis was not supported. Similar to studies examining socioeconomic status and internalizing problems, there was some support linking socioeconomic status to externalizing problems. Specifically, lower socioeconomic status was associated with higher scores on delinquent behavior, aggressive behavior, and attention problems (see Wadsworth & Achenbach, 2005). Other studies, however,

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may help explain the lack of significant findings reported herein. For example, research examining behavior problems in adolescence suggested that it is not socioeconomic status itself that influences behavior problems. Instead, characteristics of the environment (e.g., parental stress, financial limitations, lack of resources, community efficacy; Leventhal & Brooks-Gunn, 2000) may be the most important underlying factors. Further, recent research reported that family socioeconomic status explained very little regarding behavior problems manifesting in different environments (e.g., rural versus urban) and suggested that environmental factors may be more important (Reijneveld et al., 2010).

Therefore, the non-significant findings from the current study may reflect the indirect role that socioeconomic status plays in middle school aged adolescents' emotional and behavioral problems overall. The importance of factors related to lower socioeconomic status should be examined closely and taken into account when considering the adjustment of adolescents. It is likely that targeting other areas of the ecological model, such as providing easily accessed social support (e.g., from mental health and social work organizations), increasing efforts to bolster community or neighborhood efficacy, and increasing access to prosocial activities and peer groups, will provide important protective factors and a more proximal means of intervention, relative to addressing socioeconomic status itself. Thus, similar recommendations for future research and implications can be made regarding socioeconomic status and internalizing and externalizing problems. Namely, prevention and intervention efforts would likely be best served at the community level (e.g., providing access to mental health care, improving the safety of neighborhoods).

Hypothesis 4: The Overarching Context of Ethnicity and Culture

  Internalizing Problems. Hypothesis 4 posited that middle school aged adolescents who reported lower levels of acculturation would report significantly higher levels of internalizing problems across both grades. This hypothesis was supported in the Sixth Grade cohort only, with ethnic identity being correlated positively with internalizing problems. Ethnic identity can be conceptualized as one component of acculturation status, along with language use and comprehension and alignment with the majority culture (Dinh, Roosa, Tein, & Lopez, 2002). Interestingly, out of all three components measured in the current study, ethnic identity was the only component related to internalizing problems and only in Sixth Grade students. The research literature regarding ethnic identity, in particular, was somewhat mixed and sparse. There was evidence that supported the current finding for Sixth Graders, suggesting that children and adolescents who reported higher levels of ethnicity commitment and exploration were more likely to have internalizing problems (Kidwell, Dunham, Bacho, Pastorino, & Portes, 1995). In almost all occasions, however, the relationship was mediated by other more proximal variables. For example, the relationship between ethnic identity and internalizing problems in a sample of Indian children was mediated by maternal positivity, paternal negativity, and parents' support (Atzaba-Poria & Pike, 2005).

  Nonetheless, the lack of significance for Eighth Graders was supported by the research literature as well. There was research that supported the position that adherence to ethnic identity served as a protective factor for adolescents. In one such study, it was revealed that ethnic identity was related negatively to internalizing problems in adolescent African American, Hispanic, and Caucasian mothers, with global social support (e.g., combined support from

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family, friends, and/or a significant other) mediating the relationship (Sieger & Renk, 2007). In another recent study, ethnic identity was correlated with lower levels of depression and anxiety in African American, but not Caucasian, adults (Williams, Chapman, Wong, & Turkheimer, 2012). Interestingly, the current study revealed that the relationship, albeit non-significant, between ethnic identity and internalizing problems was negative for Eighth Grade students and in line with the abovementioned research.

The mixed results described here also may reflect the complexity of ethnic identity as it relates to personal identity. In one study, personal identity exploration, and not ethnic identity exploration, was related to anxiety, depression, and overall lower levels of psychological wellbeing (Schwartz, Zamboanga, Weisskirch, & Rodriguez, 2009). Further parsing out ethnic identity and personal identity constructs as important predictors of adolescent adjustment could clarify the findings of the current study in future research.

Another possible explanation for the findings presented in the current study was that middle school aged adolescents closely aligning themselves with their ethnic identity was experienced as socially problematic during Sixth Grade but not during Eighth Grade. Sixth Graders who are just transitioning into their middle school environment may be more invested in simply fitting in or blending in with others, whereas Eighth Grade students are honing in on their identities and more strongly value individuality (Way et al., 2007). This possibility fit well with the earlier finding that Sixth Graders' internalizing problems were related significantly to their overall perceptions of classmate support rather than support from friends, thus presenting the possibility that Sixth Graders have yet to fully formulate their identities and related friendship cliques.

Although there was literature to suggest that acculturation status impacted internalizing problems in adolescence, the current study may be one of the first to separate out the different components of acculturation status and to examine their relations with internalizing problems in a cross-sectional design. The findings in the current study were important because they suggested that ethnic identity may be influential earlier on for middle school aged adolescents and that its' association with internalizing problems changes direction over time. Future research should further separate ethnic identity into commitment and adherence factors and include the construct of personal identity to better understand the relationship between ethnic identity and internalizing problems in younger adolescents. From a prevention standpoint, efforts at the macro-level of an ecological framework, such as celebrating ethnic and cultural differences within middle schools and the community, may help protect against potential internalizing problems that young adolescents experience in conjunction with struggling to make sense of their ethnic identity.

Externalizing Problems. Hypothesis 4 further posited that adolescents who reported lower levels of acculturation status would report significantly higher levels of externalizing problems across both grades. This hypothesis was not supported. That none of the components of acculturation (e.g., ethnic identity, level of acculturation, use and comfort with English language) were associated with externalizing problems in either grade level highlighted the complexity of these particular constructs. Unlike the relative paucity of research examining the relationship of ethnic identity and internalizing problems, there was a significant body of literature suggesting that lower levels of acculturation status were related to externalizing problems (Araujo Dawson & Williams, 2008; Atzaba-Poria & Pike, 2007; Buriel, Calzada, & Vasquez, 1982) and general proneness to problem behavior (Dinh et al., 2002).

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However, the literature was somewhat mixed with a number of findings, suggesting that level of acculturation status had no effect on behavior problems (for example, Pasch et al., 2006) or that such relationships were mediated by other more proximal variables such as parental conflict (Gonzalez, Deardorff, Formoso, Barr, & Barrera, 2006). The current sample may be unique in that behavior problems were better explained by more proximal variables within the ecological model. It also may be that a closer examination of different components of ethnicity adherence and commitment or personal identity exploration would provide clearer insight into the findings reported in the current study.

As discussed earlier, this study may be one of the first to look at different aspects of acculturation status (e.g., level of acculturation, ethnic identity, and language) separately and across grades. It may be that the combination of variables would provide more impactful findings. Although findings were not significant for externalizing problems in this study, the importance of overarching cultural and ethnic contexts should not be overlooked given that there were significant relations reported in the literature. Thus, in the development of multisystemic prevention and intervention programs aimed at reducing externalizing problems in adolescence, a component that addresses these macro-system variables would be worthwhile. Similar to the suggestions regarding internalizing problems, community wide efforts to educate about and celebrate cultural and ethnic differences may help alleviate the tensions and stressors that sometimes are associated with lower levels of acculturation. In turn, this remediation of stressors could prevent behavior problems from ensuing in middle school aged adolescents.

Final Hypothesis: The Overall Model

Finally, the current study sought to understand how parenting characteristics, perceived community support (from teachers, friends, and classmates), socioeconomic status, and acculturation variables might predict overall the emotional and behavioral functioning of adolescents in the Sixth and Eighth Grades. It was hypothesized that variables across each level of the ecological model would predict significantly both internalizing and externalizing problems across both grade cohorts. It further was hypothesized that Sixth Graders and Eighth Graders would differ in the types of variables that the statistical algorithm would select for each respective model, with a greater number of parenting characteristics predicting Sixth Graders' internalizing and externalizing problems and a greater number of community variables predicting Eighth Graders' problems. It also was expected that no differences would be noted between cohorts for ethnicity, acculturation, or socioeconomic status variables.

Regarding internalizing problems, the hypothesis was supported partially. Although parenting variables were important for both Sixth Graders and Eighth Graders, the types of parenting variables that accounted for the most variance for each grade differed. Specifically, Mothers' Rejection played the largest predictive role in the Sixth Grade cohort. Fathers' Rejection also was a significant predictor; however, the contribution of this variable was slight and suggested an interesting relationship with internalizing problems. Meanwhile, regarding the Eighth Grade cohort, Fathers' Rejection and Authoritarian Parenting were the strongest predictors of adolescents' internalizing problems.

The findings regarding parents' rejection reflected two important points regarding the similarities and differences between Sixth and Eighth Grade students. First, parents' rejection

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appeared to be a characteristic that was relatively important for adolescents' internalizing problems, over and above other characteristics (e.g., parents' warmth or emotional support). Second, the sex of the parent who was perceived to be engaging in rejecting behaviors made a difference for adolescents' internalizing problems depending on grade level. That rejection was selected as the most influential variable in both cohorts was supported strongly by the research literature.

In general, secure parent-child relationships were considered to be a protective factor against internalizing problems in children and adolescents (Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990; Lynch & Cicchetti, 2002). Further, research suggested that adolescents who perceived their parents to be rejecting were less likely to have a secure attachment, ultimately putting them at risk for internalizing problems as well (Armsden et al., 1990). Further, as discussed earlier, a number of studies also revealed findings regarding parental rejection in particular. For example, parental rejection was associated with generalized anxiety (Hale et al., 2006) and depressive symptoms (Hale et al., 2005; Monshouwer et al., 2012) in adolescents. Future research should examine cost effective ways that large scale prevention efforts within middle schools can incorporate parental awareness about the effects of rejecting behaviors on adolescents' experience of internalizing problems and provide parents with alternative strategies for interacting with and valuing their teens.

Interestingly, the predictive value of rejection for adolescents' internalizing problems shifted from Mothers' Rejection being the most significant predictor of Sixth Graders' problems to Fathers' Rejection being a significant predictor in the Eighth Grade cohort. A similar trend was noted when correlational analyses were examined. In particular, Fathers' Rejection was

correlated more strongly with internalizing problems in the Eighth Grade cohort when compared to the Sixth Grade cohort. Thus, a conceptualization using role theory can be applied (Hosley & Montemayor, 1997). Specifically, it may be that younger adolescents have been socialized to rely on and expect that their mothers will provide them with warmth and acceptance. When Sixth Graders perceive that their mothers are less accepting and more rejecting, internalizing problems, such as anxiety and depressed mood, may increase. However, as adolescents progress through their middle school years, it may be that the continued lack of acceptance from fathers begins to take its toll, particularly as adolescents face more discipline-oriented interactions as they strive for autonomy. Future research should examine longitudinally the differential effects of mothers' and fathers' rejection to further parse out the findings of the current study.

A final note regarding the addition of Fathers' Rejection to the Sixth Grade model of internalizing problems is warranted. This variable was selected as the final predictor of internalizing problems. Further, a negative relationship was indicated, suggesting that higher levels of perceived rejection from fathers were predictive of lower levels of self-reported internalizing problems. Thus, it appeared that, after controlling for the other variables entered into the regression equation, the direction of this particular variable changed. Such phenomena occasionally occur when applying stepwise regression techniques (Field, 2005) and may be a result of suppression effects or a chance finding. In this study, however, it may be that rejection from fathers may not have the same impact on ethnically grounded families when mothers already have demonstrated rejecting behaviors. Future research should move to replicate this finding before more solid interpretations can be made.

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In addition to rejection, a second parenting characteristic, Fathers' Authoritarian Parenting, was selected as an important statistical predictor of internalizing problems in the Eighth Grade cohort. The research literature supported the association between an authoritarian parenting style (e.g., high control and low warmth) and internalizing problems, suggesting that children of authoritarian parents were less likely to have social confidence (Lamborn et al., 1991) and are at greater risk for anxiety (Wolfradt et al., 2003) and depression (Joshi et al., 2009). It was possible that fathers' authoritarian parenting style was a significant predictor in the Eighth Grade cohort for similar reasons to those discussed in the context of the greater magnitude of the association between fathers' authoritarian parenting style and internalizing problems in the Eighth Grade cohort (relative to the Sixth Grade cohort). Namely, as adolescents progress through their middle school years, the punitive style of parenting that characterizes the authoritarian parenting style becomes increasingly problematic as teens are developing their own identities and sense of autonomy (Sussman et al., 2007). This finding further highlighted the importance of parent education regarding effective and adaptive parenting styles. Although authoritarian parenting did not show a significant relationship to internalizing problems until the Eighth Grade in this study, it would be beneficial for psychoeducation to occur when adolescents are just entering middle school and before problematic effects of such a parenting style begin to emerge.

The final significant predictor in the overall model examining the influence of variables on internalizing problems was ethnic identity. This variable was selected as a significant predictor of internalizing problems in the Sixth Grade cohort. Specifically, as adolescents' ethnic identity (e.g., adherence and commitment to their identity) increased, internalizing problems also

increased. As discussed earlier, the relation between ethnic identity and internalizing problems was mixed within the literature. The findings in the current study likely were mediated by more proximal variables, such as Sixth Graders' fragile self-esteem and sense of self as well as their need to fit in or blend in socially. As middle school students approach the end of middle school, it is likely that their identity is more stable and that individual differences between themselves and fellow students is embraced. It also could be that a true iatrogenic effect was being demonstrated in this study, as some literature suggested that such an effect existed between internalizing problems and ethnic identity (Kidwell et al., 1995).

Although there was literature examining externalizing problems within the context of an ecological framework, less has been understood about how such a framework can be applied to internalizing problems. The findings from the current study, in which an overall ecological model was tested, may reflect the position in the field that parents' characteristics are of primary importance regarding their adolescents' internalizing problems (Greenberg et al., 1983; Raja et al., 1992), with ethnic identity playing a minor predictive role in the Sixth Grade cohort as well. Although these findings did not support the idea that variables from each level of an ecological framework have direct predictive power, the ecological model should not be discounted when considering the development of internalizing problems. Future research should turn its focus to the examination of the indirect relationships that variables such as community support and acculturation play in internalizing problems across grades in middle school.

Regarding externalizing problems, the overall hypothesis was supported partially as well. Specifically, parenting variables alone accounted for the largest portion of variance in the Sixth Grade cohort, whereas Teachers' Support and Fathers' Warmth were selected as the most

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significant predictors in the Eighth Grade cohort. Regarding the Sixth Grade model, Mothers'

Rejection and Permissive Parenting were selected as most important for predicting externalizing

problems. This model highlighted the important role that the parent-child relationship

(particularly the mother-child relationship) plays for young adolescents. The finding that

mothers' rejection significantly predicted externalizing problems in adolescence was supported

by literature that adolescents who perceived their parents as rejecting were more likely to be

aggressive (Akse et al., 2004) and delinquent (Barnow et al., 2005) and to have behavior

problems overall (Sentse et al., 2009). Similarly, the permissive parenting style (e.g., low control

and high warmth) also was associated with externalizing problems, such as school misbehavior,

substance use and experimentation, delinquency, and association with deviant peers (Lamborn et

al., 1991).

It may be that only Sixth Graders' externalizing problems were related to mothers'

rejection and permissive parenting due to developmental differences between Sixth and Eighth

Grade students. As discussed throughout this paper, socialization may play a role in young

adolescents' development of maladjustment when they perceive their mothers as being

particularly lacking in acceptance. Mothers often are considered to be the expected caretaker and

provider of warmth and emotional support. Thus, when acceptance is not provided, young

adolescents may seek attention by misbehaving and acting out. Further, that mothers' permissive

parenting only predicted problems in the Sixth Grade cohort supported the idea that Sixth

Graders continue to need guidance, structure, and support from their parents (Way et al., 2007)

and that behavior problems may ensue when such structure is lacking, especially from mothers.

As middle school aged students develop and mature, it may be that the permissive parenting style

becomes less important because other variables (e.g., perceived support for community members) plays a more central role.

In fact, when the overall Eighth Grade model was examined, Teachers' Support was selected as the most important predictor of externalizing problems, followed by Fathers' Warmth. Specifically, as perceptions of teacher support increased, externalizing problems decreased in the current sample. The relationship between fathers' warmth and externalizing problems also was negative. The contrast between the Sixth Grade and Eighth Grade models was striking and supported the position that community variables became more central to adolescent adjustment for a later grade level (in this case, Eighth Grade). The relation between teachers' support and externalizing problems also was supported in the literature, suggesting that adolescents who perceived lower levels of support from teachers were more likely to have behavior problems and issues with self-esteem (Hoge et al., 1990; Ryan et al., 1994; Way et al., 2007).

The finding that teachers' support was a significant predictor for externalizing problems in the Eighth Grade cohort had important significance for this study. Much has been discussed in the literature regarding the important transitions that occur for adolescents as they enter middle school and high school. However, little has been mentioned about the unique and subtle changes that happen within the middle school environment that could have important implications for prevention and intervention of adolescent maladjustment. In particular, findings from the overall model supported the idea that, as adolescents progress through middle school, an important phenomenon occurs. Namely, the influence of community support (i.e., teachers' support, in this case) strengthens and begins to have implications for adolescents' adjustment. Although the

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literature strongly supported the linkage between community support variables and externalizing problems in adolescence, the first study examined directly these relationships as they occur within the middle school environment in Sixth and Eighth grade cohorts.

The findings from the overall model regarding externalizing problems also suggested that parenting continued to be important for younger adolescents and thus should be the focus of future prevention and intervention efforts for these age groups. As adolescents move through middle school and teachers' support becomes more salient for externalizing problems, interventions may need to shift. Specifically, resources for teachers, such as education about the importance of teacher support for adolescent adjustment, safeguards against teacher burnout, and smaller class sizes all could be worthwhile prevention efforts. Thus, more work needs to be done to tailor prevention and intervention efforts to foster the best possible outcomes for our adolescents as they transition through middle school.

Limitations

Although the current study added to the extant literature in very important ways, it was not without limitations. First, the current study was correlational in nature, thus making causal inferences impossible. Although the cross-sectional design provided some insight into changes that may occur over time, future research should incorporate a longitudinal design in which adolescents are followed across all three middle school years and surveyed at multiple points.

Second, the utilization of a stepwise regression was beneficial for understanding the different ways in which variables from an ecological model were related to adolescent adjustment; however, this statistical technique has been criticized in the field for being difficult to generalize to different samples. Although generalizability tests were run for the current sample

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(utilizing a 75/25 split approach), results were inconclusive, as there was not enough power when only utilizing a quarter of the current sample from this study. Future research should focus on replicating the current results with other samples as a means of testing the generalizability of the current findings.

Third, the current study used a single informant (i.e., the adolescent). Richer conclusions could be made by future research that includes input from parents, teachers, and even peers. Similarly, the current study used only one type of measurement (i.e., self-report questionnaires). As a result, future research should work to include behavioral observations, individual interviews, and other forms of measurement to make richer conclusions about the complex relationships among different levels of the ecological model and adolescent adjustment.

Lastly, the cross-sectional nature of the current study could present a potential confound. Further, Sixth Grade student data was collected near the beginning of their school year, whereas the Eighth Grade student data was collected near the end of the school year. Thus, grade may have been confounded with time in the school year. As a result, the variables collected could potentially be influenced by this timeframe and not be generalizable to Sixth and Eighth Grade students at different times of the school year.

Conclusion and Future Directions

Despite its limitations, the current study added new and important insights to the literature regarding adolescent adjustment in middle school. Although longitudinal studies exist in which different factors from the adolescent environment were examined, the current study utilized a cross-sectional approach to examine the predictive significance of variables across each level of an ecological framework. That two different developmental points in time within

the middle school context were examined was an important addition to the literature. Specifically, the current study sampled Sixth Graders within their very first semester of middle school. This time point is crucial given the major transitions that middle school aged adolescents are experiencing socially, academically, and internally (Way et al., 2007). Similarly, Eighth Graders were sampled within their very last semester of middle school at a point in time when they are preparing actively for their new transition to high school.

Given these unique characteristics of this study, the findings reported here provided a unique view of how adolescents differ as they begin and complete their middle school experience. In addition to supporting the continued study and implementation of multisystemic prevention and intervention efforts, the current study highlighted the importance of individualized treatment, even within the developmental period during middle school. Regarding internalizing problems, Sixth Grade students were likely to benefit from approaches that include parent psychoeducation at the microsystem level and larger scale efforts to celebrate and appreciate ethnic identity, individuality, and cultural differences. In contrast, Eighth Graders were likely to benefit from bolstered efforts to enhance perceptions of support from teachers, classmates, and close peers to protect them from the experience of internalizing problems.

Regarding externalizing problems, both grade cohorts would benefit from prevention and intervention efforts targeted at parenting practices, specifically as they relate to the parent-child relationship. Further, Sixth Graders would benefit from macro-level approaches to continue embracing and understanding ethnic and cultural differences. Lastly, both cohorts may benefit from continued efforts to promote support and efficacy from fellow teachers, classmates, and

close peers. Such ecological approaches likely will continue to benefit adolescents' adjustment as more specific targets are identified and addressed in future prevention and intervention efforts.

APPENDIX A: PARENT INFORMED CONSENT

Adolescent Characteristics

Informed Consent

Principal Investigator(s): Rachel White, M.S.

Faculty Supervisor: Kimberly Renk, Ph.D.

Investigational Site(s): University of Central Florida;
Respective Middle Schools Who Have Agreed to Participate

How to Return this Consent Form: Please read over the consent form carefully and sign at the end. Please return the consent form to your adolescent's school teacher.

Introduction: Researchers at the University of Central Florida (UCF) study many topics. To do this, we need the help of people who agree to take part in our research studies. You are being asked to allow your adolescent to take part in a research study, which will be recruiting 140 adolescents who are in Middle School. Your adolescent is being invited to take part in this research study because his or her Middle School was willing to send our consent forms to you.

The person doing this research is Rachel White, a graduate student in the Psychology Department at UCF. Because Ms. White is a graduate student, her work is being supervised by Kimberly Renk, Ph.D., an Associate Professor in the Psychology Department at UCF.

What you should know about a research study:
- This document will explain this research study to you.
- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should allow your child to take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide it will not be held against you or your child.

- Feel free to ask all the questions you want before you decide.

Purpose of this research study: The purpose of this research study is to investigate how adolescents view family characteristics, teacher characteristics, peer characteristics, their own personal characteristics (such as culture and ethnicity) and how all of those are related to their personal experiences with emotional and/or behavioral problems. We hope that the information gained from this study can be used in the context of future therapeutic interventions that are intended to change the outcomes experienced by adolescents who have emotional and behavioral problems.

What your adolescent will be asked to do in the study: Your adolescents will be asked to complete a packet of questionnaires as part of your participation in this study. First, your adolescents will be asked to fill out a questionnaire that asks them to describe themselves, such as their age, their gender, their current grade, as well as basic information about your family (e.g., parents' current occupations). Next, your adolescent will be asked to answer several questionnaires about their parents, teachers, peers, and their personal characteristics such as acculturation and ethnicity. More specifically, your adolescent will complete seven questionnaires regarding their 1) social and emotional development, 2) perceptions of the upbringing behavior of their parents, 3) perceptions of their mothers' and fathers' parenting styles, 4) perceived social support from their parents, teachers, and peers, 5) sense of group membership/affiliation and attitudes toward their own ethnic group, 6) attachment and belonging to their cultural community, and 7) use of the English language versus another language in various settings. Your adolescent does not have to answer every question or complete every task. You or your adolescent can discontinue your adolescents' participation at any time.

Location: Your adolescent will participate in this study at their respective middle school.

Time required: We expect that your adolescent will participant in this research study for approximately one hour during a non-academic class period.

Risks: Although we do not foresee any risks to your adolescent, some adolescents may be sensitive to some of the questions included in their packet of questionnaires (e.g., a question will ask about whether they know anyone who has had emotional and/or behavioral problems). If your adolescent is experiencing any emotional and/or behavioral problems currently, they may be especially sensitive to the content of our study. Any adolescents who find the study difficult to complete will be allowed to discontinue immediately and will be encouraged to discuss their concerns with their parents or guidance counselors. Further, if you feel that your adolescent would benefit from interventions that can address their emotional and/or behavioral functioning currently, you are welcome to contact the UCF Psychology Clinic at 407-823-4348. Please refer to http://www.psych.ucf.edu/clinic for more information about this clinic. You will be responsible for any costs associated with these interventions. You also should note that the

research team is required by Florida state law to report any possible instances of abuse or neglect that may be spontaneously disclosed by participants during the course of this research study.

Benefits: Beyond learning more about how research is conducted, your adolescent will not benefit directly from taking part in this research. However, it is hoped that the findings of this research study will benefit society at large by providing more information about adolescent adjustment and the impact of family, community, and culture. It also is hoped that the information collected as part of this study will inform current therapeutic interventions used with adolescents who are experiencing emotional and/or behavioral difficulties.

Compensation or payment: There is no compensation or other payment to you or your adolescent for their participation in this study.

Anonymity: We will limit the personal data collected about you adolescent as part of this study. Further, we will not be asking them to include their identity anywhere on their research packet. Thus, their name will not be linked to their questionnaire responses in any way and is considered anonymous. Organizations that may inspect and copy your information include the IRB and other representatives of UCF. If the research team uncovers any possible abuse or neglect of participants, the research team is required to report this information to the necessary authorities in order to comply with Florida law.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints, or if you think that this research study has hurt your adolescent, please contact: Kimberly Renk, Ph.D., Associate Professor and Faculty Supervisor, University of Central Florida Department of Psychology, by telephone at (407) 823-2218 or by email at krenk@ucf.edu.

IRB contact about you and your adolescent's rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:
- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

Withdrawing from the study: You or your adolescent may decide not to have your adolescent continue in the research study at any time. If you decide to have your adolescent leave this

research study, neither you nor your adolescent would suffer any adverse consequences. The person in charge of the research study can remove your adolescent from the research study without your approval. Possible reasons for removal include failure to follow the instructions of the research staff or disruption to the research process. We will tell you and your adolescent about any new information that may affect your adolescent's health, welfare, or your choice to have your adolescent stay in the research study.

Your signature below indicates your permission for the child named below to take part in this research. **PLEASE NOTE SIGNATURE GOES ON NEXT PAGE**

DO NOT SIGN THIS FORM AFTER THE IRB EXPIRATION DATE BELOW

_____
Name of participant

_____
Signature of parent or guardian   Date

❑ Parent
❑ Guardian (See note below)

_____
Printed name of parent or guardian

_____   _____

Assent
        ❑   Obtained

Note on permission by guardians: An individual may provide permission for a child only if that individual can provide a written document indicating that he or she is legally authorized to consent to the child's general medical care. Attach the documentation to the signed document.

APPENDIX B: CHILD ASSENT

Adolescent Adjustment
Assent

Principal Investigator(s):	Rachel White, M.S.
Faculty Supervisor:	Kimberly Renk, Ph.D.
Investigational Site(s):	University of Central Florida;
	Respective High Schools Who Have Agreed to Participate

Introduction: Researchers at the University of Central Florida (UCF) study many topics. To do this, we need the help of people who agree to take part in our research studies. You are being asked to take part in a research study because you are a middle school student. The person doing this research is Rachel White, a graduate student in the Psychology Department at UCF. Because Ms. White is a graduate student, her work is being supervised by Kimberly Renk, Ph.D., an Associate Professor in the Psychology Department at UCF.

Purpose of this research study: The purpose of this research study is to investigate how adolescents view family characteristics, teacher characteristics, peer characteristics, their own personal characteristics (such as culture and ethnicity) and how all of those are related to their personal experiences with emotional and/or behavioral problems. We hope that the information gained from this study can be used in the context of future therapeutic interventions that are intended to change the outcomes experienced by adolescents who have emotional and behavioral problems.

What you will be asked to do in this study?: You will be asked to complete a packet of questionnaires as part of your participation in this study. First, you will be asked to fill out a questionnaire that asks for you to describe yourself, such as your age, your gender, your current grade, and your parent's occupation and years of schooling. Next, you will be asked to answer several questionnaires about your parents, teachers, peers, and your personal characteristics such as acculturation and ethnicity. Finally, you will be asked to complete questionnaires about your current emotions and behaviors. Please keep in mind that there are several questionnaires that will ask you about your parents. If you do not live with your biological parents now, please rate whomever you consider to be your father or mother (e.g., adoptive parent, step-parent, etc.). If you do not have a mother or father figure in your life currently, write "N/A" next to that column. You do not have to answer every question or complete every questionnaire. You can stop participating at any time.

Anonymity: To ensure that your answers remain anonymous, we ask that you **do not** include your name on any of the questionnaires.

Withdrawing from the study: You can decide to not to participate in this study or to stop your participation at any time. If you decide to withdraw from the study, there will be no penalty to you. Just indicate your decision to one of the investigators available in your session.

Risks: Although we don't anticipate any risks to you for participating in this research study, there may be some sensitive questions included in the questionnaires. If you experience any difficulty completing the study questions, please contact a member of the research team or your school guidance counselor for assistance.

APPENDIX C. DEMOGRAPHICS INFORMATION AND SOCIOECONOMIC STATUS

Demographics Information

Please complete each question to the best of your knowledge either by circling the appropriate answer or filling in the appropriate description. If an item is unclear, please ask the examiner for clarification.

1.   Age: _____

2.   Gender: Male   Female

3.   Race: Caucasian/White   African American/Black   Hispanic   Asian

        Other: _____ (Please describe)

4.   Do you live in the same house as your father: Yes   No

5.   Do you live in the same house as your mother: Yes   No

6.   On average, how many **hours per day** do you spend with or talk to your **father**:

No time	Between 0 and 1	Between 1 and 2	Between 2 and 3
Between 3 and 4	Between 4 and 5	Between 5 and 6	Between 6 and 7
Between 7 and 8	Between 8 and 9	Between 9 and 10	Greater than 10

7.   On average, how many **hours per day** do you spend with or talk to your **mother**:

No time	Between 0 and 1	Between 1 and 2	Between 2 and 3
Between 3 and 4	Between 4 and 5	Between 5 and 6	Between 6 and 7
Between 7 and 8	Between 8 and 9	Between 9 and 10	Greater than 10

8.   How many brothers do you have: ___   Please give their ages: _____

9.   How many sisters do you have: _____   Please give their ages: _____

10.   **Father's** highest level of education:

    Doctoral degree   Master's degree   Bachelor degree

    Associates degree   High School diploma/GED

    If none of the above, please indicate highest grade completed: _____

11.   **Mother's** highest level of education:

    Doctoral degree   Master's degree   Bachelor degree

    Associates degree   High School diploma/GED

    If none of the above, please indicate highest grade completed: _____

12.   What is your **father's** job: _____

13. What is your **mother's** job: _____

14. What zip code do you live in (e.g., 32792)? _____

15. Does your family own a car, van, or truck?   Yes   No

16. Does your family own a house?   Yes   No

17. Do you have your own bedroom to yourself?   Yes   No

18. During the past 12 months, how many times did you travel away on vacation with your family?
    1. Not at all
    2. Once
    3. Twice
    4. More than twice

19. How many computers does your family own?_____

7sAPPENDIX D. YOUTH SELF-REPORT

Please print   YOUTH SELF-REPORT FOR AGES 11-18

For office use only
ID #

YOUR FULL NAME	First	Middle	Last

PARENTS' USUAL TYPE OF WORK, even if not working now. (Please be specific — for example, auto mechanic, high school teacher, homemaker, laborer, lathe operator, shoe salesman, army sergeant.)

YOUR GENDER ☐ Boy ☐ Girl	YOUR AGE	YOUR ETHNIC GROUP OR RACE

FATHER'S TYPE OF WORK _____

MOTHER'S TYPE OF WORK _____

TODAY'S DATE
Mo. _____ Date _____ Yr. _____

YOUR BIRTHDATE
Mo. _____ Date _____ Yr. _____

GRADE IN SCHOOL _____

NOT ATTENDING SCHOOL ☐

IF YOU ARE WORKING, PLEASE STATE YOUR TYPE OF WORK:

Please fill out this form to reflect *your* views, even if other people might not agree. Feel free to print additional comments beside each item and in the spaces provided on pages 2 and 4. *Be sure to answer all items.*

I. Please list the sports you most like to take part in. For example: swimming, baseball, skating, skate boarding, bike riding, fishing, etc.

☐ None

a. _____
b. _____
c. _____

Compared to others of your age, about how much time do you spend in each?

	Less Than Average	Average	More Than Average
a.	☐	☐	☐
b.	☐	☐	☐
c.	☐	☐	☐

Compared to others of your age, how well do you do each one?

	Below Average	Average	Above Average
a.	☐	☐	☐
b.	☐	☐	☐
c.	☐	☐	☐

II. Please list your favorite hobbies, activities, and games, other than sports. For example: cards, books, piano, cars, computers, crafts, etc. (Do *not* include listening to radio or watching TV.)

☐ None

a. _____
b. _____
c. _____

Compared to others of your age, about how much time do you spend in each?

	Less Than Average	Average	More Than Average
a.	☐	☐	☐
b.	☐	☐	☐
c.	☐	☐	☐

Compared to others of your age, how well do you do each one?

	Below Average	Average	Above Average
a.	☐	☐	☐
b.	☐	☐	☐
c.	☐	☐	☐

III. Please list any organizations, clubs, teams, or groups you belong to.

☐ None

a. _____
b. _____
c. _____

Compared to others of your age, how active are you in each?

	Less Active	Average	More Active
a.	☐	☐	☐
b.	☐	☐	☐
c.	☐	☐	☐

IV. Please list any jobs or chores you have. For example: paper route, babysitting, making bed, working in store, etc. (Include **both** paid and unpaid jobs and chores.)

☐ None

a. _____
b. _____
c. _____

Compared to others of your age, how well do you carry them out?

	Below Average	Average	Above Average
a.	☐	☐	☐
b.	☐	☐	☐
c.	☐	☐	☐

Be sure you answered all items. Then see other side.

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V. 1. About how many close friends do you have? (Do *not* include brothers & sisters)

☐ None   ☐ 1   ☐ 2 or 3   ☐ 4 or more

2. About how many times a week do you do things with any friends outside of regular school hours?

(Do *not* include brothers & sisters)   ☐ Less than 1   ☐ 1 or 2   ☐ 3 or more

VI. Compared to others of your age, how well do you:

	Worse	Average	Better	
a. Get along with your brothers & sisters?	☐	☐	☐	☐ I have no brothers or sisters
b. Get along with other kids?	☐	☐	☐	
c. Get along with your parents?	☐	☐	☐	
d. Do things by yourself?	☐	☐	☐	

VII. 1. Performance in academic subjects.   ☐ I do not attend school because _____

Other academic subjects—for example: computer courses, foreign language, business. Do *not* include gym, shop, driver's ed., or other nonacademic subjects.

Check a box for each subject that you take	Failing	Below Average	Average	Above Average
a. English or Language Arts	☐	☐	☐	☐
b. History or Social Studies	☐	☐	☐	☐
c. Arithmetic or Math	☐	☐	☐	☐
d. Science	☐	☐	☐	☐
e. _____	☐	☐	☐	☐
f. _____	☐	☐	☐	☐
g. _____	☐	☐	☐	☐

Do you have any illness, disability, or handicap?   ☐ No   ☐ Yes—please describe:

Please describe any concerns or problems you have about school:

Please describe any other concerns you have:

Please describe the best things about youself:

Be sure you answered all items.

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Below is a list of items that describe kids. For each item that describes you *now or within the past 6 months*, please circle the **2** if the item is *very true or often true* of you. Circle the **1** if the item is *somewhat or sometimes true* of you. If the item is *not true* of you, circle the **0**.

0 = Not True	1 = Somewhat or Sometimes True	2 = Very True or Often True

0 1 2	1. I act too young for my age		0 1 2	33. I feel that no one loves me
0 1 2	2. I drink alcohol without my parents' approval (describe): _____		0 1 2	34. I feel that others are out to get me
			0 1 2	35. I feel worthless or inferior
	_____		0 1 2	36. I accidentally get hurt a lot
0 1 2	3. I argue a lot		0 1 2	37. I get in many fights
0 1 2	4. I fail to finish things that I start		0 1 2	38. I get teased a lot
0 1 2	5. There is very little that I enjoy		0 1 2	39. I hang around with kids who get in trouble
0 1 2	6. I like animals		0 1 2	40. I hear sounds or voices that other people think aren't there (describe): _____
0 1 2	7. I brag			
0 1 2	8. I have trouble concentrating or paying attention			_____
0 1 2	9. I can't get my mind off certain thoughts; (describe): _____		0 1 2	41. I act without stopping to think
			0 1 2	42. I would rather be alone than with others
	_____			
0 1 2	10. I have trouble sitting still		0 1 2	43. I lie or cheat
0 1 2	11. I'm too dependent on adults		0 1 2	44. I bite my fingernails
0 1 2	12. I feel lonely		0 1 2	45. I am nervous or tense
0 1 2	13. I feel confused or in a fog		0 1 2	46. Parts of my body twitch or make nervous movements (describe): _____
0 1 2	14. I cry a lot			
0 1 2	15. I am pretty honest			_____
0 1 2	16. I am mean to others			
0 1 2	17. I daydream a lot		0 1 2	47. I have nightmares
0 1 2	18. I deliberately try to hurt or kill myself		0 1 2	48. I am not liked by other kids
0 1 2	19. I try to get a lot of attention		0 1 2	49. I can do certain things better than most kids
0 1 2	20. I destroy my own things		0 1 2	50. I am too fearful or anxious
0 1 2	21. I destroy things belonging to others		0 1 2	51. I feel dizzy or lightheaded
0 1 2	22. I disobey my parents		0 1 2	52. I feel too guilty
0 1 2	23. I disobey at school		0 1 2	53. I eat too much
0 1 2	24. I don't eat as well as I should		0 1 2	54. I feel overtired without good reason
0 1 2	25. I don't get along with other kids		0 1 2	55. I am overweight
0 1 2	26. I don't feel guilty after doing something I shouldn't			56. Physical problems *without known medical cause:*
0 1 2	27. I am jealous of others		0 1 2	a. Aches or pains (*not* stomach or headaches)
0 1 2	28. I break rules at home, school, or elsewhere		0 1 2	b. Headaches
0 1 2	29. I am afraid of certain animals, situations, or places, other than school (describe): _____		0 1 2	c. Nausea, feel sick
			0 1 2	d. Problems with eyes (*not* if corrected by glasses) (describe): _____
	_____		0 1 2	e. Rashes or other skin problems
0 1 2	30. I am afraid of going to school		0 1 2	f. Stomachaches
0 1 2	31. I am afraid I might think or do something bad		0 1 2	g. Vomiting, throwing up
0 1 2	32. I feel that I have to be perfect		0 1 2	h. Other (describe): _____

APPENDIX E. MY MEMORIES OF UPBRINGING

My Memories of Upbringing

Below are a number of questions concerning your childhood and adolescence. For each question circle the response that best applies to your mother's and father's behavior towards you. Read through each question carefully and consider which one of the possible answers applies to you. **Answer separately for your mother and your father.** If you are not living with your biological parents now, please rate whomever you consider to be your father or mother (e.g., adoptive parent, step-parent, etc.). If you do not have a mother or father figure in your life currently, write "N/A" next to that column.

1	2	3	4
No, never	**Yes, but rarely**	**Yes, often**	**Yes, most of the time**

	Mother	Father
1. My parents are sour or angry with me without letting me know the cause.	1 2 3 4	1 2 3 4
2. My parents praise me.	1 2 3 4	1 2 3 4
3. I wish my parents would worry less about what I was doing.	1 2 3 4	1 2 3 4
4. My parents give me more corporal punishment than I deserve.	1 2 3 4	1 2 3 4
5. When I come home, I have to account for what I have been doing, to my parents.	1 2 3 4	1 2 3 4
6. I think that my parents try to make my adolescence stimulating, interesting, and instructive (for instance by giving me good books, arranging for me to go on camping trips, and taking me to clubs).	1 2 3 4	1 2 3 4
7. My parents criticize me and tells me how lazy and useless I am in front of others.	1 2 3 4	1 2 3 4
8. My parents forbid me to do things other adolescents are allowed to do because they are afraid that something might happen to me.	1 2 3 4	1 2 3 4
9. My parents try to spur me to become to best.	1 2 3 4	1 2 3 4
10. My parents look sad or in some other way show me that I have behaved badly so that I get real feelings of guilt.	1 2 3 4	1 2 3 4
11. I think my parents' anxiety that something might happen to me is exaggerated.	1 2 3 4	1 2 3 4
12. If things go badly for me, I feel that my parents try to comfort and encourage me.	1 2 3 4	1 2 3 4
13. I am treated as the "black sheep" or "scapegoat" of the family by my parents.	1 2 3 4	1 2 3 4
14. My parents show with words and gestures that they like me.	1 2 3 4	1 2 3 4
15. I feel that my parents like my brother(s) and/or sister(s) more than they like me.	1 2 3 4	1 2 3 4

16. My parents treat me in such a way that I feel ashamed.	1 2 3 4	1 2 3 4
17. I am allowed to go where I like without my parents caring too much.	1 2 3 4	1 2 3 4
18. I feel that my parents interfere with everything I do.	1 2 3 4	1 2 3 4
19. I feel that warmth and tenderness exist between me and my parents.	1 2 3 4	1 2 3 4
20. My parents put decisive limits for what I am and am not allowed to do, to which they then adhere to rigorously.	1 2 3 4	1 2 3 4
21. My parents punish me hard, even for small offenses.	1 2 3 4	1 2 3 4
22. My parents want to decide how I should be dressed or how I should look.	1 2 3 4	1 2 3 4
23. I feel that my parents are proud when I succeed in something I have undertaken.	1 2 3 4	1 2 3 4

APPENDIX F. PARENTAL AUTHORITY QUESTIONNAIRE

PAQ

Instructions: In this questionnaire, you will read statements about your parents. You will be asked to rate your *Mother's* and *Father's* behavior. For all questions, answer the statement as to how each parent acts toward you and circle your answer. If you are not living with your biological parents now, please rate whomever you consider to be your father or mother (e.g., adoptive parent, step-parent, etc.). If you do not have a mother or father figure in your life currently, write "N/A" next to that column.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

	My Mother	My Father
1. Feels that in a well run home the children should have their way in the family as often as parents do.	1 2 3 4 5	1 2 3 4 5
2. Even if children don't agree, feels that it is for our own good if we are forced to conform to what he/she thinks is right.	1 2 3 4 5	1 2 3 4 5
3. Whenever he/she tells me to do something, expects me to do it immediately without asking any questions.	1 2 3 4 5	1 2 3 4 5
4. Once family policy has been established, discusses the reasoning behind the policy with the children in the family.	1 2 3 4 5	1 2 3 4 5
5. Always encourages verbal give-and-take whenever I feel that family rules are unreasonable.	1 2 3 4 5	1 2 3 4 5
6. Feels that what children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want.	1 2 3 4 5	1 2 3 4 5
7. Does not allow me to question any decision he/she makes.	1 2 3 4 5	1 2 3 4 5
8. Directs the activities and decisions of the children in the family through reasoning and discipline.	1 2 3 4 5	1 2 3 4 5
9. Feels that more force should be used by parents in order to get their children to behave the way they are supposed to.	1 2 3 4 5	1 2 3 4 5
10. Does not feel that I need to obey rules and regulations of behavior simply because someone in authority has established them.	1 2 3 4 5	1 2 3 4 5
11. I know what he/she expects of me in my family, but I also feel free to discuss those expectations when I feel they are unreasonable.	1 2 3 4 5	1 2 3 4 5

12. Feels that wise parents should teach their children early just who is boss in the family.	1 2 3 4 5	1 2 3 4 5	

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

	My Mother	My Father
13. Seldom gives me expectations and guidelines for my behavior.	1 2 3 4 5	1 2 3 4 5
14. Most of the time, does what the children in the family want when making family decisions.	1 2 3 4 5	1 2 3 4 5
15. Consistently gives the children in the family direction and guidance in rationale and objective ways.	1 2 3 4 5	1 2 3 4 5
16. Gets very upset if I try to disagree with him/her.	1 2 3 4 5	1 2 3 4 5
17. Feels that most problems in society would be solved if parents would not restrict their children's activities, decisions, and desires.	1 2 3 4 5	1 2 3 4 5
18. Lets me know what behavior he/she expects of me, and if I don't meet those expectations, punishes me.	1 2 3 4 5	1 2 3 4 5
19. Allows me to decide most things for myself without a lot of direction from him/her.	1 2 3 4 5	1 2 3 4 5
20. Takes the children's opinions into consideration when making family decisions, but does not decide for something simply because the children want it.	1 2 3 4 5	1 2 3 4 5
21. Does not view himself/herself as responsible for directing and guiding my behavior.	1 2 3 4 5	1 2 3 4 5
22. Has clear standards of behavior for the children in our home, but is willing to adjust those standards to the needs of each of the individual children in the family.	1 2 3 4 5	1 2 3 4 5
23. Gives me direction for my behavior and activities and expects me to follow his/her direction, but is always willing to listen to my concerns and to discuss that direction with me.	1 2 3 4 5	1 2 3 4 5
24. Allows me to form my own point of view on family matters and generally allows me to decide for myself what I am going to do.	1 2 3 4 5	1 2 3 4 5
25. Feels that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to do.	1 2 3 4 5	1 2 3 4 5

	My Mother	My Father
26. Often tells me exactly what he/she wants me to do and how he/she expect me to do it.	1 2 3 4 5	1 2 3 4 5
27. Gives me clear direction for my behaviors and activities, but is also understanding when I disagree with him/her.	1 2 3 4 5	1 2 3 4 5

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

	My Mother	My Father
28. Does not direct the behaviors, activities, and desires of the children in the family.	1 2 3 4 5	1 2 3 4 5
29. I know what he/she expects of me in the family and he/she insists that I conform to those expectations simply out of respect for his/her authority.	1 2 3 4 5	1 2 3 4 5
30. If he/she makes a decision in the family that hurts me, he/she is willing to discuss that decision with me and to admit it if he/she makes a mistake.	1 2 3 4 5	1 2 3 4 5

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APPENDIX G. CHILD AND ADOLESCENT SOCIAL SUPPORT SCALE

CASSS

Instructions: In this section, you will answer questions about your parents, teachers, classmates, and a close friend. For each statement, circle the response that best describes your feelings about each item and how important each item is to you.

How Often?	1	2	3	4	5	6
	Never	Very Rarely	Rarely	Occasionally	Very Frequently	Always

	1	2	3	4	5
How Important this is to you?	Not at all	Somewhat	Fairly	Very	Extremely

My Father	How often	Importance
1. Express pride in me	1 2 3 4 5 6	1 2 3 4 5
2. Help me practice things	1 2 3 4 5 6	1 2 3 4 5
3. Make suggestions when I'm uncertain	1 2 3 4 5 6	1 2 3 4 5
4. Help me make decisions	1 2 3 4 5 6	1 2 3 4 5
5. Give me good advice	1 2 3 4 5 6	1 2 3 4 5
6. Help me make up my mind	1 2 3 4 5 6	1 2 3 4 5
7. Help me find answers	1 2 3 4 5 6	1 2 3 4 5
8. Praise me when I do a good job	1 2 3 4 5 6	1 2 3 4 5
9. Politely point out my mistakes	1 2 3 4 5 6	1 2 3 4 5
10. Tell me how well I do on tasks	1 2 3 4 5 6	1 2 3 4 5

My Mother	How often	Importance
1. Express pride in me	1 2 3 4 5 6	1 2 3 4 5
2. Help me practice things	1 2 3 4 5 6	1 2 3 4 5
3. Make suggestions when I'm uncertain	1 2 3 4 5 6	1 2 3 4 5
4. Help me make decisions	1 2 3 4 5 6	1 2 3 4 5
5. Give me good advice	1 2 3 4 5 6	1 2 3 4 5
6. Help me make up my mind	1 2 3 4 5 6	1 2 3 4 5
7. Help me find answers	1 2 3 4 5 6	1 2 3 4 5
8. Praise me when I do a good job	1 2 3 4 5 6	1 2 3 4 5
9. Politely point out my mistakes	1 2 3 4 5 6	1 2 3 4 5

10. Tell me how well I do on tasks	1 2 3 4 5 6	1 2 3 4 5

How Often?	1	2	3	4	5	6
	Never	**Very Rarely**	**Rarely**	**Occasionally**	**Very Frequently**	**Always**

How Important this is to you?	1	2	3	4	5
	Not at all	**Somewhat**	**Fairly**	**Very**	**Extremely**

My Teachers…	How often	Importance
11. Listen if I'm upset or have a problem	1 2 3 4 5 6	1 2 3 4 5
12. Care about me	1 2 3 4 5 6	1 2 3 4 5
13. Are fair to me	1 2 3 4 5 6	1 2 3 4 5
14. Understand me	1 2 3 4 5 6	1 2 3 4 5
15. Explain things when I'm confused	1 2 3 4 5 6	1 2 3 4 5
16. Show me how to do things	1 2 3 4 5 6	1 2 3 4 5
17. Give good advice	1 2 3 4 5 6	1 2 3 4 5
18. Help me when I want to learn to do something better	1 2 3 4 5 6	1 2 3 4 5
19. Help me solve problems by giving me information	1 2 3 4 5 6	1 2 3 4 5
20. Praise me when I've tried hard or done well	1 2 3 4 5 6	1 2 3 4 5

My Classmates…	How often	Importance
21. Act nice to me	1 2 3 4 5 6	1 2 3 4 5
22. Ask me to join activities	1 2 3 4 5 6	1 2 3 4 5
23. Do nice things for me	1 2 3 4 5 6	1 2 3 4 5
24. Spend time doing things with me	1 2 3 4 5 6	1 2 3 4 5
25. Help me with projects in class	1 2 3 4 5 6	1 2 3 4 5
26. Make suggestions when I need help	1 2 3 4 5 6	1 2 3 4 5
27. Treat me with respect	1 2 3 4 5 6	1 2 3 4 5
28. Tell me how to do new things	1 2 3 4 5 6	1 2 3 4 5
29. Say nice things to me when I have done something well	1 2 3 4 5 6	1 2 3 4 5

30. Give me positive attention	1 2 3 4 5 6	1 2 3 4 5

How Often?	1	2	3	4	5	6
	Never	**Very Rarely**	**Rarely**	**Occasionally**	**Very Frequently**	**Always**

	1	2	3	4	5
How Important this is to you?	**Not at all**	**Somewhat**	**Fairly**	**Very**	**Extremely**

My Close Friend…	How often	Importance
31. Understands my feelings	1 2 3 4 5 6	1 2 3 4 5 6
32. Makes me feel better when I mess up	1 2 3 4 5 6	1 2 3 4 5 6
33. Helps me solve my problems	1 2 3 4 5 6	1 2 3 4 5 6
34. Shows me how to do new things	1 2 3 4 5 6	1 2 3 4 5 6
35. Sticks up for me when others don't	1 2 3 4 5 6	1 2 3 4 5 6
36. Spends time with me when I'm lonely	1 2 3 4 5 6	1 2 3 4 5 6
37. Helps me when I need it	1 2 3 4 5 6	1 2 3 4 5 6
38. Asks if I need help	1 2 3 4 5 6	1 2 3 4 5 6
39. Tells me he or she likes what I do	1 2 3 4 5 6	1 2 3 4 5 6
40. Accepts me when I make a mistake	1 2 3 4 5 6	1 2 3 4 5 6

APPENDIX H. MULTIGROUP ETHNIC IDENTITY MEASURE

MEIM

Instructions: Circle the response that best corresponds with you in regards to your *ethnicity*:

1	2	3	4	5
Strongly Disagree	**Disagree**	**Neither Agree or Disagree**	**Agree**	**Strongly Agree**

1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.	1 2 3 4 5
2. I have a strong sense of belonging to my ethnic group.	1 2 3 4 5
3. I understand pretty well what my ethnic group membership means to me.	1 2 3 4 5
4. I have often done things that will help me understand my ethnic background better.	1 2 3 4 5
5. I have often talked to other people in order to learn more about my ethnic group.	1 2 3 4 5
6. I feel a strong attachment towards my own ethnic group.	1 2 3 4 5

APPENDIX I. PSYCHOLOGICAL ACCULTURATION SCALE

PAS

Instructions: For each item, circle the number that best describes you.

1	2	3	4	5
Only with those that share an ethnic minority status with me		**Equally with the American majority/culture and an ethnic minority**		**Only with the American/majority culture**

1. With which group(s) of people do you feel you share most of your beliefs and values?	1 2 3 4 5
2. With which group(s) of people do you feel you have the most in common?	1 2 3 4 5
3. With which group(s) of people do you feel most comfortable?	1 2 3 4 5
4. In your opinion, which group(s) of people best understands your ideas (your way of thinking)?	1 2 3 4 5
5. Which culture(s) do you feel proud to be a part of?	1 2 3 4 5
6. In which culture(s) do you know how things are done and feel you can do them easily?	1 2 3 4 5
7. In which culture(s) do you feel confident that you know how to act?	1 2 3 4 5
8. In your opinion, which group(s) of people do you understand best?	1 2 3 4 5
9. In which culture(s) do you know what is expected of a person in various situations?	1 2 3 4 5
10. Which culture(s) do you know the most about the history, traditions, and customs, and so forth?	1 2 3 4 5

APPENDIX J. LANGUAGE SCALE

Language Scale

Instructions: Circle the answer that best describes which language you use in different situations.

1. In general, what language(s) do you read and speak?
    a. Only English
    b. English better than another language that I know (such as Spanish, French, or Chinese)
    c. Equally English and another language that I know
    d. Another language (such as Spanish, French, or Chinese) better than English
    e. Only another language (such as Spanish, French, or Chinese)

2. What language(s) do you usually speak at home?
    a. Only English
    b. English better than another language that I know (such as Spanish, French, or Chinese)
    c. Equally English and another language that I know
    d. Another language (such as Spanish, French, or Chinese) better than English
    e. Only another language (such as Spanish, French, or Chinese)

3. In which language(s) do you usually think?
    a. Only English
    b. English better than another language that I know (such as Spanish, French, or Chinese)
    c. Equally English and another language that I know
    d. Another language (such as Spanish, French, or Chinese) better than English
    e. Only another language (such as Spanish, French, or Chinese)

4. What language(s) do you usually speak with your friends?
    a. Only English
    b. English better than another language that I know (such as Spanish, French, or Chinese)
    c. Equally English and another language that I know
    d. Another language (such as Spanish, French, or Chinese) better than English
    e. Only another language (such as Spanish, French, or Chinese)

5. In what language(s) are the T.V. programs that you usually watch?
    a. Only English
    b. English better than another language that I know (such as Spanish, French, or Chinese)
    c. Equally English and another language that I know
    d. Another language (such as Spanish, French, or Chinese) better than English
    e. Only another language (such as Spanish, French, or Chinese)

6. In what language(s) are the radio programs you usually listen to?
   a. Only English
   b. English better than another language that I know (such as Spanish, French, or Chinese)
   c. Equally English and another language that I know
   d. Another language (such as Spanish, French, or Chinese) better than English
   e. Only another language (such as Spanish, French, or Chinese)

7. In general, in what language(s) are the movies, T.V., and radio programs that you *prefer* to watch and listen to?
   a. Only English
   b. English better than another language that I know (such as Spanish, French, or Chinese)
   c. Equally English and another language that I know
   d. Another language (such as Spanish, French, or Chinese) better than English
   e. Only another language (such as Spanish, French, or Chinese)

8. What language(s) do you usually speak in class with your teachers?
   a. Only English
   b. English better than another language that I know (such as Spanish, French, or Chinese)
   c. Equally English and another language that I know
   d. Another language (such as Spanish, French, or Chinese) better than English
   e. Only another language (such as Spanish, French, or Chinese

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