Olympian Parents Answer the Question of How Parents Contribute Towards their Child's Academic Productivity

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Abstract

How do parents contribute toward their child's academic productivity? This article analyzes studies conducted over the last 30 years on this topic. During these three decades a number of theories and theoretical frameworks have been developed to answer this fundamental question. There have been nine national studies published and six reviews of the literature about parent involvement. What has proven effective in terms of children's achievement? The results of the national studies and the reviews show that home-based frameworks consistently show positive results whereas school-based frameworks show mostly non significant or inconsistent results. The article concludes that more research is needed with home-based paradigms and challenges the educational community to find ways to communicate the information derived to parents.

There is consensus among educators that parents make a major contribution to their children's education. The literature on this topic is extensive (Astone & McLanahan, 1991; Baker, 1996; Becker & Epstein, 1982; Bradley, Caldwell, & Rock, 1988; Cai, Moyer, & Wang, 1997; Cataldo, 1987; Ciriello, 1991; Coleman, 1987, 1990; Coleman & Husen, 1985; Comer, 1988, 1991; Cook, 2008; Crouter, MacDermid, McHale, & Perry-Jenkins, 1990; Cucchiara & Horvat,2009; Desimone, 1999; Domina, 2005; Dornbusch et al., 1985; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Dornbusch & Wood, 1989; Eccles & Harold, 1994; Epstein, 1983; Epstein & Dauber, 1991; Fan & Chen, 2001; Fehrman, Keith, & Reimers, 1989; Freeman, 2000; Goldring, 1991; Gorman & Balter, 1997; Grolnick, 2003; Grolnick & Ryan, 1989; Grolnick, Ryan, & Deci, 1991; Grolnick & Slowiaczek, 1994; Hansen, 1986; Henderson, 1987; Henderson & Berla, 1994; Heyman & Earle, 2000; Heymann, 2000; Hickman, Greenwood, & Miller, 1995; Hill et al., 2004; Keith et al., 1993; Keith, Keith, Quirk, Cohen-Rosemthal, & Franzese, 1996; Kim, Murdock, & Choi, 2005; Lindle, 1989; Marjoribanks, 1981, 1983, 1987; Mattingly, Prislin, McKenzie, & Kayzar, 2002; Melnick, 1991; Merttens, 1994; Miedel & Reynolds, 1999; Mims, 1985; Mitiotis, Sesma, & Masten, 1999; Moles & Farris, 1997; Patrikakou & Weissberg, 1998; Pomerantz, Grolnick, & Price, 2005; Pomerantz, Moorman, E., Litwack, S., 2007; Prins & Toso, 2008; Reynolds & Clements, 2005; Schmitt, 1986; Shumow, Vandell, & Kang, 1996; Simon, 2000; Smith, 1989; Steinberg, Lamborn, Dornbusch, & Darling, 1992; Walberg, 1984). However, the important question that needs to be answered is how do parents contribute toward their child's academic productivity?

There is much confusion in the parental involvement literature about just what is meant by this term. There are a few definitions that appear. Reynolds and Clements (2005) define parent involvement "within the context of school-family partnerships to include behavior with or on behalf of children at home or in school, attitudes and beliefs about parenting or education and expectations for children's future "(p110). Grolnick and Slowiaczek (1994) define parents' involvement "in children's schooling as parents' commitment of resources to the academic areas of children's lives," and Jeynes (2005) defines it as "parental participation in the educational processes and experiences of their children." However, there is no real consensus (Miedel & Reynolds, 1999; Reynolds & Clements, 2005). Many authors writing about parental involvement assume that a definition is just understood by everyone. The reason for this assumption may be because everyone has experience of their own parents' involvement or their own involvement in child-rearing experiences. As a result of this assumption, much of the current literature treats parent involvement as a one-dimensional phenomenon. Policy makers have added to this emphasis by urging the schools to provide more parental involvement in any way possible.

The more recent literature has taken a different approach by recognizing that parental involvement is multidimensional in nature (Fan, 2001; X. Fan & Chen, 2001; Hong, Yoo, You, & Wu, 2010; Reynolds & Clements, 2005; Sui-Chu & Willms, 1996). In fact, the following terms have been used: aspects of parenting (Watkins & Ames, 1994)(Okagaki & Frensch, 1998); parental factors (Campbell & Verna, 2007); family factors (Robinson, Weinberg, Redden, Ramey, & Ramey, 1998); family processes (Marjorbanks, 1979, 1983); kinds of involvement (Grolnick & Slowiaczek, 1994); parental dimensions (Grolnik, 2003); parental roles (Cai, Moyer, & Wang, 1997); parenting patterns/styles (Baumrind, 1971); parenting skills (Cataldo, 1987); parenting styles (Deslandes & Potvin (1999); and types of parents (Vandergrif & Green, 1992).

Notice the many different terms used to describe the complexities of parenting. When I started working in this area in the 1980s, I used the term, family processes, because my research followed the work of Bloom (1985), Dave (1963), Wolf (1964), and Marjoribanks (1979, 1981) who all used this term. However, using so many terms has created confusion. To simplify the terminology, I consider the different dimensions, aspects, family processes, etc. as constructs. This label therefore applies to the 93 parental involvement constructs (see Table 1) that I was able to uncover by analyzing 30 years of the literature.

Insert Table 1 about here

There is a degree of overlapping which could reduce the list. There are 24 constructs that originated from items in the original National Education Longitudinal Study of 1988 (NELS88) surveys. Most of these NELS88 constructs are factors, but a number of them are one-item variables that were selected to typify larger conceptualizations (Muller, 1998). There are six more single items from another U.S. Government survey the National Longitudinal Survey of Youth (NLSY).

NELS88 Constructs

Since there are so many constructs developed from the NELS88 survey items, I isolated the items that made up each of the 24 constructs so that the names assigned by the researchers could be compared. However, the labeling of some of these constructs caused problems. For example, Fan (2001) labels a set of NELS88 parent items as a "supervision" factor, and Desimone (1999) calls the same set of items a "rules" factor. Since both labels are similar, there is no problem, but McNeal (1999) isolated a totally different set of items and labeled them a "monitoring" factor. Most educators would assume that factors labeled supervision, rules, and monitoring all measure the same construct, but this is not the case. Similarly, Fan's (2001) communication factor

contains the same four items as discussion factors derived by Sui-Chu and Willms (1996), Keith et al. (1996), McNeal (1999), and Desimone (1999). Again, the differences between parent talk, child-parent dialogue, discussion and communication might be so minimal as to cause little confusion. When all of the NELS88 factors are considered, there are a number of factors with descriptive labels that can only be understood when the items are considered. Most of the studies/books/chapters using the other 64 constructs in Table 1 do not provide the items that were used in synthesizing them. Therefore, it is not possible to truly know the degree of overlap among these constructs.

Summing up, the total list illustrates the multidimensional nature of parental involvement. Rather than a one-dimensional construct, parental involvement consists of the full array of these constructs. Any definition must therefore encapsulate the complexity of this term. It is my contention that it is better for researchers to simply recognize the large number of related constructs and isolate specific ones for their studies. Table 2 lists the nine constructs that have generated most of the parental involvement research in the last decades. Two of these constructs are school-based, and the other seven are home-based. The list represents the important areas of parenting that influence children's achievement.

Insert Table 2 about here

Theories & Theoretical Frameworks

Theories

For this section of the article I present the broad-based theories that have been proposed to explain parental behavior. These conceptions involve the interaction of many variables that are applied over extended periods of time.

The first theory is Bronfenbrenner's (1979; 1986) ecology of child-rearing. This theory postulates a series of concentric circles (macrosystem, exosystem, mesosystem, microsystem) where complex influences operate with the child at the center. I have not utilized the postulates as much as the overall idea that everything going on in the family has influences on the child. The father's and mother's skills, their employment, their stability, and the many outside forces that interact with the family all cause changes in the upbringing of the child. Many years ago I was involved with a national study conducted in Greece (Flouris et al., 1994), and one of the findings that I could never explain was that children from rural areas did not do as well academically as suburban or urban children. Years later I came upon Bronfenbrenner's theory that proposed that rural children had fewer resources, and this lack of stimulation explained this finding. I now realize that every social force like a parent losing his job, or the mother staying at

home instead of working all influence the child. Bronfenbrenner reports a number of studies done during the American depression of the 1930s when many breadwinners lost their jobs. Some children prospered if they were old enough to help the family financially, while very young children were permanently damaged because they were just too young to financially contribute as the family spiraled into economic chaos. It is important to note than school-based influences are dwarfed by the larger forces that buffet today's families.

Another broad-based theory is Ryan and Adam's (1995) series of boxes within boxes. This theory provides six contexts to explain the forces directed to and from the child. The child's outcomes (achievement) are at the center of this theory. The first context specifies the child's personal characteristics, and the next is school-focused parent-child interactions. The third context is general parent-child interactions; then general family relations; and then the personal characteristics of parents. The outermost context is exogenous social/cultural and biological variables. This theory seems to be naturally suited for path analysis or hierarchical regression studies where different models are tested. The contexts lend themselves to such models.

Cultural capital (Lareau, 1987) is a theory developed from Bourdieu's (1986) work with social relationships. Cultural capital manifests itself in terms of personal dispositions, attitudes, values, and knowledge gained from experiences. These cultural packages are enhanced from connections to resources such as computers, schools, and libraries. Individuals operate best in environments (habitus) where they feel comfortable and secure. This theory presumes that problems arise when minority children attend schools where the teachers, administrators, and much of the student body does not share their cultural values. Children that have the same cultural values as the teachers and leadership staff over time adjust better to the demands of school. This theory presumes that communication networks within each culture provide advantages that help the children of that culture to have better attendance, better achievement, and better adjustment. In this approach working class parents are not challenged for having low expectations nor are teachers disciplined for discriminatory practices because the class structures are considered embedded in society (at home and in school).

The culture of poverty theory is a spinoff from the cultural capital theory (Socio-Economic Status)(Lareau, 1987; Sui-Chu & Willms, 1996). It speculates that working class (low SES) parents have different values, place less emphasis on the importance of education, and maintain greater separation between their roles and the middle class school staffs. The children do not do well at school because of these class differences. Another related theory is that institutions can socialize their teachers and staff to systematically treat students from minorities differently than majority children. Institutional biases can then have damaging effects on the achievement of minority children.

Coleman (1988) originated another theory -- the conception of social capital. Within this framework there are the following kinds of capital: physical capital, which is essentially the family's wealth; human capital that signifies the education and skills possessed by the parents;

and social capital, which represents the willingness of the parents to transmit their human capital to their children. Social capital involves shared values and the expectation that other members of the community will enforce or convey these values to the children in that community. Parents using their social capital want to become acquainted with the parents of their children's friends. The community shares norms and exerts a degree of social control. When a child violates the values or standards of this community, other adults that view this behavior are expected to voice their disapproval or inform the parents. It is expected that any adult within this community will inform the children about their obligations and, to some degree, enforce the rules. Reciprocity is expected. These interactions reinforce the standards and norms. Social capital might involve members of the same religion. Members might attend the same schools and interact at the same social gatherings. The community is recognizable to outsiders and especially to the children.

Theoretical frameworks (**School-Based**)

Theoretical frameworks have a more narrow focus but still incorporate a number of different constructs. First let me summarize the two frameworks that operate within the current operation of the schools. Epstein's typology is the best known and summarizes the ways American schools involve parents (Epstein, 1983; Epstein, 1988; Epstein, 1995; Epstein & Dauber, 1991; Epstein & Salinas, 1992; Epstein, Salinas, & Jackson, 1995). This typology consists of the following types of involvement: Type 1. Offering parenting courses; Type 2. Communication between the home and school; Type 3. Volunteering; Type 4. Learning at home; Type 5. Involving the parents in decision making; Type 6. Collaborating with the community. Leadership from the educational community is needed for every type of this involvement except Type 6 (Collaborating with the community).

Monandon (1992), a Swiss researcher, developed teacher-based typology to explain the ways teachers involve parents (see Figure 2.1). This typology is based on the contrast between parents that expect teachers to assume responsibility for their child's education with parents that want to share this responsibility with the teachers. Teachers wanting to share responsibility can encourage extensive parental participation (diffuse). Such interactions between parents and teachers are considered partnerships. However, in other areas where both parents and teachers recognize that the schools have the primary role to play, teachers are still open to a degree of parent participation (specific). The lower boxes in the figure describe parents that recognize the primacy of the teachers. They willingly delegate their responsibility for the child's education (retreat). Monandon (1992) reports that higher status parents want to become partners or to collaborate, while working class parents retreat from any real participation in their child's education.

	School's Role		
Parent		**Diffuse**	**Specific**
Involvement	**Participation**	Partnership	Collaboration
	Retreat	Delegation	Assignment

Figure 1

Theoretical frameworks (**Home-Based)**

There are eight theoretical frameworks that have been proposed to describe how parents operate in raising their child in the context of their home. These frameworks summarize the "everyday" parental involvement that is not under the supervision or control of professional educators. Bloom (1985) called this the curriculum of the home.

The Pomerantz, Moorman, and Litwack, (2007) framework proposes that parents contribute to their child's development in two fundamental ways: 1) by providing resources for skill development; 2) providing resources for motivational development. This simplified framework summarizes a number of diverse parental activities. Skill development can begin very early in the child's life and can continue all through the school years. Motivation is the other key, and parents can influence much of their child's behavior by knowing how and when to motivate. This framework also provides the following four scales: autonomy support vs. control (support better); process vs. person focus (fixed ability)(process better); positive vs. negative affect (positive better); positive beliefs vs. negative beliefs about children's potential (positive better). Baumrind's (1971, 1991; Baumrind & Black, 1967) classic studies of parenting have been extended by Dornbusch (1985, 1987, 1989) and consist of viewing four parenting styles: authoritative, authoritarian, permissive, and neglecting. Authoritative parents are those with the confidence and efficacy to organize and monitor their child's activities smoothly; authoritarian parents are primarily disciplinarians; permissive parents use very loose control and give their children more autonomy; and neglecting parents do not accept the responsibility that comes with being a parent.

Grolnick's (2003) framework specifies two dimensions. The first contains six sliding scales (warmth vs. hostility; warmth vs. coolness; child-centeredness vs. rejecting and indifference; involvement vs. non-involvement; and acceptance vs. rejection). The second dimension is made up of five scales (democratic vs. autocratic; firm control vs. lax control; psychological control vs. psychological autonomy; controlling vs. autonomy support; restrictive vs. permissive). Note the influence of Baumrind's work in this framework. Grolnick synthesizes

into her framework not only some of the Baumrind ideas but also a number of other constructs included in Table 1. This framework gets at the complexities that parents face during the many years when they exert their influence.

The Hoover-Dempsy framework (Hoover-Dempsy & Sandler, 1997) contains five levels of constructs. Parent involvement revolves around the level of the parent's efficacy (level of confidence) about being able to promote their child's school achievement. Each level involves the interaction of many different constructs. Overall, the framework is one of the most comprehensive to be developed.

Vandergrif and Green (1992) developed a framework that included four positions for parent involvement. One type/position includes the parent being supportive and an active participant in their child's schoolwork (helping with homework, coming to school); another position includes being non-supportive, but still an active participant; the third position has the parent being supportive but inactive (is involved in helping but rarely comes to school; and the last position has the parent being non-supportive (abusive) and inactive. This framework synthesizes a number of constructs into a broader framework.

Scott-Jones (1995) developed a path model that represents a hypothesized framework. She uses three major constructs (valuing, monitoring, and helping) that are correlated with academic motivation and engagement in school. Valuing includes not only the three aspiration constructs presented above (Table 1) but adds other constructs that convey the value of education to the child. The monitoring includes the child's behavior and performance, whereas help involves not only homework help but the acquisition of basic skills. A fourth construct, doing, simply means not doing the schoolwork for the child. Within this framework basic skills are hypothesized to influence motivation/engagement and both of them directly influence the child's achievement. This framework, like the others presented, ties together many constructs.

Finn's (1998) framework has been called a typology, but it is such a concise summary of parent involvement constructs that I believe it represents another useful framework. He lays out four broad-based constructs for parents to engage their children at home: 1) actively organizing and monitoring the child's time; 2) helping with homework; 3) discussing school matters with the child; 4) parent reading to and being read to by the child. This is another useful framework that ties many other constructs together.

Finally Campbell's Academic Home Climate (Campbell & Verna, 2004, 2007) framework synthesizes 24 constructs that were uncovered by 25 years of qualitative/quantitative studies with international samples from five Asian countries, three European countries, and the United States. In the quantitative phase of these studies a number of factors were found by administering the *Inventory of Parental Influence* to 12,441 children and 2,866 of their parents. These samples included 6,492 American, 1,992 European, and 3,957 Asian children. Principal Components Analyses and Principal Axis Factoring were used to extract the factors, and qualitative interviews were conducted to find the parental practices that were being used with families of high achieving children.

In deriving these parental practices, we interviewed mothers, fathers, and the high-achieving child separately. Consequently, we triangulated our data from these sources. Schwartz et al (1985) and Schwartz and Mearns (1986) reported that parents tend to inflate their influence, and they recommend using two sources of information for isolating family dynamics. We also used the surveys that were completed by all of these family members as checks of veracity. All of the qualitative interviews were type scripted and computerized.

Theoretically we found that our qualitative work fit nicely within the cultural framework labeled ethnomethodology (Garfinkel, 1967) because we were primarily interested in discovering the "every-day practices" that family members would use to foster high achievement in different cultures.

By the 1990s I had typescripts of qualitative cross-cultural data from high achieving families in Asia, Europe, and the United States. I highlighted important points that were made by the parents or the children, and then developed rough categories. The collection of highlighted family practices needed some summary label to describe them. I did not want to use a technical term because I wanted to share these practices with parents, and therefore I named them "recipes." I define recipes as simple statements about issues of child-rearing and child support that describe actions and positions parents believe are important. Many of these recipes are easy-to-use strategies or parental practices. This term is understandable to most parents. I decided that the best way to disseminate these recipes was to publish books for parents. In 1995 I published an American book (*Raising your child to be gifted: Successful parents speak!*)(Campbell, 1995) and followed this with a book for Chinese parents in Taiwan (in Mandarin), and another book for Mainland Chinese parents (in Pin-Yin).

Writing these books required me to refine the categories that I had been using. This process took several iterations before reducing the categories to 24. I now refer to these categories as constructs.

From 1995-2010 my research teams continued to look for more recipes. I also began looking for recipes in other published primary source studies. In 2005 the second edition of my American book was published (Campbell, 2005). This book contains 123 recipes (47 more than in the original text).

To date, I have accumulated 502 parental recipes that represent the micro level behaviors that effective parents use day by day. By 2007 I realized that the 24 constructs represented an "*Academic Home Climate*" (AHC) (Campbell, & Verna, 2007). This climate fosters high achievement because it generates a number of positive attitudes, attributions, and values (see Table 3). When this Academic Home Climate meshes with the academic climate found in the child's school, achievement is enhanced (Coleman 1987; Comer 1991; Christenson, Godber, & Anderson, 2005; Marchant, Paulson et al. 1995).

Insert Table 3 about here

Results

National studies

There have been 11 American national studies that examine parental involvement constructs. My analysis of these national studies is organized to answer the following questions: What constructs have been found that influence children's achievement? What constructs have produced consistent positive results, which ones have generated negative results? Which ones have been found to have no effect at all? I will again break down the results in two tables. The first presents results from the school-based constructs, and the second presents findings from the home-based constructs.

There have been eight national studies that used the NELS88 data (Desimone, 1999; Fan, 2001; Keith et al., 1993; Hong, & Ho, 2005 ; Keith, Keith, Quirk, Cohen-Rosenthal, & Franzese, 1996; McNeal, 1999; Muller, 1998; Sui-Chi & Willms, 1996). These data contain information from 8^{th-} and 10th-grade students and their parents.

Domina's (2005) national study utilized data from the National Longitudinal Survey of Youth 1979 (NLSY79) data set that surveyed elementary school children (4th grade and below). Hong, Yoo, You, & Wu's (2010) national study used 7th-12th grade data from the Longitudinal Study of American Youth (LSAY) which is a National Science Foundation data base. Finally, Astone & McLanahan (1991) used another US government data set from the High School & Beyond study. This survey is directed at high school 10th-grade students.

I summarize one set of findings by analyzing data derived from student's reports of their parent's involvement. The second set of findings is derived from the parent's reports of their own involvement. In these studies, factors are produced from Principal Component Analyses or factor analytic methods. These factors or other constructs are then used in path or multiple regression analyses. The findings show the effects of the different parental involvement constructs on children's achievement. Within both tables the numbers refer to the number of studies reporting findings.

The school-based findings (see Table 4) from the children show no positive results. Children's reports about their parents attending school meetings and events were found to have no relation to their achievement. The same finding occurred for volunteering. The negative findings concerned parents that participated in school and helped with their child's homework. There was an additional negative finding for 10th-graders where parents were reported to attend a

school event. The results from the parents data is somewhat less negative with two positive findings – one for parents involved in fund raising/volunteering, and the other from one study where PTO involvement was reported. But the rest of the findings are either negative or not significant (NSD).

Insert Table 4 about here

The results from the home-based findings (Table 5) are mostly positive from the student's and parent's perspective. In both groups parental aspirations/expectations had positive associations with achievement (7 studies). Communication within the family was also found to have positive results, and one study found that academic reinforcement had no effect at all (NSD). From the students' perspective, five studies posted positive results for communication within the family, but the results from the parents' perspectives for this construct showed mixed results.

Insert Table 5 about here

The children's reports for parent restrictions, monitoring and general supervision were positively associated with achievement. However, parent checking was negatively correlated with achievement. The other parent's constructs were less positive with supervision posting mixed results and monitoring posting negative results. Note that when the students report monitoring, the results are positive. Parents' reports for social capital and support were positively connected to achievement.

Whenever data are available from children and parents, the question arises which set is more accurate and valid? In the course of my international studies, I collected parent and child data on the same construct in one study in Taiwan and then in another study in New York City. I wanted to find out whose perception was more closely related to the child's achievement. After analyzing all the data, I came to the conclusion that the information from the students was much more honest and accurate. Desimone (1999) and (Keith, 1992) both expressed the same conclusion that student reports of their parents involvement were much more important than parent reports. Parent reports might be self-serving and thus inaccurate (Keith, 1992). Therefore, I give more weight to the NELS88 findings listed above that were derived from the children.

Summarizing these findings, of the nine constructs isolated as the most important in Table 2, seven are represented in these national studies. All of the school-based constructs are

represented, but the children's reports were not positive. Many of the types of involvement such as visiting the school or volunteering do not seem to be related to children's achievement.

For the seven home-based constructs isolated in Table 2, five are represented with findings. The two constructs with the most consistent results are expectations and interfamily communication. Scott-Jones (1995) and Fan (2001) believe that expectations are akin to the tip of the iceberg that includes a body of parental activities, attitudes, and behaviors. Scott-Jones (1995) sees expectations as part of the larger theme about convincing children about the value of education. Communication likewise is crucial in any productive family. This is a central ingredient in productive parenting.

Another construct that posted positive findings was parental support. Notice that there are no findings from the motivation or providing constructs. Both are difficult to measure.

For the home-based management constructs, the only positive finding was for monitoring (from the child's view), whereas supervision at home was found to have little effect on achievement.

Review of Reviews

There have been six review articles that summarize the literature about parent involvement. With this review of reviews I will answer the question: What constructs have been found that influence children's achievement? The findings will be presented for school-based constructs, and then for home-based constructs.

The first review (Iverson & Walberg, 1982) analyzed 18 studies (N=5,831) from eight countries over 19 years. These studies included the Dave (1963) and Wolf (1964) studies and the Marjorbanks (1979, 1981) studies that are direct decedents for my current work. The main finding was that home environment was found to be more highly correlated to achievement than SES. The authors made the case that little can be done with SES differences, but much more research could be done to determine how variables within the home influence achievement. It was this recommendation that launched our first studies in the 1980s.

Gorman and Balter (1997) reviewed 35 programs where parent education programs were developed by schools, then implemented and evaluated (Typology type 1). After analyzing the results of these studies the authors concluded that the programs really did not produce consistent results. They expressed the view that it is asking too much of parents to change in such a short period of time (7-15 sessions).

Mattingly, Prislin, McKenzie, Rodriguez, and Kayzar, (2002) reviewed 41 studies that evaluated K-12 parent involvement programs. Their review found little support for the widespread claim that programs are effective in promoting positive school outcomes.

There are two meta-analyses that have been done for the parental involvement studies. Fan and Chen (2001) analyzed 25 studies (N=133,577), and Jeynes (2005) analyzed 41 studies (N=20,000). These studies summarize their findings in terms of specific parental involvement constructs. These two reviews found just two school-based constructs. Both studies found that parents' participation in school activities had positive effects on the children's achievement (Fan & Chen, r=.32; Jeynes, effect size=.21). But at the item level, Fan and Chen's definition of participation differed from the one used by Jeynes. Neither of these meta-analyses indicated whether these constructs were constructed from student or parent data. This is important because the results from the national studies showed that the findings differed according to the source. Furthermore, Jeynes (2005) found that homework checking had small negative effects that were not significant (see Table 6).

Insert Table 6 about here

For the home-based constructs, educational aspirations were found to have the strongest effects on achievement. Communication about school between the parent and the child was also found to have a positive effect on achievement in both studies. Jeynes (2005) found that parents' reading to and with their child was beneficial, and that a parenting style that was viewed as supportive and helpful was also associated with higher achievement. The final construct (family rules) was found to have a very small influence (Fan and Chen, 2001).

Summarizing the results of these six reviews of the literature (analyzing 160 studies) in terms of the major constructs isolated in Table 2, both of the school-based constructs are represented, and five of the seven home-based constructs are represented. The programs to train parents and parent involvement programs were not found to be effective. The meta-analyses authors summarized their findings in terms of broad-based constructs and reported positive results for parents' participation with the schools. This finding is contrary to the finding from the children's national data but not from the parents' data. For the home-based constructs, aspirations and communication were again found to have consistent and positive associations with children's achievement. Supervision in terms of imposed rules had a very small effect just as the national studies showed. Apparently, this is not as important as other home-based constructs. This was the first positive summary report that reading to and with the child had positive effects.

Academic Home Climate

In summarizing 25 years of qualitative/quantitative research, let me start with the recipes results. The constructs with the most recipes are: expectations (73 recipes), work ethic (71 recipes), communication (51 recipes), homework (46 recipes), and commitment (38 recipes). These recipes all come from the cross-cultural interviews that I did with international samples. I did not

have any of these constructs in our quantitative instrument in the 1980s and 1990s but are now working on scales for communication and expectation.

Table 7 provides corroboration from other research studies for 15 of the 24 constructs that make up the Academic Home Climate. I did not subdivide this table into school-based and home-based constructs because all of them are under the control of the parents. Even the constructs "dealing with teachers" and "homework" and "help" have a different focus than school-based constructs that seem similar. To illustrate this difference, the parents in our samples were very cautious in dealing with teachers. Their basic focus is to get the children to see the teachers in a constructive way and to work with them as much as possible.

Insert Table 7 about here

Homework and help were also treated differently. Homework is assigned by teachers, but productive parents have imaginative ways to make sure it gets done. They provide structure and time for doing it, and they are careful about the help that they give. In our quantitative studies our instrument produces a help factor, and in most of the studies we conducted, the results show that there is a negative correlation between this factor and achievement. The same negative correlation has been found by many researchers (Cooper, 1989; Chen & Stevenson, 1989; Domina, 2005; Epstein, 1983; Jeynes 2005; Lee & Bowen, 2006; Madigan, 1994; Redding, 1992). In the Chen and Stevenson cross-cultural studies, they reported that of the 27 correlations between mother's help and the child's achievement, 24 were negative and 10 were significant. The most accepted explanation for this finding is that children who are doing poorly require more help, and therefore the correlation really represents either lower ability or lower prior achievement (Lee & Bowen, 2006).

Another possible explanation is that math homework and the methods that are now used to teach math have changed over the years. This fact means that the methods taught to the parents, even if he/she could remember how the subject was taught, do not mesh with today's methods. Parents trying to use yesterday's outmoded approaches are more likely to confuse their child rather than help him.

My qualitative data present a different explanation. The effective parent spends time either teaching the child how to solve his homework problems, or encouraging the child to figure out how to solve the problem by himself – to take responsibility for his/her own learning. This is a different kind of help. One Chinese child (in Taiwan) told me that her father taught her the "solving method" and insisted that he never gave her the answer. I wonder how many busy elementary school parents take the easy way out and simply give the answers to their child. In this case the negative correlations reflect the fact that the child learned nothing except being able

to manipulate his parent to do the homework for him. Scott-Jones (1995) has a separate variable (doing) in her framework that demands that the parent not do the child's schoolwork. Teachers often complain that a parent is the real author of some students' reports or projects, and this makes grading very delicate.

The chief quantitative finding from the many studies we have conducted with national and international samples shows that low levels of pressure are associated with high achievement. The parents that exert the most pressure get negative results, and this finding holds up for Chinese and Japanese samples. One other consistent finding is that monitoring/time management is important for some ethnic groups but is negatively correlated with achievement for other groups. Support is always positive, but rarely significant, as is the press for intellectual development.

Summarizing the academic home climate research, in terms of the nine dominant constructs identified in Table 2, this framework accounts for eight of the nine constructs, and the last "motivation" is generated as a result of this climate.

American Academic Olympian Parents

This section of the article is organized around the question: What constructs have been found that influence the Olympian's productivity? The data used for these analyses consisted of 107 fathers and 175 mothers of the American Olympians. These parents completed the IPI and the mothers' and fathers' data were analyzed separately using Principal Component Analyses to produce the following five factor/components: pressure, support, help, press for literacy, and monitoring/time management. One additional scale was derived from the items in the Olympians' survey. This construct was derived by using a Principal Component Analysis, and the resulting factor/component was labeled a conducive home atmosphere. This label describes parents that recognized their Olympian's talents and provided resources at home to encourage its development. More technical information about these analyses is presented in the next article in this theme issue.

To determine the effects of these parental constructs on the Olympian's high school GPA, a hierarchical multiple regression analysis was performed. Two significant predictors were found. Parents using low pressure (p=.002) and those that did not force reading on their Olympian prematurely (p=.026) were found to have higher GPAs.

Another hierarchical multiple regression analysis was determined with the Olympians long-term productivity as adults (rate of publications/year) as a dependent variable. In this analysis the only significant predictor was the conducive home atmosphere (p=.020). Thus for these Olympians the academic climate established during the early school years by their parents was still paying dividends for their 30-40 year old Olympian. They were publishing more articles and books than Olympians who did not have these early advantages.

Discussion

Theories

The discussion section is organized around the question: What theories/theoretical frameworks are associated with positive school outcomes like achievement? What works? In my review of the studies presented above, Bronfenbrenner's (1986) ecological theory should have wider application because it is built upon the premise that every force outside and inside the family has influences on child-rearing. The fact that few researchers cite this theory may be because of the complex levels initially presented by Bronfenbrenner. I think this theory has wide application, especially to the research I have done and reported here.

The culture of poverty or SES theory, as explained by Lareau (1987) or by Sui-Chu and Willms (1996), has been tested by some studies but has not found any support in the studies I reviewed. Certainly, there are SES differences in schools between poor and wealthy communities in the U.S. and even across school districts. But there is so much mixing of cultures within America that it is difficult to isolate stable samples.

The theory of cultural capital as summarized by Lareau (1987) and others (Lee & Bowen, 2005; Sui-Chu and Willms, 1996) has been used in two studies. American researchers working within this theory conduct studies by creating groups such as European Americans, African Americans, or Latino Americans. Since most of the teachers in the American schools originate from European backgrounds, advantages are hypothesized for European American children. Supposedly, minority parents feel uncomfortable when they deal with school staffs that do not match their culture. Accordingly, this mismatch underlies one of the reasons that minority parents do not connect with schools.

But there are both practical and theoretical difficulties in assigning students to these groups. In our qualitative studies of Greek American, African American, and Latino families, we find many distinct subcultures. We have found immigrants from modern day Africa that are very different from other African Americans. Furthermore, in our New York City samples, there are many West Indian immigrants, although obviously Black, who have very different subcultures. The Latino category also contains too many subcultures to justify the use of this term. We find Mexican immigrants that classify themselves as Native Americans. They are not the Indians of North America but from those of Central America. Some of them originate from ancestors that were living on the continent before the Spanish conquest. However, other Mexican immigrants trace their ancestry back to Spain and call themselves Castilian. They might have more in common with the European Americans. Furthermore, the immigrants from India/Pakistan have dark skin but have distinct cultures. This is also true of the Asians in general. All of these difficulties make ethnic-racial grouping problematic for U.S. studies. Actually, forcing all of these different subcultures into census categories is just not defensible. The many subcultures just have too many important divergences.

Kingston (2001) provides a strong rejection of this theory as applied in the U.S. The theory revolves around how the privileged elite signal the "gate keepers" who are presumed to provide advantages to them and their children. These gate keepers help the elite get into the most prestigious colleges and universities and then help them get high paying jobs. This process keeps the elite privilege going generation after generation. But in the U.S. one set of gate keepers are teachers and as Kingston points out in studies that have tried to see if teachers recognize any subtle signals being used, the only things that teachers look for are not related to cultural capital. Instead, teachers perceive that hard work and persistence are qualities associated with good performance. These qualities can be readily acquired by non-elite groups in the U.S. thereby undermining support for this theory. Another problem pointed out by Kingston is that Bourdieu's (1986) theory is plagued by vague definitions and applications. This theory has also been tested by two independent investigators (Lee & Bowen, 2006; Sui-Chu and Willms, 1996), but the findings of neither study supported it.

Coleman's (1987, 1988, 1990) theory of social capital has been tested by six independent investigators (Kyriakides & Campbell, 2010; Lee & Bowen, 2006; Miranda, 1999; McNeal, 1999; Sui-Chu and Willms, 1996; Wei, 2008), and in each case the researchers found support for its veracity. Coleman expressed the view that two-parent families would be able to provide more social capital than one-parent families, and we were able to confirm this expectation (Kyriakides & Campbell, 2010; Wei, 2008). Coleman (1988) provided information about how to test his theory. For example, he recommended using interactions of parents' human capital with social capital variables. We used this recommendation and in doing so confirmed his assertion about two-parent families.

Frameworks

Next, the utility of the theoretical frameworks are examined. I will start with the school-based framework that has been most extensively used by researchers. Epstein's typology summarizes how the American schools provide for parent involvement. From the analyses of the nine national studies and the 160 studies used in the review articles, there is no consistent support for any of the constructs embodied in this framework. But there were no investigations for two of the types of involvement (Type 5. Involving the parents in decision making; Type 6. Collaborating with the community).

Gorman and Balter's (1997) review of parenting courses (Type 1) found no support and Mattingly, Prislin, McKenzie, Rodriguez, and Kayzar's (2002) review offered no support for programs being implemented in American schools. The research done on volunteering (Type 3) was mixed or mostly not significant, and the research done with teacher-directed homework at home was negatively related to the children's achievement. Attendance or involvement in PTO/PTA organizations or participating at school events or activities (Type 2) was found to be related to higher achievement by the two meta-analyses, but as I mentioned above, this finding

may depend on the source of the data being derived either from students or parents. The conclusion can therefore be made that most school-based constructs might be useful to parents in understanding what is going on at the child's school, but none of them are consistently related to positive school outcomes like achievement.

The opposite conclusion can be made for some of the home-based frameworks. The easiest one to use is the Pomerantz, Moorman, and Litwack's (2007) framework where parents provide either cognitive or motivational resources. Different constructs can be built into this framework and studied. Likewise, Finn's (1998) summary framework or the Scott-Jones (1995) path model offers the same possibilities. The Campbell Academic Home Climate framework with its 24 constructs also lends itself to further application.

All of these home-based frameworks require parents to be actively involved in the child's school-related activities. It is this every day involvement that is needed to change the child's attitudes, work ethics, commitments, and values. Only at this level will the child's achievement be influenced.

It is important to realize that the theories and frameworks are all made up of separate parent involvement constructs. Some of them are consistently associated with higher achievement, such as parental aspirations/expectations and interfamily communication. Others may be useful such as parent's involvement with the child's school, but these are not consistently related to the child's achievement. Some of these constructs might be dysfunctional such as applying excessive pressure or harsh discipline where results show children get lower levels of achievement.

Conclusions

One conclusion drawn from the analysis of the research described above is that parent involvement is not unidimensional but multidimensional in nature. In fact, the complex nature of parenting involves an array of constructs that are employed at various stages of the child's development. Future researchers must recognize this complexity and specify the individual constructs being investigated in their studies. Furthermore, each construct needs to be defined at the items level so that readers of the literature can understand just what is being studied. My analysis of the NELS88 constructs illustrates this need. Without such specification there will continue to be confusion and errors made when multiple studies are compared. This is especially true for researchers that do not use U.S. government surveys where the actual items can be ascertained. For my own research instrument I have published the items that were used to construct the factors used in my studies (Campbell, 1994, 1996; Campbell & Verna, 2004). I recommend the same approach to others who develop instruments in this area. The analysis reported above also shows that more parent involvement instruments are needed especially for home-based constructs.

Another need that arises from the analyses above is that too few researchers make the needed effort to use the four major theories presented above or the eight home-based frameworks that have been introduced in the last decades. In my view the Epstein typology has been over utilized, and the home-based frameworks have been underutilized. Researchers who have no connection to these theories and frameworks need to incorporate them into the designs of their studies in order to objectively ascertain their usefulness. It is only in this way that comprehensive theories/frameworks can be constructed over time and then used to solve educational problems.

Finally, one major short coming of the frameworks is that they have been used almost exclusively only by their authors. The reason for this lack of application might well be the failure of these authors to clarify how to use their theory or framework. Coleman does supply such information, and this might be one of the reasons that there are independent applications of his theory.

The Academic Home Climate research reported here is an offshoot from the mainline of research on parent involvement. Benjamin Bloom originated this line of research with his supervision of the Dave (1963) and Wolf (1964) dissertations and with the publication of his ground breaking book in 1985. Marjoribanks (1979, 1981, 1983, 1986, 1987) continued this work with international studies, and Clark (1983) continued this line of research with his study of the family dynamics of African American parents of high and low achieving students. All of these studies, though cited often, did not change the direction of the parent involvement research and were largely ignored by educators. But this offshoot holds the most promise for future research. To illustrate, the major finding from the analyses above is that the two most dominant family-based constructs are interfamily communications and expectations (aspirations). My qualitative studies derived 144 recipes for these two constructs. These recipes detail how effective parents convey high expectations to their children, and how better communication within the family produces a climate that leads to enhanced performance in school.

We need to do qual/quan studies to uncover what effective parents are actually doing in their homes rather than more of the same studies that have dominated the parent involvement research over the last three decades. The school-based Epstein construct has been used by educators to urge parents to attend school meetings, participate in parent-school organizations, volunteer their time in classes and outside classes, attend meetings and school events. All of these activities might be good for parents to do, but the data show that they do not increase the child's achievement by themselves. Instead, it is the everyday parental involvement in the home that produces results. We must also find out ways to convey this information to larger numbers of parents who can use this information.

In 2007 (Campbell & Verna) I attributed this lack of interest about the goings on of effective families to the need for professional educators to maintain their hegemony over the parent involvement research. In this way they could maintain their control.

Consequently, it is my view that future research must be focused on the family interactions and dynamics that occur every day in productive families. Sui-Chu & Willms (1996)

found that few schools had strong influence on the learning climate in the home, but they expected big gains in achievement if schools could develop programs that supplied parents with concrete information along these lines (p. 138). If research is to prove useful in helping families across the spectrum, the focus must change from "surface status characteristics" such as occupation, education, and family size (Clark, 1983, p. 6-7) to the useful practices that the productive parents employ to establish a productive academic climate.

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Table 1.
Parental Involvement Dimensions/Constructs

Acceptance (Grolnick, 2003)
Acceptance/rejection (Dusek & Litovsky, 1988)
Actively organizing & monitoring the child's time (Finn, 1998)
Achievement Motivation (Family Process)(Marjorbanks, 1979)
Achievement Value Orientation (Family Process)(Marjorbanks, 1979)
Behavior management of children (Cataldo, 1987)
Child centeredness (Grolnick, 2003)
Childrearing beliefs (Okagaki, Frensch, 1998)
Communication about school (Fan & Chen, 2001; Jeynes, 2205)
Communication factor (day-to-day) (Campbell, 2009)
Communication with teachers (Fan & Chen, 2001)
Consistency (Robinson, Weinberg, Redden, Ramey & Ramey, 1998)
Contact with the schools (NELS88)(Desimone, 1999; Fan, 2001; Sui-Chu & Willms, 1996)
Discussion/Communication factor (NELS88)(Desimone, 1999; Fan, 2001; McNeal, 1999; Sui-Chu & Willms, 1996)
Discussion daily dialogue about school (Finn, 1998)
Discussion about school-related activities (Grolnick & Slowiaczek, 1994)
Discussion with child about H.S. (NELS88)
Discussion with child about post H.S./College (NELS88)
Discussion -- parent-child factor (Lee & Bowen, 2006; Keith & Keith, 1993)
Educational aspirations factor (NELS88) (Fan, 2001; Fan & Chen, 2001; Okagaki, Frensch, 1998; Keith & Keith 1993)
Educational/Vocational Aspirations (Family Process)(Marjorbanks, 1979)
Educational support strategies factor (NELS88)(McNeal, 1999)
Expectations – for report card grades (Okagaki, Frensch, 1998)
Expectations -- Parental (Jeynes, 2005; Lee & Bowen, 2006)
Expectations factor (Campbell, 2009)
Family's use of community resources & schools (Cataldo, 1987)
Firm control/lax control (Dusek & Litovsky, 1988; Grolnick, 2003)
Get information about specific teachers (Grolnick & Slowiaczek, 1994)
Help -- controlling leads to bad results (Pomerantz & Ruble, 1998)
Help -- encouraging leads to good results (Pomerantz & Ruble, 1998)
Help factor (Campbell, 2009)
Help with homework (NELS88) (NLSY79)(Domina, 2005)
Helping with homework (Finn, 1998)
Home structure factor (NELS88) (Keith & Keith 1993)
Homework checked (NLSY79)(Domina, 2005; Jeynes, 2005)
Homework help factor (Lee & Bowen, 2006)
Homework supervision factor (Sui-Chu, 1999)

Homework -- knowing what is assigned & making sure it gets done in a timely manner (Finn, 1998)
Intervention activities (NELS88)(Muller, 1998)
Less restrictive parenting attitudes (Robinson, Weinberg, redden, Ramsey & Ramey (1998)
Management of child's activities & educational needs (Cataldo, 1987)
Meet teachers (Grolnick & Slowiaczek, 1994)
Modeling a healthy family life (Cataldo, 1987)
Modeling the importance of school (Grolnick & Slowiaczek, 1994)
Monitoring factor (NELS88) (McNeal, 1999)
Monitoring/time management factor (Campbell, 2009)
Parent as Math content advisor (Cai, Moyer & Wang, 1997)
Parent as Math learning counselor (Cai, Moyer & Wang, 1997)
Parent as motivator (Cai, Moyer & Wang, 1997)
Parent as resource provider parent as monitor (Cai, Moyer & Wang, 1997)
Parent attends meeting with teacher/official (NLSY79)(Domina, 2005)
Parent cares about school (Grolnick & Slowiaczek, 1994)
Parent involvement at school factor (Lee & Bowen, 2006)
Parental rules imposed at home (Fan & Chen, 2001)
Parental self-efficacy (Okagaki, Frensch, 1998)
Parent-initiated communication factor (Campbell, 2009)
Participation at school factor (NELS88)(Fan, 1993; Keith & Keith 1993; Sui-Chu & Willms, 1996)
Participation in school activities (Fan & Chen, 2001; Jeynes, 2005).
Press for intellectual development factor (Campbell, 2009)
Pressure factor (Campbell, 2009)
Provides resources for intellectual development (Grolnick & Slowiaczek, 1994)
Providing a healthy emotional environment (Sui-Chu, 1999)
Providing basic physical care & shelter (Cataldo, 1987)
Providing enrichment (Sui-Chu, 1999)
Psychological autonomy granting (Deslandes & Potvin, 1999)
Psychological autonomy/psychological control (Dusek & Litovsky, 1988; Grolnick, 2003)
PTA/PTO factor (NELS88)(Fan, 1993; McNeal, 1999)
PTO attendance (NELS88)(NLSY79)(Domina, 2005)
Rational, affectionate, parental sensitivity to children's emotional & social needs (Cataldo, 1987)
Reading regularly to the child (Jeynes, 2205)
Responsiveness to child input (Robinson, Weinberg, Redden, Ramey & Ramey, 1998)
Restriction activities (NELS88) (Muller, 1998)
Restrict going outside activities (Sui-Chu, 1999)
Restrict TV (NELS88) (Sui-Chu, 1999)
Rules about homework, GPA, Chores (NELS88)
Rules about watching TV, staying out, Chores (NELS88)
Social capital: the extent to which parents know the child's friends (NELS88)
Social capital: the extent to which parents know the parents of the child's friends (NELS88)
Student-initiated communication factor (Campbell, 2009)
Supervision (Deslandes & Potvin, 1999)

Supervision/Rules factor (NELS88) (Desimone, 1999; Fan, 2001; Sui-Chu & Willms, 1996)
Support factor (Campbell, 2009)
Support learning (Sui-Chu, 1999)
Supporting role of the school (Sui-Chu, 1999)
Talk with father about planning H.S. program (NELS88)
Teacher see parents is involved & pays closer attention to child (Grolnick & Slowiaczek, 1994)
Time management factor (Lee & Bowen, 2006)
TV rules factor (NELS88)(Fan, 1993)
Volunteer factor (NELS88)(Fan, 1993)
Volunteering in classroom (NLSY79) (Domina, 2005)
Volunteering outside classroom (NLSY79) (Domina, 2005)
Volunteering/fundraising factor (NELS88) (Desimone, 1999)
Warmth (Deslandes & Potvin, 1999)

Table 2.

Dominant constructs used in parental involvement research.

School-Based Constructs	Summarizing Related Constructs
1. Homework/Help	Controlling/Encouraging, Productive vs. Dysfunctional Ways to Help
2. School Involvement	PTO/PTA, Volunteering, Meeting & Contacting Child's Teachers

Home-Based Constructs	Summarizing Related Constructs
3. Communication	Discussion, Talking to Child
4. Expectations	Educational Aspirations, Vocational Aspirations, Grade Expectations
5. Management	Monitoring, Behavior Management, Time Management, Actively Organizing
6. Motivation	Achievement Motivation, Parent as motivator, Learning Counselor
7. Providing	Resources, Emotional climate, Academic Home Climate, Press for Intellectual Development, Enrichment
8. Supervision	Rules. Intervention, Restricting
9. Support	Support for learning & role of the school

Table 3.

Parent's Academic Home Climate Generates:

Ability to Accept Challenges
Academic Self-Concepts (Confidence in Abilities)
Accept Responsibility
Adaptability Attitudes (In Many Areas)
Attitudes (Toward School & the Teacher)
Attributions (Ability)(Effort)
Beliefs
Cognitive Growth
Curiosity
Desire to Learn (Readiness)
Development of a Work Ethic
Expectations
Interests
Level of Commitment
Levels of Cooperation
Motivation
Respect for Authority
Values
Ways to Communicate

Table 4.

Key findings of school-based constructs from American national studies (NELS88)

School-Based Constructs

Factors derived from Student data | Factors derived from parent data

Parents attend meeting at school
NSD

Contact school
-*

Parents attend school event
8th grade=negative; 10thgrade=+**

PTO/PTA Involvement
-**

Parents participate in school
-*

Parents participate in school
-**

Parent Attends PTO/PTA
NSD

Parent Attends PTO/PTA
-**

Parent volunteers at school
NSD

Volunteer/Fund Raising
+**

Parent volunteers outside school
NSD

Parent helped with homework
-**

Note. Results of correlations with achievement -*p <.05; **p <.01; NSD No significant difference

Table 5

Key findings of home-based constructs from American national studies

Home-Based Constructs			
NELS88 Student Factors		**NELS88 Parent Factors**	
Aspiration 4/4	Positive **	Aspiration 3/3	Positive **
Discussion 5/7 Communication	Positive *	Discussion +1,-1,1 NSD Communication	mixed
Supervision 2/2	NSD	Supervision/rules 1 NSD, 1 -**	mixed
Restrict Child 2/2	Positive **	Support 1/1	Positive **
Monitoring 1/1	Positive *	Monitoring 1/1	Negative*
General supervision 1/1	Positive *	Social Capital 1/1	Positive **
Check homework 2/2	Negative **	Academic reinforcement	NSD

P=*.05; P=**.01

Table 6

Key findings from the reviews of multiple studies

Fan & Chen (2001)		Jeynes (2005)	
School-Based Constructs	Correlations	**School-Based Constructs**	Effect Sizes
Parent participation in school activities	.32	Attendance & participation in school functions	.21*
		Homework checking	-.08 NSD
Home-Based Constructs		**Home-Based Constructs**	
Aspirations	.40	Parental expectations (aspirations)	.58*
Communication with children about school	.19	Communication	.24**
Parental rules imposed at home	.09	Parental style (supportive & helpful)	.31**
		Reading to & with the children	.42***

Table 7

Corroboration of Academic Home Climate Constructs

Communication
        Jeynes (2005) about school
        Finn (1998) daily discussion about school
        Fan & Chen (2001) about school
        Deslandes & Potvin (1999) day-day interactions
        Lee & Bowen (2006) educational discussion
        Freeman (2000) interaction
        Pomerantz, et al. (2007) motivational development via communication
Cooperation
Creativity
Dealing with Teachers
        Prins & Tosco (2008) involvement in school
        Fan & Chen (2001) communication with teachers
        Deslandes & Potvin (1999) communication with teachers
Decision Making
Discipline
        Cataldo (1987) behavior management
Empathy
        Deslandes & Potvin (1999) warmth
        Cataldo (1987) affectionate, parental sensitivity & responsiveness
Establishing a Work Ethic
        Deslandes & Potvin (1999) self-reliance
        Deslandes & Potvin (1999) work-orientation
        Pomerantz, Moorman & Litwack (2007) skill development, meta cognition skills
Expectations
        Jeynes (2005)
        Fan & Chen (2001)
        Lee & Bowen (2006)
Help
        Lee & Bowen (2006) with homework
Homework
        Finn (1998) helping
Intellectual Stimulation
        Jeynes (2005) reading to the child
        Prins & Tosco (2008) involvement in literacy activities
        Freeman (2000) meaningful stimulation
        Pomerantz, Moorman & Litwack (2007) cognitive skills
Level of Commitment
        Freeman (2000) provide feedback for improving
Monitoring/Time Management
        Jeynes (2005) checking homework
        Finn (1998) organizing & monitoring

      Finn (1998) supervising homework
      Deslandes & Potvin (1999) supervision
      Lee & Bowen (2006) time management
      Cataldo (1987) management
      Pomerantz, Moorman & Litwack (2007) monitoring, regulating learning
Morality
Peers
Praise
Pressure
Problem Solving
Responsibility
      Jeynes (2005) attendance
Self-Esteem
      Deslandes & Potvin (1999) granting psychological autonomy
      Deslandes & Potvin (1999) identity
      Freeman (2000) take pride in child's accomplishments
Studying
Supplying Structure
      Fan & Chen (2001) rules imposed
Support
      Deslandes & Potvin (1999) affective support
      Freeman (2000) real emotional support