DEVELOPMENT AND SOCIETY

Volume 34 Number 1, June 2005, pp. 147~167

COPING THROUGH SOCIAL CAPITAL IN EDUCATIONAL STRATIFICATION: RELATIONAL ALIGNMENT AND COMPLEMENTARY TIES

KIM DOO HWAN University of Notre Dame

This paper attempts to refine the theory of social capital in educational research. This study emphasizes functional specificity of the support by parents and school as two primary source of social capital to adolescents. After a review of theories on various forms of capital regarding stratification process, this study, first, introduces the concept of relational alignment as reflecting functional specificity of social capital drawing on Wisconsin status attainment model (Sewell et al. 1969), Coleman's theory of social capital (1988) and aligned ambition (Schneider and Stevenson 1999). Second, based on complementarity principal of interpersonal or inter-organizational network development pattern (Lauman, Galaskiewicz and Marsden 1978), complementary extra-group ties is proposed as a social capital strategy through which parents and schools can effectively bridge resources and information specific to adolescents' goals, enabling them to make informed choices about their future. One empirical application for each theoretical concept is discussed in the context of transition to college education in the US and one empirical application for relational alignment is discussed in terms of school academic performance in Korea.

Key Words: stratification, social capital, functional specificity, relational alignment, complementarity

INTRODUCTION

The role of social capital is a relatively novel addition in educational research. Social capital refers to resources appropriable from social relations which can contribute to a successful educational outcome after taking into account the efforts of individual students and their socioeconomic backgrounds (Coleman, 1988; Smith, 1995; Stanton-Salazar and Dornbusch, 1995; Teachman, Paasch and Carver 1997; Valenzuela and Dornbusch 1994; Zhou and Bankston, 1996). Some interpretations of social capital theory suggest that the formation of network closure or strong ties as conceptualized in Colman's theory of social capital does not always have positive effects and can restrain the actions of network members (Portes, 1998; Portes and Sensenbrenner, 1993). In other words, one form of social capital that works for a certain type of action may not work so well for other types of actions (Sandefur and Laumann, 1998). Schneider and Stevenson (1999) emphasize

concrete and directed communication in their study on adolescents' ambition, stating, "It is not simply communication that Coleman perceives as meaningful, but also what norms are conveyed to adolescents." (1999: 147) This argument is consistent with the focus on benefits as mechanisms that social capital can accrue to an actor in the form of value (Sandefur and Laumann, 1998).

In contemplating these arguments, this paper attempts to refine the theory of social capital for educational outcomes by drawing on "functional specificity of social capital's many forms" (Sandefur and Laumann, 1998: 483). In doing so, this article proposes "relational alignment" and "complementary extra group ties" as reflecting functional specificity of social capital. I will first review theories on various forms of capital with reference to stratification in order to provide the context for the argument of this article (section 2, 3 and 4). Second, I will map out theoretical position of relational alignment (section 5) and complementary extra-group ties (section 6) in the field of educational attainment research. Empirical applications of these theoretical constructs will be discussed in the context of transition to college education in the US and in terms of school academic performance in Korea.

HUMAN CAPITAL IN STRATIFICATION

Human capital is education, experience and job skills accumulated over the course of a person's life. Most studies operationalize human capital with years of schooling or job experience. In neo-classical economic theory, human capital creates differences in the earnings or pay between individuals (Becker, 1964; Mincer, 1974; Schultz, 1961). It also functions as a signal of the underlying quality of a worker's capacity for a job (Spence, 1974).

Economists using the human capital model assume that because women and men anticipate engaging in different adulthood activities, women will develop better non-market skills whereas men will develop better market-place skills (Becker, 1981). The basic tenets of human capital theory are: 1) skills inhere in an individual; 2) they are measurable, e.g. years of formal education; 3) rational calculation of individual rates of return induces the motivation to enhance one's human capital. The human capital theory of economics views workers as rational actors seeking to maximize their lifetime income (utility) by investing in their own productive capacities.

Discrepancy in earnings among workers arises from workers' different initial and continuing investments in their productivity-related skills. Human capital theory is also built on a 'technocratic' approach assuming that the more the society advances in technology, the greater the societal

demand for a high-skilled, managerial and professional labor force as jobs for those with lower levels of formal education and training decreases.

This assumption resembles an evolutionary advancement in society as envisioned in Blau and Duncan's theory of liberal industrialism (Blau, 1967). According to this theory, social stratification depends upon the varying investment in human capital by individuals and the rate of return on such investment. There have been problems, however, associated with human capital theory, which are namely: 1) the behavioral assumptions regarding utility maximization; 2) difficulties in calculating rates of return for investments in education; 3) a failure to recognize that skills are socially defined and constructed; 4) ignoring reward allocation of positions occupied by those with differential human capital. The essential issue of power relations and their effects on reward structure and motivation underlie these criticisms (Brown, 2001).

In sociology, functional stratification theory has a similar theoretical element to human capital theory even though it considers inherent capacity, i.e., innate talents, to be another source of stratification according to the functional significance of positions. Davis and Moor (1945: 244) argue: "In many cases ... the training process is so long, costly, and elaborate that relatively few can qualify " and that "virtually none would undertake it if the position ... did not carry a reward commensurate with the sacrifice".

Sacrifice itself is investment in the economic theory of human capital. In other words, the investment involves a present cost for a potential future benefit in the labor market since a social system based on open competition or achievement is very likely to provide such benefits in the future. These theories assume that the social stratification system is based on pure achievement or on an open competition system. Davis (1948) has modified the functional stratification theory in his introductory text of sociology based on a pure achievement social system. Granting that the theory presupposes a complete, open competition society, the existence of family — the social organization for biological reproduction and socialization — requires consideration of status ascription and how competition toward status and status ascription operate together in the process of stratification.

In sum, those who have the same ability do not necessarily have the same opportunities for education and training. Even with the same level of education or training, people may not occupy or have the chance for a high status occupational position or earnings commensurate with their position. This is due to status ascription, the influence of parental status, and the efforts or influence of various identity-based groups in the stratification process (Huaco, 1970).

Blau and Duncan (1967) also recognize that the theory of stratification involves both ascriptive and achievement principles. However, after examining the relative importance of these principles, they argue: "[T]he American occupational structure is largely governed by universalistic criteria of performance and achievement, with the notable exception of the influence of race. The close relationship between educational attainment and occupational achievement, with education being the most important determinant of occupational status that could be discovered, testifies to this universalism" (241).

Problems associated with this functional theory of social stratification lie in the assumption that meritocratic selection becomes guaranteed with advancements in technology and economy. This means that a strong association between educational and occupational attainment promotes intergenerational mobility rather than maintaining stability in class positions through generations. But in terms of empirical findings, cross-national comparisons and investigations of differential technological and economical advancements over different periods of time do not confirm their theory (Goldthorpe, 2000).

Even though both human capital theory in economics and functional stratification theory in sociology have shortcomings in their assumptions about selection processes, the importance of human capital (that is, educational attainment) is clear in the process of stratification. What matters in stratification is not the human capital or level of formal education itself but the formation and subsequent application of it, i.e. distribution structure of opportunity in schooling and in the labor market. In other words, "What makes a difference in academic achievement?" constitutes one question; the other question is: "What are the factors operative in converting an achieved quality of education into earnings or occupational status over and beyond the basic skills and knowledge for a job?"

It is evident that there is a clear premium for a college degree and more return for more and better education as numerous studies show in economics and sociology. Another issue to examine, however, is what happens if the rate of occupational upgrading does not meet the continuous and universal expansion of educational attainment. Both human capital theory and the functional theory of stratification assume that reward conferral is the natural corollary to educational attainment. However, if there is overpopulation that exceeds the societal demand for those highly educated individuals, this can raise questions about the utility of education as a market signal.

Industrialization and post-industrialization has in fact promoted educational equality with the growth of free schooling in industrialized societies.

This tendency is also reflected in the elevated uniformity in educational and occupational aspirations. Already in 1992, about seventy percent of American high school seniors expected to earn at least a college degree and the percentage of those desiring professional and managerial positions was over seventy percent. In addition, the incongruity between the projected labor force and the highly elevated ambition of contemporary youth is phenomenal (Schneider and Stevenson, 1999: 70-77). This can cause serious social and political consequences such as job dissatisfaction, resistance to the ideals of achievement ideology, political alienation, political leftism as well as lower than expected earnings given one's educational attainment.

The discussion so far has dealt with the unequal creation of human capital and raised some potential problems in emerging educational equality at the college level. These two issues constitute the setting in which this article tries to refine the theoretical concept of social capital. The family is at the core of the unequal creation of human capital. The process of creating human capital depends, at the very minimum, on various characteristics of the family that is endowed with different kinds and amounts of resources and capital. In addition to this process, the process of the labor market also involves many different factors other than those of a pure merit-based reward system.

For example, there have been studies on the value of social capital, social resources or social networks on the return on human capital (Burt, 1992, 2001; Lin, 1999; Lin, 2000). In Burt's words, those who have better social capital have a better opportunity in terms of returns on their human capital (Burt, 1992). This means that we cannot conduct adequate research on stratification by merely assessing individual attributes like human capital. In most cases, it involves a group process (some aspect of social capital) as well.

Based on the finding that education is the most crucial medium in attaining higher occupational status, researchers in sociology have disentangled the process in the home as the micro-foundation of status attainment since Blau and Duncan (1967). The Wisconsin model of status attainment (Sewell, Haller and Portes, 1969) refined this tradition of research by adding significant others and their influence on adolescents' ambition for achievement and continues to date (Cheng and Starks, 2002; Grusky, 1983; Grusky and Diprete, 1990; Hanson, 1994; Hauser and Anderson, 1991; Jencks, Crouse and Mueser, 1983; Teachman, 1987; Teachman, Paasch and Carver, 1996; Teachman and Paasch, 1998). The specification of the Wisconsin model implies unequal distribution of significant others (micro social structure surrounding adolescents) and social psychological resources (motivations and

beliefs generated by the social structure surrounding adolescents) by the family backgrounds. *Status socialization* process in the Wisconsin model of status attainment shares its theoretical argument partly with hereditary transmission of cultural capital (Bourdieu, 1986). On the other hand, the Wisconsin model of status attainment heralded the beginning of research on the effects of social capital (relational resources with significant others) in educational attainment (Coleman, 1988).

CULTURAL CAPITAL AND HABITUS: COVERT TRANSMISSION OF CLASS STATUS

Bourdieu (1986) states that his notion of cultural capital initially came to him as a theoretical hypothesis to explain the unequal academic achievements of children positioned differentially in the social class structure. Bourdieu does not view schools as necessarily neutral institutions, but ones in which the preferences, attitudes, and behaviors of the upper or middle class are valued more (Bourdieu and Passeron, 1977). According to this view, both human capital theory in economics and functional stratification theory in sociology favor rewards on disguised forms of capital formed by unequal distributions of resources or capital.

"The structure of the field, i.e. the unequal distribution of capital, is the source of the specific effects of capital, i.e. the appropriation of profits and the power to impose the laws of functioning of the field most favorable to capital and its reproduction." (Bourdieu, 1986: 246)

Economists only relate cost of schooling to its return in terms of money in looking at the relationship between returns on educational investment and economic investment. According to Bourdieu, this simple monetary analysis by economists does not reflect the different proportions of resources allocated to economic investment and cultural investment by different agents or different social classes for the following reasons: 1) the volume and composition of assets held by different agents or different social classes determine the opportunity structure of differential returns on investment that the various markets offer; 2) since the ability or talent is itself the product of an investment of time and cultural capital, economists fail to recognize "the contribution which the educational system makes to the reproduction of social structure by sanctioning the hereditary transmission of cultural capital" (Bourdieu, 1986: 244).

To Bourdieu, capital in any form, when appropriated by a possessor or a group of possessors, enables them to appropriate social energy for their own exclusive use. The family "is one of the key sites of the accumulation of capital in its different forms and its transmission between the generations" (Bourdieu, 1996: 19).

In regards to the contradictory results of cultural mobility and cultural reproduction in their study, Aschaffenburg and Mass (1997) attempt to reconcile this conundrum by stating that the upper class will remain resilient in maintaining their status, for the dissipation of the exclusionary power of cultural capital will induce them to seek alternative strategies to maintain their distinct and privileged status. This is because there is a process of conversion whereby one form of capital may be converted into other forms of capital with the purpose of maintaining status:

"The convertibility of the different types of capital is the basis of the strategies aimed at ensuring the reproduction of capital (and the position occupied in social space) by means of the conversions least costly in terms of conversion work and of the losses inherent in the conversion itself (in a given state of social power relations)." (Bourdieu, 1986: 253)

Resources available for families of high socioeconomic backgrounds find a way for them to express ascriptive forces into achieved status such as buying homes in high-status residential areas with good-quality public schools or sending their children to private schools (Goldthorpe, 2000: 249). Bourdieu also argues, "the most powerful principle of the symbolic efficacy of cultural capital no doubt lies in the logic of its transmission. … the transmission of cultural capital is no doubt the best hidden form of hereditary transmission of capital" (Bourdieu, 1986).

It is evident that the force of selection or social allocation by institutional arrangement (Kerckhoff, 1976, 1996) is, in its operation, a countervailing force against status socialization as envisioned in the traditional status attainment theories. Along with cultural capital, *habitus* in Bourdieu's theory of class reproduction potentially provides a point of integration for the two perspectives of allocation or socialization on the association between social backgrounds, aspirations and status attainment (McClelland, 1990). Habitus is defined as "systems of durable, transposable *dispositions*, structured structures, predisposed to function as structuring of practices...objectively adapted to their goals without presupposing a conscious aiming at ends" (Bourdieu, 1977b: 72) and "act as a mediation between structure and practice" (Bourdieu, 1977a: 487). According to McClelland (1990), the theo-

retical notion of habitus helps to "show how both culture and structure produce and modify occupational goals" (103). In other words, the socialization process can inculcate a particular orientation toward future plans on adolescents and provide cultural capital as the means to achieve them. However theses processes are constantly adjusted by perceived structural constraints. This can be a way to explore how the micro process in the family has to do with the macro social hierarchy in which the family is located. Relational (intergenerational) alignment of ambition may be a promising tool that we can examine this integration empirically.

SOCIAL CAPITAL: TIES THAT TRANSMIT CULTURAL CAPITAL

The value of strong social ties within the family has been proven in the transmission of parental resources to children (Coleman, 1988). Coleman suggests that close-knit parental relationships between families through children's friendships (social capital) facilitate the transmission of achievement norms (cultural capital) between generations (Coleman, 1988; Carbonaro, 1998; Teachman, Paasch and Carver, 1996; Teachman, Paasch and Carver, 1997).

In intergenerational closure¹, critical information and values to which children would not otherwise have access by themselves can flow from parents to children through these ties. These ties are the most efficient conduit of norms, standards, and expectations for becoming successful adults (Schneider and Stevenson, 1999). Network closure brings a clear and consistent normative order that provides values for network members to internalize. This generates corresponding performance expectations and secures supportive relationships from others (Podolny and Baron, 1997). Accordingly, when children absorb the contents (identity) generated by intergenerational closure, they benefit more from parental resources than from the family that lacks intergenerational closure.

While Coleman's intergenerational closure shares the logic of transmission in Bourdieu's theory of cultural capital, in particular for social capital within the family, Coleman pays more attention to the network structure which promotes the relational or intergenerational transmission of norms

¹ Coleman (1988) developed this term to describe the interconnected relationship between different parents through their children's friendship. As a term in formal network analysis, we can understand this term as density of network. What he emphasizes is a better safety net for their children and a synergy effect on making their children develop pro-academic norms when they are connected to each other. He does not intend to express "exclusiveness of a group" with closure as in the definition of social capital by Bourdieu (1986).

and expectations. He was interested in the social integration mechanism which can prevent adolescents from deviation or generate public goods that make a community into a functional whole. Based on the relational and social structural features of social capital, Coleman argues that changes in social structure can facilitate productive actions of the actors within the structure. The closure of social networks functions better than disconnected social networks in generating trust, expectation and norms as forms of social capital as well as sanctions to maintain them.

When the value of strong intergenerational ties as social capital in schools and communities has been demonstrated in the transmission of parental expectation and resources to children (Coleman, 1988), it must have been welcomed by its potential for parents to do something independent of socioeconomic backgrounds. Differing from the normative framework of social capital based on benefits from social integration (Coleman, 1988), Bourdieu focuses on unequal distribution of capital. According to Bourdieu, social capital is "the aggregate of the actual or potential resources which are linked ... to membership in a group." Therefore to him, social capital is best understood as a process that facilitates access to benefits rather than to reciprocal relationships themselves. The distinction lies in the types and quality of resources that can be tapped through exchanges as pointed out by Sandefur and Laumann (1998), who call for a shift in attention to benefits available thorough various social ties. However Bourdieu's definition of "capital" is overwhelmingly concentrated on power and sees education as a reflection of social stratification rather than as shaping social stratification, and consequently he misses the role of mediation or bridging that social capital potentially has (Bourdieu, 1986; Calhoun, 1993; Swartz, 1997). For example, institutional ties potentially function to overcome the barriers facing disadvantaged groups by utilizing resources available through those ties (Stanton-Salazar and Dornbusch, 1995).

RELATIONAL ALIGNMENT

Whether the status attainment model is still relevant for the study of social stratification depends on the subsequent theoretical developments reflecting the changing relationship of variables to the societal changes that have since taken place. Unlike the mobility research prior to Blau and Duncan (1967), by attending to the status attainment process rather than the mobility rate or pattern in society, the status attainment paradigm starts to disentangle the micro-foundation of the stratification system as exemplified in much of the research on searching the attributes of the family which

affect mobility outcomes (Mare, 2001).

The Wisconsin model of status attainment refines the status attainment model by Blau and Duncan (1967) by adding "significant others" and "ambition" to the model (Sewell, Haller and Portes, 1969; Sewell and Hauser, 1980). The model emphasizes the socialization process in which adolescents are surrounded by those who encourage achievement norms and interact with them.

To date, most research in the tradition of the Wisconsin model replicates the original model with improvement in measurement (Jencks, Crouse and Mueser, 1983) or investigates educational expectations (Teachman and Paasch 1998) and occupational aspirations (Rojewski and Yang, 1997) separately. In association with other family background variables, they study how the consequences of the variables in the Wisconsin model change within the course of individuals' lives rather than change across cohorts (Warren, 2001; Warren, Hauser and Sheridan, 2002) and compares the impact of the educational aspirations of parents, teachers, close relatives, and peers on students' educational expectations across various racial groups (Cheng and Starks, 2002).

Blau and Duncan (1967) emphasize the social rewards of education rather than the "coping" strategies by individuals or families in the stratification system. In contrast, the Wisconsin model in its early elaboration emphasized the social process in the home, conceptualizing the family's influence on a child's academic attitudes and behavior as parental expectations and aspirations, parental communication with the child, or parenting styles. This specification of the model implicitly expresses the influence of coping strategies within the family.

The recent proliferation of research on social capital in association with educational outcomes expands this micro foundation into the meso-level of the social structure of communities and schools (Coleman, 1988; Bryk, Lee and Holland, 1993; Bryk and Schneider, 2002). In addition, findings on the effects of social psychological variables in the Wisconsin model of status attainment have been refined by the concept of aligned ambition, particularly reflecting the elevated ambition of contemporary adolescents (Schneider and Stevenson, 1999).

Coleman's social capital also goes one step further than the Wisconsin model of status attainment, which focuses on the influence of significant others. Coleman attends to connections of those who are around and influence children. He introduces a connected social structure of parents around children's friendship, or "intergenerational closure". According to him, "intergenerational closure" promotes the capacity of parents in supervising

their children by maintaining acquaintance with other parents who are the parents of the friends of their own children. When adolescents are integrated through intergenerational closure, they can develop desirable norms and expectation toward educational achievement more easily. Though Coleman bases his theory on the functional character of a family or a school community with a high degree of intergenerational closure as a whole, his conceptualization of social capital emphasizes relational transmission of resources through strong social ties.

The value of a college degree decreases as the number of persons with college degree increases. How to cope with this societal change in industrial and post-industrial development by individuals or the family becomes a crucial dimension of the stratification process in these changed circumstances. Discovering the dramatic changes in the ambitions of American high school students from the 1950s through the 1990s in both educational expectation and occupational aspiration, Schneider and Stevenson (1999) argue that adolescents are successful in pursuing their ambition when an educational plan is well informed with the path to the occupational goal that they desire.

In the specifications of the Wisconsin model, educational expectations and occupational aspirations are entered separately and predict the status attained. Schneider and Stevenson (1999) developed a theoretically refined concept of "aligned ambition" by combining educational aspirations with occupational ambitions. Aligned ambition pays attention to the importance of matching or coupling between educational and occupational ambitions that are critically associated with the actual realization of that ambition.

Aspirations are desired outcomes but desired outcomes should be distinguished from desired illusions. The ambition in status attainment arises from the web of expectations around children, but it should also be linked to the web of knowledge of the real world and its information and resources. In order for found information and resources to be effective, it must be appropriated by agents in the web, implemented, and invested in the production process. The importance of information and resources of significant others did not appear in the Wisconsin model of status attainment. An individual's aspiration develops from consideration of a web of latent expectations about the future. The web of latent expectations may either lack or have resources and information linked to the dynamics of aspiration depending on the location in the nexus of "structured and accumulated opportunities for entering multiple institutional contexts and forging relationships with people who control resources." (Stanton-Salazar, 2001: 19)

Taking into account several arguments about social mobility or reproduc-

tion in stratification, the theory of "how agents maneuver in terms of desired outcome as a supply side mechanism" is relevant to looking at the stratification process. This is because variation in "coping" strategies that act as countervailing forces against the "sorting" mechanism established in a given social structure can result in a great deal of difference in status attained.

An early stage of the status attainment model established the importance of education in the process of stratification. The changed situation of an emerging uniformity of ambition and high level of college attendance, which may result in differential returns to the same level of education, especially among college graduates, increasingly calls for a new theory. In terms of coping with this paradoxical social change — too high of an ambition and too many highly educated people in the population — this study offers a new clue to decipher "who moves up and why" with the concept of "relational alignment".

This article defines relations as aligned when the two in the relationship share a specific goal or take actions specifically towards the goal. Relational alignment draws on three theoretical predecessors: the web of expectation surrounding children in the Wisconsin model, the relational transmission of norms and expectations in Coleman's intergenerational closure, and matching between educational and occupational plans in the concept of "aligned ambition" (Schneider and Stevenson, 1999).

Kim and Schneider (Forthcoming) operationalize the concept of "relational alignment" with intergenerational matching of adolescents' educational goals with parents' expectation and supporting actions and applies it to the context of adolescents' transition to college education in the US. The study examined the effects of intergenerational alignment on access to college education and college selectivity among American adolescents controlling for students' efforts, family backgrounds and social capital variables in Coleman's conceptualization.

Kim and Schneider's (Forthcoming) study shows that the alignment of parents' and students' goals increase students' odds of attending a postsecondary institution in the year after high school graduation. In particular, the study found that the effect of parents' education on the selectivity of the college attended is dependent on relational alignment of educational goals between parents and adolescents; for example, when there is a match between the educational goals between students and parents, students whose parents have higher levels of educational attainment benefit more from their parents' human capital in terms of the college selectivity to which students are admitted.

This interaction between relational alignment and levels of parent education expresses habitus that mediates practice and structure. McClelland (1990) and Dumais (2002) operationalize habitus with occupational aspirations assuming occupational goals emerge from the calculation or perception of the/an opportunity structure. However if habitus is constructed to integrate practice and structure, the concept of interaction between relational alignment and levels of parent education better conveys the notion of habitus as an empirical term since it relates micro social process in the family(relational alignment) to the macro system of social hierarchy (levels of educational attainment).

Kim (2005) also examined the same measurement of relational alignment with school performance of middle school students in Korea. This study found almost the same results as the previous study with the dependent variable of school rank: the effect of parents' human capital on children's educational performance is contingent on the relational alignment of educational goals.

As we have seen so far, the gist of the alignment argument is at the functional specificity of relational support (social capital) between parents and adolescents. For example, when agreement between parents' expectations and their adolescents' aspirations occur and when parents or schools take actions specific to successful transition to postsecondary education, parents as social capital are defined as aligned.

COMPLEMENTARY EXTRA-GROUP TIES

While the core of the web in which relational alignment occurs lies in the family-specific actions that parents take to manage their child's school career, and are expressed in the relationship between socioeconomic status and academic achievement (Baker, 1986), it should not be limited to the family. Institutional agents (school teachers and counselors) and their ties are also influential in both the educational and occupational attainment process. They are particularly important for those who are disadvantaged in gaining access to social support regarding knowledge, experience, and information in pursuing their educational and occupational goals (Rosenbaum, 1999; Stanton-Salazar, 1997; Stanton-Salazar and Dornbusch, 1995).

A social network that consists only of in-group members, in particular for those who are disadvantaged, can be insulating, thereby diminishing the capacity to gain access to resources controlled from outside the group. In an account of inner city youth pregnancy, Fernandez-Kelly explains that a truncated social network of the inner city is very likely the cause a young female to envision an adult identity by becoming a mother (1995). The truncated social network seriously limits chances to access the market economy that exists outside the community in which they are physically located.

In a similar vein, Stanton-Salazar argues that "the inclusion of one institutional agent in the social network of a youth from a working-class or low income family carries far more potential transformative power than such an inclusion would carry in the social network of a typical middle-class youth" (2001: 163). Since their social origin is short of "the proper class-specific socialization deemed necessary for school success, alternative sites within the school and community do provide compensatory opportunities" (2004: 28).

In the context of national development, Woolcock (1998) suggested that a high integration of intra-group ties complemented by a high linkage of extra-group networks can be very beneficial to the members of a group. Burt (2001: 47) also argues that in relation to the educational outcome of children, "The complete story is about effective adult supervision (closure argument) combined with parental ability to wrestle resources out of society to support the child (hole argument)." According to Burt (1997), "Human capital itself is useless without the social capital of opportunities in which to apply it (1997: 339)." Social capital of extra-group ties is relatively new to research on educational attainment and only a few studies on educational attainment consider this dimension of social ties (Hofferth, Boisjoly and Duncan, 1998; Morgan and Sorensen, 1999; Stanton-Salazar, 1997; Stanton-Salazar and Dornbusch, 1995). These arguments and studies emphasize the importance of social ties to diverse views, knowledge, information or resources not readily available within the group but they do not reflect the functional specificity of those ties.

Complementarity is one of the two basic principles in interpersonal or interorganizational network development patterns³ (Laumann, Galaskiewicz and Marsden, 1978). Actors or organizations that occupy different positions in the division of labor or in access to resources and information can develop complementary network ties when they can jointly

² As a refinement of brokerage as social capital, structural holes represent "the separation between nonredundant contacts" (Burt 1992: 18). The concept of redundancy refers to the limited nature of resources and information when an individual's contacts are connected to each other; because of these interconnections, the same information tends to re-circulate within the network of contacts. Nonredundant contacts (those not connected with each other) indicate more diverse channels of resources and information.

³ The other principle of interpersonal or interorganizational network development patterns is similarities. "It is assumed that similarity of goals and functions produce a commonality of interests and hence interorganizational linkage" (461)

achieve each other's goals. The idea of reciprocal complementarity in interpersonal or inter-organizational network development patterns can be recast into a social capital strategy as complementary ties reflecting functional specificity of the ties.

On this basis, this study argues that complementary ties reflect the functional specificity of extra-group ties, i.e. functionally specific social capital of opportunity. Families, high schools and colleges are organizations functionally interdependent in the production of college freshmen. Complementary ties between high school and colleges bridge what is not readily available within the family that an adolescent immediately belongs to. The complementary extra-group ties as social capital bridge knowledge, information and resources along with opportunities for a specific goal. The information from complementary extra-group ties is specifically necessary for a certain goal — i.e. successful transition to college (Kim, 2004).

Ties between high schools and colleges are complementary network ties since they can jointly achieve each other's goals - high schools sending students to better colleges and colleges recruiting better students. It is the ties that high schools have with colleges that recruit their freshmen as they prepare to graduate. The more college representatives a high school can attract, the wider and better options students in that school have in successfully completing the college application process.

At the level of organization, Kim (2004) investigated whether high school ties to colleges and high school actions specific to helping students with the transition to postsecondary education were likely to improve students' chances of attending selective four-year colleges, controlling for the average academic ability of students in the school and the school's socioeconomic composition. The effects of high school ties with colleges were apparent in models estimating both access to postsecondary institutions and enrollment in selective four-year colleges (Kim, 2004).

Teachers can be seen as complementary ties for students from disadvantaged family backgrounds since they are located in a different position of division of labor in the educational system but jointly achieve each other's goal (Furstenberg and Hughes 1995; Stanton-Salazar 1997). With this perspective, a recent study examined the effects of teachers as social capital on dropping out of high school focusing on the "quality of the social networks that comprise a student's interactions with teachers" (Croninger and Lee, 2001: 554). The study found that teachers as sources of social capital are especially beneficial for those who are socially and academically at risk when they enter the high school. Based on findings of the study, Croninger and Lee ask to "highlight the manner in which adolescents themselves pur-

posefully seek out and use teacher-based resources to enhance their school efforts" (571). This argument shares the base with the definition of complementarity in social capital strategy. The importance of school teachers as complementary ties for students with disadvantaged family backgrounds has also been confirmed with Korean adolescents (Kim, 2005).

This article, first, identified problems of human capital perspective in research on status attainment or stratification. In terms of unequal production of human capital, this article examined how the family plays a critical role in providing cultural and social capital that make a significant variation in educational achievement. By attending to the changed situation of an emerging high level of college attendance in the United States, this article has argued that social capital should be functionally specific to the goal through relational alignment and complementary ties. Erickson's criticism (1996) of Bourdieu's thesis on the relationship between culture and class intimates her theory. She argues that both culture for domination and culture for coordination are useful resources at work, but culture used in coordination is of the cultural variety and much more useful in a competitive private sector. This cultural variety comes from the social network variety (Erickson, 1996). Bourdieu's definition of "capital" is overwhelmed with its concentration on power and sees education as a reflection of social stratification rather than as shaping social stratification. If we translate Erickson's criticism of Bourdieu's conception of culture and class into parents' role for their children, not only is it the supervision of children through strong social ties within the family as Coleman argues, but also the coordination of different aspects of development stages with a crucial impact on children's successful transition into successful adulthood. In particular, smoothing the transition to the life after high school easily goes beyond the boundary of parent personal competence. Hence complementary ties or actions are often necessary.

Parent and school actions can bridge and also transform information and resources to complement the specific situation that their adolescents face in transitioning to college and adulthood. Middle-class families draw educational social support from a variety of sources within and without the school or the family (Bourdieu and Passeron, 1977; Bourdieu, 1986). Many middle- and upper-middle class American families hire professionals to assist their adolescents with preparation for college admission (McDonough, 1997). For lower class families, the school may represent the only viable avenue for accessing complementary social capital in terms of educational and informational resources for successful preparation for college and adulthood. Since participation in high school programs by low

class parents turn out to be significant predictors of low class students' enrollment in selective four-year colleges (Kim, 2004), the school's capacity in a poor neighborhood may be closely related with opportunities for low class adolescents.

Lastly, theoretical argument in this article requires more thorough empirical verification since it has been only applied to transition to college in the United States and school performance in Korea. In particular, aligned ambition and relational alignment have been argued in relation with youth labor market but has not been examined regarding transition from school to work. In order to verify the importance of relational or intergenerational ambition alignment and complementary extra-group ties in the process of status attainment or stratification, more researches need to be done in the context of transition to work before it informs the policy on problems of youth labor market.

REFERENCES

- Aschaffenburg, K., and I. Maas. 1997. "Cultural and educational careers: The dynamics of social reproduction." *American Sociological Review* 62(4): 573-587.
- Astone, N. M., and S. S. McLanahan. 1991. "Family-Structure, Parental Practices and High-School Completion." *American Sociological Review* 56(3): 309-320.
- Astone, N. M., C. A. Nathanson, R. Schoen, and Y. J. Kim. 1999. "Family demography, social theory, and investment in social capital." *Population and Development Review* 25 (1):1-31.
- Baker, David P. and David L. Stevenson. 1986. "Mothers' Strategies For Children's School Achievement: Managing The Transition to High School." Sociology of Education 59(3): 156-166.
- Becker, G. S. 1964. Human Capital. New York: Columbia University Press.
 - . 1981. Treatise on the Family. Cambridge MA: Harvard University Press.
- Blau, Peter M. and Otis Dudley Duncan. 1967b. *The American Occupational Structure*. New York: Free Press.
- Bourdieu, Pierre. 1977a. "Cultural Reproduction and Social Reproduction" Jerome Karabel and A.H. Halsey eds., *Power and Ideology in Education*, pp. 487-511 New York: Oxford University Press.
- _____. 1977b. Outline of Theory of Practice. New York: Cambridge University Press.
- _____. 1986. "The Forms of Capital." *Handbook of Theory and Research for the Sociology of Education*, John G. Richardson ed., pp. 241-258. Westport, Connecticut: Greenwood Press.
- _____. 1996. "On the Family as Realized Category." *Theory, Culture & Society* 13 (1): 19-26.
- Bourdieu, Pierre and Jean-Claude Passeron. 1977. Reproducation in Education, Society and Culture. London: Sage Publications.
- Brown, D. K. 2001. "The social sources of educational credentialism: status cultures, labor markets, and organizations." *Sociology of Education* 74 (extra issue): 19-34.

- Bryk, Anthony S. and Barbara Schneider. 2002. *Trust in Schools: A Core Resource for Improvement*. New York: Russell Sage Foundation.
- Bryk, Anthony S., Valerie E. Lee and Peter B. Holland. 1993. *Catholic Schools and the Common Good*. Cambridge: Harvard University Press.
- Burt, R. S. 1992. Structural Holes. Cambridge, MA: Harvard Unniversity Press.
- _____. 1997. "The contingent value of social capital." *Administrative Science Quarterly* 42(2): 339-365.
- 2001. "Structural Holes versus Network Closure as Social Capital." Nan Lin, Karen S. Cook, and R. S. Burt eds., *Social Capital: Theory and Research*, Aldine de Gruyter.
- Calhoun, Craig. 1993. "Habitus, Field, and Capital: The Question of Historical Specificity." Craig Calhoun, Edward LiPuma and Moishe Postone, eds., *Bourdieu: Critical Perspecitve*, pp. 61-88. Chicago: University of Chicago Press.
- Carbonaro, William J. 1998. "A little Help from My Friend's Parents: Intergenerational Closure and Educational Outcomes." *Sociology of Education* 71(4): 295-313.
- Cheng, S. and B. Starks. 2002. "Racial differences in the effects of significant others on students' educational expectations." *Sociology of Education* 75(4): 306-327.
- Croninger, Robert G. and Valerie E. Lee. 2001. Social capital and dropping out of high school: benefits to at-risk students of teachers' support and guidance. *Teachers College Record* 103: 548-581.
- Coleman, J. S. 1988. "Social capital in the creation of human capital." *American Journal of Sociology* 94: S95-S120.
- Davis, Kingsley. 1948. Human Society. New York: Macmillan.
- Davis, Kingsley and Wilbert E. Moore. 1945. "Some Principles of Stratification." *American Sociological Review* 10(2): 242-49.
- DiMaggio, P. 1982. "Cultural Capital and School Success: The Impact of Status Culture Participation on the Grades of U.S. High School Students." *American Sociological Review* 47(2): 189-201.
- DiMaggio, P., and J. Mohr. 1985. "Cultural Capital, Educational-Attainment, and Marital Selection." *American Journal of Sociology* 90: 1231-1261.
- Dumais, Susan A. 2002 "Cultural capital, gender, and school success: the role of habitus." *Sociology of Education* 75(1): 44-68
- Erickson, Bonnie H. 1996. "Culture, Class, and Connections." *American Journal of Sociology* 102(1): 217-251.
- Fernandez-Kelly, M. P. 1995. "Social and cutltural capital in the urban ghetto: implications for the economic sociology of immigration." A.Portes ed., *The economic sociology of immigration*, pp. 213-47. New York: Russell Sage.
- Furstenberg, F. F., Jr., and Hughes, M. E. 1995. "Social capital and successful development among at-risk youth." *Journal of Marriage and the Family* 57(3): 580-592.
- Goldthorpe, John. 2000. "Outline of a Theory of Scoical Moblity." *On Sociology* pp. 230-58. Oxford: Oxford University Press.
- Grusky, D. B. 1983. "Industrialization and the Status Attainment Process: the Thesis of Industrialism Reconsidered." *American Sociological Review* 48(4): 494-506.
- Grusky, D. B., and T. A. Diprete. 1990. "Recent Trends in the Process of Stratification." *Demography* 27(4): 617-637.
- Hanson, S. L. 1994. "Lost Talent Unrealized Educational Aspirations and

- Expectations among United-States Youths." Sociology of Education 67(3): 159-183.
- Hauser, R. M., and D. K. Anderson. 1991. "Post-High-School Plans and Aspirations of Black-and-White High- School Seniors - 1976-86." Sociology of Education 64(4): 263-277.
- Hofferth, S. L., J. Boisjoly, and G. J. Duncan. 1998. "Parents' extrafamilial resources and children's school attainment." *Sociology of Education* 71(3): 246-268.
- _____. 1999. "The development of social capital." *Rationality and Society* 11(1): 79-110.
- Huaco, George. 1970. "The Functional Theory of Stratification." Melvin M. Tumin ed., *Readings on Social Stratification*, pp 411-428. Englewood Cliffs, NJ: Prentice-Hall.
- Jencks, C., J. Crouse, and P. Mueser. 1983. "The Wisconsin Model of Status Attainment — a National Replication with Improved Measures of Ability and Aspiration." Sociology of Education 56(1): 3-19.
- Kerckhoff, Alan C. 1976. "The Status Attainment Process: Socialization or Allocation." *Social Forces* 55(2): 368-381.
- Kerckhoff, Alan C. 1996. "Building Conceptual and Empirical Bridges between Studies of Educational and Labor Force Careers." Alan C. Kerckhoff, ed., Generating Social Stratification: Toward a New Research Agenda, Boulder, CO: Westview Press.
- Kim, D. H. 2004. "Aligning Action and Promoting Complementary Ties: School Support in Adolescents' Transition to Postsecondary Education" Presented at the Annual American Education Research Association Grants Program Doctoral Awardee Conference, October, 2004. Washington DC.
- Kim, D. H. 2005. "Kyoyuk myokpyo ŭi kwan gyejok tongjo wa hagop songch'wi: chiwi hoektŭk yŭn'gu ui sae panghyang (Relational alignment of educational goals and school performance: a new direction of status attainment research)." *Korean Journal of Sociology of Education* 15(1): 43-64.
- Kim, D. H. and Barbara Schneider. Forthcoming. "Social Capital in Action: Alignment of Parental Support in Adolescents' Transition to Postsecondary Education" *Social Forces*.
- Lareau, Annette. 1987. "Social Class and Family-School Relationships: The Importance of Cultural Capital." *Sociology of Education* 56(1): 73-85.
- Lareau, annette and Erin Horvat. 1999. "Moments of Social Inclusion and Exclusion: Race, Class and Cultural Capital in Family-School Relationships." *Sociology of Education* 72(1): 37-53.
- Laumann, Edward O., Joseph Galaskiewicz and Peter V. Marsden. 1978. "Community Structure as Interorganizational Linkages." Annual Review of Sociology 4: 455-84
- Lin, N. 1999. "Social networks and status attainment." *Annual Review of Sociology* 25: 467-487.
- _____. 2000. "Inequality in social capital." Contemporary Sociology 29(6): 785-795.
- Mare, R. D. 2001. "Observations on the study of social mobility and inequality." D. B. Grusky ed., *Social Stratification*, pp. 477-488. Boulder: Westview Press.
- McClelland, Katherine 1990. "Cumulative disadvantage among the highly ambitious" *Sociology of Education* 63(2):102-121.
- McDonough, Patricia M. 1997. Choosing Colleges: How Social Class and Schools

- Structure Opportunity. Albany: State University of New York Press.
- Mincer, Jacob. 1974. Schooling, Experience and Earning. New York: National Bureau of Economic Research.
- Morgan, S. L., and A. B. Sorensen. 1999. "Parental networks, social closure, and mathematics learning: A test of Coleman's social capital explanation of school effects." *American Sociological Review* 64(5): 661-681.
- Podolny, J. M., and J. N. Baron. 1997. "Resources and relationships: Social networks and mobility in the workplace." *American Sociological Review* 62(5): 673-693.
- Portes, A. 1998. "Social capital: Its origins and applications in modern sociology." *Annual Review of Sociology* 24: 1-24.
- Portes, A., and J. Sensenbrenner. 1993. "Embeddedness and Immigration Notes on the Social Determinants of Economic-Action." *American Journal of Sociology* 98(6): 1320-1350.
- Rojewski, J. W., and B. Y. Yang. 1997. "Longitudinal analysis of select influences on adolescents' occupational aspirations." *Journal of Vocational Behavior* 51(3): 375-410.
- Rosenbaum, James E., Stefanie DeLuca, Shazia R. Miller and Kevin Roy. 1999. "Pathway into Work: Short-and Long-term Effects of Personal and Institutional Ties." *Sociology of Education* 72(3): 179-196.
- Sandefur, R. L., and E. O. Laumann. 1998. "A paradigm for social capital." Rationality and Society 10(4): 481-501.
- Schneider, B. and D. Stevenson. 1999. *The Ambitious Generation: American's Teenagers, Motivated But Directionless.* New Haven: Yale University Press.
- Schultz, T. W. 1961. "Investment in Human-Capital." *American Economic Review* 51(1): 1-17.
- Sewell, W. H., A. O. Haller and A. Portes. 1969. "The Educational And Early Occupational Attainment Process." *American Sociological Review* 34(1):82-92.
- Sewell, W. H. and Robert M. Houser. 1980. "The Wisconsin Longitudian Study of Social and Psychological Factors in Aspriation and Achievements." *Research in Sociology of Education and Socialization* 1: 59-99.
- Smith, M. H., L. J.Beaulieu and A. Seraphine. 1995. "Social capital, place of residence, and college attendence." *Rural Sociology* 60(3): 363-80.
- Spence, A. Michael. 1974. Market Signaling: Informational Transfer in Hiring and Related Process. Cambridge, MA: Harvard University Press.
- Stanton-Salazar, R. D. 1997. "A social capital framework for understanding the socialization of racial minority children and youths." Harvard Educational Review 67(1): 1-40.
- ______. 2001. Manufacturing Hope and Despair: The School and Kin Support Networks of U.S.-Mexican Youth. New York: Teachers College Press.
- _____. 2004. "Social Capital among Working-Class Minority Students." Margaret A. Gibson, Patricia Gandara, and Jill Peterson Koyamapp. eds., *School Connections: U.S. Mexican Youth, Peers, and School Achievement*, pp. 18-38. New York: Teachers College Press.
- Stanton-Salazar, R. D., and S. M. Dornbusch. 1995. "Social Capital and the Reproduction of Inequality Information Networks among Mexican-Origin High-School-Students." *Sociology of Education* 68(2): 116-135.
- Swartz, David. 1997. Culture & Power: The Sociology of Pierre Bourdieu. Chicago:

- University of Chicago Press.
- Teachman, J. D. 1987. "Family Background, Educational Resources, and Educational-Attainment." *American Sociological Review* 52(4): 548-557.
- Teachman, J. D., and K. Paasch. 1998. "The family and educational aspirations." *Journal of Marriage and the Family* 60(3): 704-714.
- Teachman, J. D., K. Paasch, and K. Carver. 1996. "Social capital and dropping out of school early." *Journal of Marriage and the Family* 58(3): 773-783.
- . 1997. "Social capital and the generation of human capital." *Social Forces* 75(4): 1343-1359.
- Valenzuela, A. and S. Dornbusch. 1994. "Familism and social capital in the academic achievement of Mexican-origin and Anglo high school adolescents." *Social Science Quarterly* 75(1): 18-36.
- Warren, J. R. 2001. "Changes with age in the process of occupational stratification." *Social Science Research* 30(2): 264-288.
- Warren, J. R., R. M. Hauser, and J. T. Sheridan. 2002. "Occupational stratification across the life course: Evidence from the Wisconsin Longitudinal Study." American Sociological Review 67(3): 432-455.
- Woolcock, M. 1998. "Social capital and economic development: Toward a theoretical synthesis and policy framework." *Theory and Society* 27(4): 151-208.
- Zhou, M. and Carl L. Bankston. 1996. "Social capital and the adaptation of the second generation: the case of Vietnamese youth in New Orleans." A. Portes, ed., *The New Second Generation*, New York: Russel Sage Foundation.

KIM DOO HWAN is a Postdoctoral Research Associate of the Center for Research on Eductional Opportunity in the Department of Sociology at the University of Notre Dame. He coauthored "Social Capital in Action: Alignment of Parental Support in Adolescents' Transition to Postsecondary Education" with Barbara Schneider forthcoming in December issue of Social Forces in 2005. He also recently published an article "Relational Alignment of Educational Goals and Educational Performance: A New Direction of Status Attainment Research" in Korean Journal of Sociology of Education.