

ABSTRACT

Title of Document: SCHOOL MOBILITY AS IT RELATES TO
ADOLESCENTS' CIVIC KNOWLEDGE AND
SCHOOL BELONGING

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The relation of school mobility to levels of adolescent civic knowledge and sense of belonging at school was examined using data collected from a nationally representative sample (N=2417) of 14-year-old adolescents from across the United States as a part of the International Association for the Evaluation of Educational Achievement (IEA) Civic Education Study of 1999. Multiple linear regression revealed that higher mobility scores were associated with lower civic knowledge scores, civic knowledge scores were marginally higher for females than males, and having a higher socio-economic status was associated with higher civic knowledge scores. Further, low confidence in school participation was associated with higher school mobility, females had higher confidence in school participation than males, and having a higher socio-economic status was associated with higher confidence in school participation scores. Lower trust in schools was associated with higher school mobility, while gender and socio-economic status were not significantly related.

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KNOWLEDGE AND SCHOOL BELONGING

By

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CHAPTER 1

Introduction and Study Overview

Rationale for the Study

American students have one of the highest rates of residential mobility in comparison to children from other industrialized nations (Mao, Whitsett, & Mellor, 1998; Temple & Reynolds, 1998). It is therefore no surprise that increasing school mobility is a trend in the United States. School mobility is defined as making a school enrollment change that is not a result of traditional grade promotion, such as moving from middle school to high school. A national study conducted in 1993 found that 50% of all students in the United States moved at least twice before their eighth birthday and, of this group, 10% moved six or more times (Rumberger & Larson, 1998). Current education policies, such as school closings and open transfers from schools with low achievement scores are only magnifying this trend. Further, several studies have shown that mobile students are at risk for negative social, behavioral, and educational outcomes.

Studies have consistently revealed that school mobility is associated with numerous risk factors such as poverty, stressful life events (such as divorce), poor initial school performance, and a tendency to change schools again in subsequent years of schooling (Alexander, Entwisle, & Dauber, 1996; Eckenrode, Rowe, Laird, & Brathwaite, 1995; Gruman, Harachi, Abbott, Catalano, & Flemming, 2008; Kerbow, 1996; Nelson, Simoni, & Adelman, 1996; Pribesh & Downey, 1999). It can be hard to isolate the potential impact of school mobility from these risk factors, therefore it is important for researchers to control for preexisting differences when investigating the

effects of school mobility. Studies that have controlled for preexisting differences have found school mobility to have a negative effect on school performance beyond the impact of other stressful factors in a child's life related to moving (Astone & McLanahan, 1994; Haveman, Wolfe, & Spaulding, 1991; Heinlein & Shinn, 2000; Ingersoll, Scamman, & Eckerling, 1989). Consequences of school mobility include lower math and reading test scores (Mantzicopoulos & Knutson, 2000; Texas Department of Education, 1997), an increased risk of behavioral problems (Tucker, Marx, & Long, 1998; Wood, Halfon, Scarlata, Newacheck, & Nessim, 1993), an increased chance of being held back a grade level (Simpson & Fowler, 1994; Tucker et al., 1998), and having lower rates of school completion and expected educational attainment (Astone & McLanahan, 1994; Hagan, MacMillan, & Wheaton, 1996; Pribesh & Downey, 1999; Rumberger & Larson, 1998; South, Haynie, & Bose, 2007).

When students are mobile, it seems logical that their academic performance would suffer. Indeed, research has found that students who move from school to school often experience disruption in the learning process (Rumberger, et al., 1999). In addition to Rumberger and his group, other researchers have studied this issue. For example, Mehana and Reynolds (2004) conducted a meta analysis for studies between 1975 and 1994, finding that relationships were almost all negative in reading and mathematics (except for military personnel in special schools). Both frequency of moving and socioeconomic status were implicated. This could be due to several factors, such as having an unsteady academic foundation, weak basic skills, and gaps in coverage between school curricula (Sanderson, 2003). Civic knowledge, or the understanding of civic concepts and fundamental democratic principles, is one of the academic areas in

which this could take place. It is quite possible that students are not learning basic facts or democratic principles because they are moving from one jurisdiction where those topics are covered to another where it has already been covered. If students are leaving one school or entering another school where they are halfway through a unit, the student is then only exposed to half of what they should have learned. With this weak foundation, it becomes increasingly difficult to build upon this knowledge in order to understand more complex civic knowledge.

A student's perception of the extent to which they belong to the student community at their school could be threatened by school mobility as well. School belonging, or a student's perception of feeling accepted by others at school and being a participant in a cohesive school structure, is vital to adolescents' development because it satisfies their basic human need for relatedness (Deci et al., 1991). School belonging is associated with a range of social and academic outcomes. Students who move frequently often are unable to establish the bonds necessary to form a feeling of school belonging. These students may not have the time to get to know their peers or join organizations in their former schools, but also may be intimidated to engage with their peers in their new school.

The issue of transfer students in college has been getting recent attention by researchers in post-secondary education. Transfer students have been found to be less engaged in their colleges and universities. A national study of students' engagement in their universities shows that slightly more than one third of transfer students, compared with nearly three quarters of non-transfer students, report spending more than one hour per week involved in extracurricular activities (NSSE, 2008). It is ironic that so much

attention has been given to mobile students at this level considering that many transfers in college are the result of student choice. School mobility at other levels has been the recipient of less concern from researchers, even though it is often not a matter of choice, but a result of district policies, such as re-districting or schools closing.

The present study examines the potential relation of school mobility among ninth graders to their levels of civic knowledge and sense of school belonging, a line of research that has not previously been published. Specifically, this study examines how school mobility relates to measures of these constructs while also considering gender and socioeconomic status as factors. In this way, it will be possible to create a more accurate picture of the consequences of school mobility among adolescents. Once we are able to better understand the consequences of school mobility for adolescents, future research can continue to examine how school mobility relates to other factors and adolescent outcomes.

Purpose of the Study

The purpose of this study is to understand the relation of school mobility to levels of adolescent civic knowledge and sense of belonging at school. Additionally, this study will consider the demographic characteristics of gender and educational resources in the home as they relate to school mobility. School mobility has been linked to an array of negative academic and social outcomes, however no other study has investigated civic knowledge or school belonging specifically. If school mobility is found to be an important influence on adolescent civic knowledge or sense of school belonging, it will be important to understand the mechanisms behind this. In order to suggest factors

important to this, three theoretical frameworks will be examined in this study, along with some research on mobility that has been largely atheoretical.

A preliminary step in the present study is to describe what is currently known about school mobility. Previous research has shown that school mobility is associated with negative academic, social, and behavioral outcomes (Ou & Reynolds, 2008). This is not limited to the child who is mobile, but also to the larger school environment that includes administrators, teachers, and fellow students. There have been several studies on school mobility as it relates to socioeconomic status, however previous studies have not included gender as a variable. In the second step of this study, I will discuss civic knowledge and how it relates to other positive outcomes of development. I will also discuss the effects of school belonging on youth civic outcomes. In the third and final step of my investigation, I will examine how school mobility affects adolescent civic knowledge and school belonging while also considering gender and socioeconomic status. This study will examine 14-year-olds, therefore there will not be issues in regards to age-related changes in the outcomes.

The results of this study will add to current understandings of what school mobility means for young people and provide a more accurate picture of the consequences of school mobility on adolescents. In particular, the current study will offer evidence as to how school mobility relates to adolescent civic knowledge and school belonging. This could have important implications for how parents, teachers, and researchers view the issue of students who frequently move from one school to another as well as implications for policies such as those that encourage school transfer.

Research Questions

This study used quantitative inquiry to investigate the effects of school mobility on levels of adolescent civic knowledge and school belonging. The overarching question for the present study is as follows: To what extent does moving from school to school relate to adolescents' civic knowledge and school belonging? The primary goal is to understand how moving from one school to another can impact adolescents' levels of civic knowledge and their perceived sense of belonging at school. This goal will be addressed by the following research questions:

How is school mobility related to adolescents' civic knowledge?

To what extent are student gender and socioeconomic status related to civic knowledge when school mobility is also a factor?

How is school mobility related to adolescents' perceived school belonging?

To what extent are student gender and socioeconomic status related to perceived school belonging when school mobility is also a factor?

Separate analyses will be conducted for civic knowledge and school belonging (operationalized by responses to a scale relating to school cohesiveness including items such as, "lots of positive changes happen in this school when students work together" and a single item measure of trust in schools). Further discussion of the present study's methodology is presented in Chapter 3.

Organization of the Study

This study is organized into five chapters. The first chapter offers an introduction to the present study. It outlines the rationale for the study, the purpose of the study, and

the conceptual framework for the study. It also provides the research questions that will be used to guide the study.

The first chapter establishes the goal of investigating how moving from one school to another can impact adolescents' levels of civic knowledge and their perceived sense of belonging at school. The second chapter is a review of the literature. It begins with a brief overview of the ecological systems theory (Bronfenbrenner, 1989) to explain human development. It then utilizes the Crick and Dodge's (1994) social information processing model to aid in understanding school mobility and its relation to associations with peers. Lave and Wenger's (2002) communities of practice theory is then employed to explain how different levels and types of social communities affect mobile students. Then, relevant research concerning school mobility is reviewed. The chapter then turns to studies about civic knowledge, school belonging, and school engagement. Finally, the strengths and weaknesses in the current literature as well as the contribution of this study are discussed.

Chapter Three outlines the research design and methodology of this study. The dataset from the International Association for the Evaluation of Educational Achievement (IEA) Civic Education Study of 1999 was utilized to perform secondary data analysis using a regression analysis. Data analysis using a nationally representative sample will result in findings that will be generalizable to 14-year-old adolescents in the United States and should be informative for policy makers as well as practitioners.

Chapter Four presents the results of the regression analyses. Chapter Five summarizes the findings of the study. Further, the implications of these findings are

discussed as well as the limitations of the current study. Finally, this chapter concludes by suggesting areas for further research.

CHAPTER 2

Theoretical Framework and Review of the Literature

The current study examines the effects of mobility on the civic engagement of 14-year-olds in the United States. I am interested in the association between adolescents' mobility (moving from school to school) and their civic knowledge and their sense of involvement or belonging at school. To lay the groundwork for this study, it is important to discuss theories that can explain how these contexts can be influential. It is also vital to review research that examines the effects of each context.

This chapter begins with a general discussion of research on mobility. This is followed by a presentation of theoretical frameworks that will be used to substantiate and interpret context effects. In each case I will both present the theory and, where relevant, discuss how the experience of moving between schools and making the required adjustments to a new setting might be conceptualized within the theory. I will then define civic knowledge and describe how this construct is related to other positive outcomes of development. In addition, I will describe demographic characteristics typically associated with higher or lower civic knowledge. Next, I will summarize research on sense of school belonging (and the related concept of school engagement) on youth civic outcomes. Finally, I will conclude with a summary and critique of the reviewed literature and discuss how the current study will make a contribution to the current literature.

Mobility

The incidence of school mobility (often associated with residential mobility but recently also with school policies regarding school transfer) has generally been high over the last twenty years. In fact, American students have one of the highest mobility rates in the world (Mao, et al., 1998; Temple and Reynolds, 1998). There has been some research on this topic using large data sets in which mobility was one of several predictors of academic achievement and attainment or of friendships networks. There has been other research using the case study method. Most of this research has been atheoretical and has paid limited attention to the students' own experiences in adjusting to new school environments.

In 1988, a longitudinal survey of eighth grade students in the US found that 31% of students had changed schools at least twice between first and eighth grades, and 10% of these students had changed schools at least four times between eighth and twelfth grades. This does not include regular grade promotions between elementary, middle, and high schools (Rumberger & Larson, 1998). Mobility rates are found to be the highest in large urban school districts that are predominantly minority (Black, 2006). Highly mobile students have been found to be at risk for negative social and educational outcomes. The majority of research on school mobility has found a negative association between student mobility and student performance (Mao, et al., 1998; Ou & Reynolds, 2008). Studies using self-report have found that frequently moving from school to school can disrupt the school environment, teachers' lessons, overall classroom learning, and students' levels of engagement (Hodgkinson, 2000; 2001).

Two studies by South and Haynie and their colleagues looked at the National Longitudinal Study of Adolescent Health to examine the impact of residential and school mobility on the structure of adolescents' friendship networks. More mobile adolescents had smaller networks and held less status in them, an effect that was magnified in schools with many mobile students. These effects were especially strong for girls (South & Haynie, 2004). Mobile students also tended to belong to networks whose other members showed low levels of school engagement and weaker academic performance. This effect was equally pronounced for girls and boys (South, Haynie, & Bose, 2007). This is an interesting set of studies, but it could benefit from some theoretical context.

Gruman, Harachi, Abbott, Catalano, and Fleming (2008) researched the issue impact of school mobility in a longitudinal study of elementary school children. The study contained a relatively small sample of 1,003 second through fifth graders who were predominantly Caucasian. Growth curve analyses were used to attempt to isolate the impacts of school mobility from other negative risk factors. Results revealed that moving from school to school predicted declines in academic performance and classroom participation, but not in positive attitude towards school. Peer acceptance and teacher support were shown to have positive influences on the growth trajectories of child outcomes. Teacher support was also shown to have a strong influence on positive attitudes toward school for those students who were highly transient.

Sanderson (2003) examined the issue of student mobility by studying an elementary school with highly transient students. A key weakness of his study is that it was a case study, therefore generalizability must be called into question. From the administrative perspective, Sanderson noted that school staff spent time processing

paperwork for these new students. Many times a student's school records did not transfer with them, which caused problems. The school had no previous record of any possible learning disabilities, behavioral problems, or medical problems. Administrators had no other choice but to screen these children, for placement purposes. Even when records are transferred, files can be hard to assess when students are coming from different school systems or other countries.

Highly mobile students challenged teachers as well, according to Sanderson (2003). Their main concern was that students who frequently moved from school to school were disengaged in the classroom. Specifically, teachers commented that more transient students had negative attitudes and experienced more behavioral problems compared to other children. Teachers hypothesized that this could be due to students being uncomfortable in their new environment, trying to establish themselves in a new school, or feeling that there will be no consequences for their actions because they are likely to move again. Indeed, studies have found that children who often moved were more likely to experience a number of psychological and behavior problems compared to children who did not move or moved infrequently (Simpson & Fowler, 1994; Wood et al., 1993).

Teachers also expressed concern over the academic foundations of these transient students. They felt that many students had unsteady foundations and weak basic skills. There may have been gaps in curriculum that occurred in the process of moving from one school to another. Not only are these teachers responsible for filling the gaps, but they must also integrate new students into the current classroom. Studies have found that mobile students consistently have lower achievement than non-mobile or stable students

(Audette et al., 1993; Ingersoll et al., 1989). Finally, many teachers lamented that they lost vital instructional time reviewing basic concepts in order to fill gaps in learning for their new students.

In a review of previous studies, Rumberger (2003) claims that there is a negative bi-directional relationship between highly mobile students and the schools they attend. He acknowledged that mobility could place that child at risk psychologically, socially, and academically. Furthermore, it is important to consider the circumstances under which the child moved. Students could have moved due to school factors such as overcrowding, school choice, suspension and expulsion policies, and the general academic and social climate. These circumstances could amplify any negative experiences the child may have had as a consequence of moving to a new environment. For example, a child who moved to a new school with a different (even objectively a more positive) school climate will have to adjust to a school that may be quite different than the one they left. The child may not even have an appropriate social schema to apply to their new school because the two schools are so different, and therefore makes the adjustment process that much more difficult.

Even students who are not mobile are affected by having highly mobile peers. In another study by Rumberger and others (1999), he found that mobile students influence classroom learning activities, teacher morale, and administrative burdens. Teachers found these transient students to be particularly disruptive to the learning process. Besides having to review certain material and treating certain learning gaps that have previously been identified, teachers find it hard to assign group work given uncertainty about whether the group will be able to stay in-tact through the duration of the assignment.

Rumberger also identified the fiscal impact that these students have from such activities as failing to return textbooks. Mobile students also impact the school climate because it is difficult to develop school spirit and cohesion with an ever-changing student body.

In summary, there is some research in this area but it is largely atheoretical and somewhat scattered in focusing on only part of the issue at a time (achievement or friendship networks or atmosphere of the school).

Theoretical Frameworks and Their Relation to Issues of Mobility between Schools
Ecological Theory of Human Development

A popular view regarding human development is that it is part of a dynamic, ecological system that is impacted by multiple contexts. The ecological systems theory proposes that people learn through interacting with their social environment, which is defined as being “any event or condition outside the organism that is presumed to influence, or be influenced by the person’s development” (Bronfenbrenner, 1979, p. 359). This includes immediate environments as well as the social and cultural contexts of relations among different settings (Rogoff, 2003, p. 45). The relationship between individuals and their environment is reciprocal, meaning that not only are individuals influenced by their environments, but that they also have an influence on their environment (Alexander, 2006, p. 50). In Bronfenbrenner’s ecological systems model (1989), he presents four nested and highly interrelated social systems representing an individual’s different environments. These social systems exist on a continuum from proximal to distal environments.

In the ecological system, the *microsystem* is the most proximal to the adolescent. The microsystem is the adolescent’s immediate environment and consequently where

their immediate experiences occur. It includes individuals, such as family and peers, as well as societal institutions, such as schools and the workplace (Bronfenbrenner, 1989). Activities, roles within social units, and interpersonal relations are also a part of this system (Alexander, 2006, p. 51). The various aspects of the microsystem interact directly with the adolescent through interpersonal relationships and patterns of activity (Bronfenbrenner, 1989). Age of the child can influence the salience of certain aspects of the microsystem. For instance, contexts such as the family and home have the largest influence on younger children, but this changes as children get older and are exposed to other influences. The impact that each context has on the child may change over time, particularly as interactions between contexts occur.

Although Bronfenbrenner does not directly address the effects of substantial changes in microsystems, such as that occurring when a student moves from school to school, his construct of “proximal processes” as a primary mechanism in development can be interpreted to shed light on the potential disruption that may result.

Bronfenbrenner and Morris (1998) claim that human development takes place through processes of progressively more complex reciprocal interactions between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate external environment. An effective interaction occurs over a fairly regular basis over extended periods of *time*. Such enduring forms of interaction in the immediate environment are referred to as *proximal processes* (Bronfenbrenner & Morris, 1998, p. 996, italics in the original).

The school setting is a microsystem in which such reciprocal interactions develop over time. In a school setting, the child acquires routine interaction patterns with persons,

objects, and symbols from being in that environment for an extended period of time. When this student moves to a new school, they are likely to experience disruption in these proximal processes and their reciprocal interactions due to the new persons, objects, and symbols to which they are exposed.

The *mesosystem* operates under the assumption that the social environments contained in the microsystem are far from being isolated from one another. The mesosystem, therefore, accounts for the interactions that occur between two or more of the adolescent's social settings (Alexander, 2006, p. 51). For instance, the interaction between an adolescent's home and school could effect adolescent development, in addition to how each would have an independent effect on development. Bronfenbrenner (1989) posits that positive associations among key social systems are necessary for healthy development. These positive associations have the potential to increase support and interaction available to individuals in the settings that are close to them. When these positive associations between microsystems are not made, there can be detrimental outcomes. As a result, any potential benefits of microsystem relationships to development are diminished (Muuss, 1996). For example, a strong connection between parents and teachers would benefit students because parents may be more active in the school through volunteering in the classroom, going on field trips, or feeling confident in talking to teachers. Conversely, teachers who are connected closely to parents may communicate more with the parents so that they are not only aware of their child's academic progress, but also of any social problems that may arise. Teachers may also be more apt in noticing any problems within the home that are negatively affecting the child in school. The interaction between the two contexts benefits the student because it has the potential to

enrich their academic potentials and general well-being. A lack of interaction between the two contexts could negatively impact the functioning of the school as a socializing agent and prevent the student from receiving outside support in the event that they are having a problem in one of the contexts. Another potentially adverse effect in the mesosystem occurs when microsystems support values or behaviors that either conflict with one another or with the larger macrosystem (Muuss, 1996).

The *exosystem* consists of microsystems related to the adolescent, but in which the adolescent does not directly participate (Bronfenbrenner, 1989; Rogoff, 2003). Although the child may not be in immediate contact with these external environments, they still have an indirect influence on development (Rogoff, 2003). For example, a parent's workplace could have a profound impact on his or her child. Bronfenbrenner (1989) argued that a parent's efficiency within the family depends greatly on the demands, stresses, and support of the parent's job. This has implications for how much time the parent spends with their child, how much financial support the parent can provide, and the overall psychological welfare of the parent. Also included are bodies such as the local school board, medical organizations, and social services (Alexander, 2003). These groups all make decisions and policies that have an impact on children in their daily lives. This includes policies that either encourage or require students to move from one school to another (such as setting criteria for closing schools where achievement is low or redrawing school boundaries, for example).

At the broadest level of development is the *macrosystem*. This is considered to be the larger sociocultural context in which the adolescent exists. It includes such pervasive influences as cultural beliefs, social customs, and economic values (Alexander, 2003).

Bronfenbrenner argues that the influences of the macrosystem can be seen throughout all levels and areas of development, because these larger societal processes are “a blueprint for the organization of every type of setting” (1979, p. 4).

Bronfenbrenner’s ecological systems theory is relevant to understanding mobility because it examines the child in relation to the multiple contexts, or microsystems, in which the child exists. Microsystems in the adolescent’s immediate environment, change when they move to a new location. There is likely to be a disruption of proximal processes for a mobile child. When an adolescent moves to a new location, they are unable to sustain habitual or continued interaction with their immediate environment because it has changed. Presumably, new proximal processes will develop in the new environment as a result of the child and adolescent’s interaction with this environment, but this takes time and can lead to uncertainty and negative emotions. When a child is mobile, there is a likely disruption of microsystems due to the child’s ever-changing environment. The child must learn to adapt to the new microsystems in their new location, including a new school, new peers, and a new neighborhood. Along with this, the adolescent must adjust to any social or cultural changes. This could be a change in routine or in some cases, a change in traditions and rituals. This most likely would occur when the new environment did not facilitate or recognize such routines or traditions. For example, a Jewish child moving from an environment with a high Jewish population to an environment with few Jewish people may not be able to practice their religion as they once did. This could be due to lack of resources, such as places to purchase traditional foods or lack of places to worship, as well as to lack of understanding from others about the Jewish religion.

Bronfenbrenner's (1979, 1986, 1989, 1998, 2005) ecological systems theory makes several key contributions to the field of human development. This theory takes into account the relations among the multiple settings in which adolescents are directly and indirectly involved, and how these have an impact on development. A limitation of this theory, however, is that it is perhaps too broad. It is nearly impossible to assess every influence and interaction between influences over time, nonetheless at once. The most any researcher can do is to focus on a few individual influences and estimate how they collectively impact children's development. In effect, the ecological systems theory can never be proven or disproven.

Perhaps a more obvious limitation of the ecological systems theory is that it lacks specificity. While I do argue that it is vital to examine multiple contexts and the interactions between them, I also believe that it is important to examine specific processes and mechanisms within these contexts. To remedy this deficiency, I will also utilize more precise theories related to each context of influence. I employ Crick and Dodge's (1994) social information processing model to understand how adolescents may respond in interpersonal situations, which are either familiar or unfamiliar (and possibly unstable). I make use of Lave and Wenger's (2002) communities of practice theory to understand how different levels and types of social communities affect mobile students. This theory focuses on microsystem settings, however it expands upon Bronfenbrenner's theory by focusing primarily on the informal learning that takes place socially in settings such as school clubs, organizations, and peer groups (in addition to classrooms). This is in contrast to the ecological systems theory that is usually applied primarily to formal learning settings such as the classroom. The communities of practice theory goes into

greater detail for microsystems across the range of settings in schools than the ecological systems theory. In a later section, I describe communities of practice in greater detail.

Theory Relating to Interactions with Peers and Classmates

The social information processing (SIP) model (Crick & Dodge, 1994) is concerned with the decision-making process of children in a context with peers or classmates. While this model was originally intended for use in the context of aggressive interactions, it can be applied to other situations. This social-cognitive approach operates under the premise that in order to understand children's social adjustment, it is important to investigate the individual cognitive tasks that might be required when a child is engaged in social interaction (Crick & Dodge, 1994). In general, the SIP model supposes that children selectively focus on and encode certain interpersonal cues within a situation, and based on those cues construct an interpretation of the situation. Then, children will access possible responses to those situations from their long-term memory, evaluate those responses, and select a response to enact (Crick & Dodge, 1994).

Central to the SIP model is the child's "data base," where the child stores and accesses memories, acquired rules, social schemas, and social knowledge. In the first step of the SIP model, the child encodes internal and external environmental cues to decipher what happened. Then, the child must interpret these cues in order to understand why the event happened. Both steps may be influenced by the database information stored in the child's memory. In the third step of the model, the child must clarify their goals to figure out what outcome they desire to achieve. The SIP model hypothesizes that children have goals in social situations, but may revise or construct new goals in response to immediate social stimuli. Next, the child conducts a "mental search of possible responses" (Crick &

Dodge, 1994) in order to think about their options in the situation. Subsequently, the child decides what they will do. Finally, the child will actually enact a plan based on what he or she perceives will bring the most positive outcome from peers and will receive feedback. This feedback provides either positive or negative reinforcement that may influence how they encode cues in the future, thus influencing how they will navigate through the SIP model in the future.

The social information processing model is based on interaction with others, such as peers. The process may become unstable or complicated when peer groups change, such as when a child moves to a new school. It is easiest to interpret cues of those who are familiar, but a child who has moved is surrounded peers and/or adults who are unfamiliar to them (Lemerise & Arsenio, 2000). In adapting to these new groups, peers as well as teachers, these children have to reinvent their response options and process verbal and behavioral information from new individuals. Additionally, a child who has moved to a new school may be in a negative emotional state associated with adjusting to a new physical and social environment. This emotional state in turn affects how they interpret and encode cues, generate their goals, and make their decisions.

Feeney, Cassidy, and Ramos-Marcuse (2008) investigated how adolescents behave in novel social situations. Specifically, they examined the extent to which attachment representations (similar to social schemas) predicted adolescents' initial behavior when meeting and interacting with unfamiliar peers. The basis of this study was Bowlby's (1969) attachment theory, which proposes that through experience, each individual builds "working models" of the world and of himself or herself in the world. Using these working models, the individual is able to perceive events in the present and

future, make plans, and select strategies for interacting with others as is similar in the social information processing model. In a study by Fennely and colleagues 135 high school students participated in videotaped social interactions with unfamiliar peers from another high school. Interview and self-report measures were used to assess attachment representations. Results from this study found that adolescents' attachment representations were predictive of their behaviors when first meeting and interaction with their new peers. This could have important implications for the area of school mobility because these students are also in new social situations and must interact with unfamiliar peers. Students who are mobile may not have strong attachment representations, meaning that it may be harder for them to draw effectively from stable models when interacting with these unfamiliar peers. Attachment theory may have other important implications for the area of school mobility, however the three theories by Bronfenbrenner, Dodge, and Lave and Wenger will be sufficient for the present investigation.

The social information processing model makes an important contribution in understanding school mobility. As previously stated, it is hard for children to interpret cues from individuals who are unfamiliar to them. If students have trouble interpreting the cues, which is the first step in the SIP model, it will influence every subsequent step in the model. It not only affects how students perceive certain situations, but how they process and ultimately act in these situations. Feedback from others also influences how children proceed through the SIP model. Students who frequently move from school to school face the social adjustment to new peers and social expectations (Schaller, 1975). They do not have a consistent peer group because they are constantly moving. Since they do not know what is likely to be a response from peers to a behavior option, their

behavior options continue to change based on which peer group they are surrounded by at the time. With a familiar peer group, a child will have a well-defined set of options based on prior feedback from previous experiences. With an unfamiliar peer group, the child will not have this same set of options because they will have little to no prior feedback or experience to draw upon with that peer group. Instead, the child will have to choose their behavior options based on what they predict the likely response from that particular peer group will be, which could differ from the likely response of other peer groups. The child will thus have to adopt their behavior options to the appropriate peer group when confronted with certain situations. The work of South and Haynie, discussed previously, is also relevant here.

Previous research has shown that in the social information processing model, boys are consistently found to be more aggressive than girls. Gender, however, did not relate significantly with number of years of peer rejection (Dodge et al., 2003). In the study conducted by South and Haynie (2004) it was found that girls' relationships with peers were more detrimentally damaged by school mobility. Previous research has not investigated any differences by socioeconomic status for the social information processing model. Unless otherwise stated, all previous studies have used the self-report method.

Theory Pertaining to the Schools as Communities of Practice

Lave and Wenger (2002) proposed a model of situated learning in which learning is discussed in terms of social participation rather than in the traditional academic sense. This model is based on the assumption that learning is a fundamentally social phenomenon. Children and adolescents are participants in communities of practice, which

are social communities with a common set of practices and goals. Children and adolescents may belong to several different communities of practice at once. Related to this concept is the notion of legitimate peripheral participation, which occurs through observation in communities of practice. Legitimate peripheral participants play a less active role in their communities of practice since they are observing from the outside rather than actively participating within the community. This passive role may be due to the fact that they are not comfortable with other members within the particular community of practice or with their own skill level to be an active participant, as is often the case with highly transient students. Participation in communities of practice involves being active in social community practices and constructing identities in relation to these communities and attributing meaning to events that conform to those common among members of the community. It is important to note that communities of practice are not defined by geographical location, but rather by social relationships and practices. Schools are communities of practice that are particularly significant to the discussion of civic engagement. Schools not only stress the importance of civic engagement, but also play a pivotal role in imparting civic knowledge and providing opportunities to join with other larger and smaller organized groups (as well as informal peer groups).

The four components of the community of practice model are meaning, practice, community, and identity. *Meaning* pertains to “learning as experience,” or the ability to form individual and collective skills and knowledge through discussion and experience (Wenger, 1998). Communities of practice influence the way one interprets the significance of certain experiences, such as how schools influence the way one constructs the way one looks at one’s nation, one’s community, and civic engagement. In a school

setting, students, teachers, and administrators all attribute meaning to certain practices. These practices include informal aspects of civic engagement such as social and political attitudes, and what is considered to be “democratic.” School, therefore, has an impact on what students view as meaningful in regards to civic engagement.

Practice is considered to be “learning by doing,” or making the transition from legitimate peripheral participant to an active participant in the community of practice. Since practice requires active participation, it plays a critical role in civic engagement. A large part of civic engagement is being actively involved in civic activities. In school, children and adolescents often participate in organizations that are critical to the functioning of the school, such as the student government or the yearbook club. Although these activities are usually specific to the school itself, it is usually hoped that students will be cognizant of how he or she can contribute to the well-being of the larger society as well.

Community involves “learning as belonging.” This type of learning occurs through involvement in the different social groups that a person identifies with throughout his or her lifetime. School is considered to be such a community, and youth learn that participation in this community is highly valued. Further, youth learn that certain activities are to be valued and maintained, such as civic engagement. Youth may transfer this feeling of belonging and being active in their school community to their larger national community. They may feel a sense of belonging as a nation’s citizen and therefore be active in the national context through civic engagement.

Identity, or “learning as becoming,” is how one constructs a sense of self both as in individual and in the context of a group. Identity develops through common ideals and

experiences within a community of practice (Wenger, 1998). In order for young people to create a civic identity, they must learn where their groups' members stand in terms of civic goals and ideals. They must also learn about other members' perspective on social or political topics. Perhaps most importantly, the children or adolescents must feel as if they identify with the civic culture and practices of their group if they are to act with relation to this same belief system. Civic identity is crucial in civic engagement, as Beaumont et al. (2006) claim that having a strong civic identity "has been proposed as a key mediator between individuals' civic or political values and their behavior and is also viewed as contributing to stability of civic and political commitment across time."

The community of practice model is a valuable framework for exploring school effects on civic engagement. As discussed, communities of practice are concerned with situated learning in group settings. Civic engagement is indeed a group process and it is important to explore how the contributions of an adolescent's social environment play a role in viewing civic and political issues and becoming active civic participants. A drawback of this model is that it does not account for the influence of competing communities of practice. Since individuals do participate in various communities of practice at once, it is possible that some of these communities may hold competing political or social views. In these situations, it is unclear how this dissonance is reconciled.

The community of practice model is also valuable in investigating school mobility. When students move from one school to another, they are leaving behind their former communities of practice and must learn to integrate into new communities of practice. This not only means that they are leaving their school or neighborhood, but that

they are also leaving behind the various social groups that to which they once belonged and with which they identified in these physical communities. A new school is likely to have routines of practice that differ from those in the previous school. The adolescent may not feel a sense of belonging, and may be less inclined to be immediately active in any new community of practice. Some students will decide to engage in legitimate peripheral participation by observing but not joining actively. The concept of school belonging will be discussed in greater detail later in this review.

Developmental Characteristics of Adolescents

Much of an adolescent's identity at age 14 is defined by their developmental characteristics at this age. At 14 years old, children are at a developmental stage termed by many theorists as "early adolescence." Very few developmental periods are characterized by so many changes occurring at so many different levels as early adolescence (Eccles, 1999). In general, these changes include the biological transformations of puberty and changes in cognition. Specifically, 14-year-olds in early adolescence are increasingly able to think abstractly and think of situations from multiple perspectives (Eccles, 1999). Early adolescents are also better able to transfer knowledge to new situations and are more aware of their own strengths and weaknesses.

These cognitive changes also have an effect on the adolescent's relationships with others, as they tend to have changes in their peer and family relationships. As 14-year-olds begin to view themselves and those around them differently, they begin to spend increasing amounts of time with their peers (Eccles, 1999). This peer relationship is likely to be more influential because the adolescent now has more opportunities for independent activities (Larson, Wilson, Brown, Furstenberg & Verma, 2002). At the

same time, they are beginning to foster a sense of independence and self-efficacy that typically leads to children distancing themselves from their parents (Eccles, 1999).

Civic Engagement

When adolescents frequently move from one school to another, it could have important implications for levels of civic knowledge. It is possible that when children are mobile, there are certain foundational civic principles and information that they either do not learn fully or do not learn at all. Related to this is the broader concept of civic engagement. In addition to civic knowledge, civic engagement is comprised of civic skills, civic attitudes, and civic participation. Each concept will be discussed in further detail below.

Definition of Civic Knowledge as Part of Civic Engagement

Civic engagement definitions can range from being overly narrow to overly broad. Part of the reason for such ambiguity is due to the multiple dimensions of civic engagement, including understanding, skills, and motivations that support and enhance many forms of active democratic citizenship (Beaumont, et al., 2006). This construct is also difficult to define because civic engagement occurs on a continuum ranging from formal to informal engagement and knowledge. Colby et al. (2003) propose a definition that seeks a medium between the broad and the narrow, the formal and informal. They define civic engagement as “activities intended to influence the social and political institutions, beliefs, or practices and to affect processes and policies related to community welfare, whether that community is local, state, or national or international” (Colby et al., 2003, p. 18-19). Different forms of engagement are correlated when examined together

(Galston, 2001; Torney-Purta et al., 2001), and early civic engagement is a predictor of continued engagement throughout one's life (Hart et al., 2007).

Civic engagement includes civic knowledge, civic skills, civic attitudes, and civic participation. Civic knowledge is one of the strongest predictors of expected future electoral participation (Amadeo et al., 2002, Torney-Purta, et al. 2001). Civic knowledge entails understanding facts related to domestic and international history and government (Rubin, 2007), in addition to fundamental democratic principles such as knowledge of political theories, institutions, and organizations (Beaumont et al., 2006; Torney-Purta, 2002). Knowledge of current events at the local, state, national, and international levels can also be considered part of civic knowledge. In school settings, civic knowledge is often assessed by testing students on a country's history, government functioning, and current political figures, but conceptual knowledge is also important.

Civic skills are closely related to civic knowledge. Civic skills are an ability to apply civic knowledge, such as by interpreting political communication (Torney-Purta, 2002) and public communication (McIntosh et al., 2007). Some propose that early political involvement helps children and adolescents develop civic skills, such as public speaking, that result in later civic engagement as an adult (Beaumont et al., 2006). There is a bi-directional relationship between civic skills and civic knowledge. Possessing civic knowledge should improve efficiency in using civic skills, and applying civic skills should increase and improve civic knowledge.

Civic attitudes and civic participation are also related to civic knowledge. Higher levels of civic knowledge are associated with more democratic attitudes and more active participation (Galston, 2001). Civic attitudes refer to beliefs about democratic societies

and include the rights and responsibilities of the government and societal members. Civic participation pertains to formal and informal involvement in political and civic institutions, such as voting, working with a political group, or protesting.

Levels of civic engagement may be threatened for highly transient adolescents. As previously stated, civic knowledge may be particularly at-risk for mobile students due to gaps in curriculum. When many students move from one school to another, the curriculum between schools is often not consistent. It is therefore possible that a concept not yet taught at one school may have already been covered at the adolescent's new school so consequently, the adolescent will not be exposed to teaching of that concept at all. Furthermore, curricula across the United States are not standardized, meaning that content area varies from school to school. For the highly transient student, there is no guarantee that they will learn the same amount of content compared to a student who has had a more stable schooling environment. When civic knowledge is impacted, it follows that civic skills will also be affected. Finally, civic participation is also endangered when an adolescent moves frequently. If adolescents do not feel a strong attachment to their surroundings, which is more difficult to develop when they are frequently moving, they may be less inclined to participate in civic activities. I have discussed distinct components of civic engagement, but also how they are interconnected. While the different elements of civic engagement are often either correlated or predictive of each other, each element is also seen individually as an indicator of positive development (Lerner et al., 2005).

Civic Knowledge and Other Aspects of Participation and Positive Development

Civic knowledge is related to other aspects of positive development in adolescents. Research on this topic reveals that the positive features of civic knowledge do not occur in isolation, but instead are intertwined with other aspects of civic engagement. Civic knowledge also tends to have positive implications for civic participation and civic attitudes. Many of the studies reviewed in this section reflect this trend.

The IEA Civic Education Study was conducted in 1999 in 28 countries. In this study, 90,000 14-year-olds were surveyed to assess their civic knowledge, attitudes, and behaviors. With such a large and representative sample, the study is generalizable to different populations. Civic knowledge was measured based on a 38-item assessment. It was found that student civic knowledge predicted the adolescent's intentions to vote in the future in all 28 countries (Torney-Purta et al., 2001). In separate analyses of the IEA dataset that included 27 of the 28 participating countries, higher levels of civic knowledge were found to be related to more positive attitudes towards immigrant rights and stronger support for the importance of social-justice related citizenship participation (Torney-Purta, Wilkenfeld & Barber, 2008).

Campbell (2008) also made use of the data from the IEA Civic Education Study to test three hypotheses related to civic knowledge. The first hypothesis was that an open classroom climate relates to greater civic knowledge. Second, Campbell (2008) hypothesized that exposure to political discussion in the classroom leads adolescents to think of themselves as future participants in political activities, specifically voting. The final hypothesis was the compensation hypothesis, or that effective civic education at

school might compensate for other civic disadvantages such as being of low socioeconomic status. Adolescents who are of high socioeconomic status are more likely to have adopted democratic norms and expect to be politically engaged in the future, whereas this is not the case for students of low socioeconomic status (Campbell, 2008; Gimpel et al., 2003). For adolescents of low socioeconomic status, it is the case that their civic experiences in the classroom influence their perceptions of future political engagement. Findings of this study indicated that open classroom climate had a positive influence on adolescents' civic knowledge after controlling for individual, classroom, school, and district characteristics. An open classroom climate also fostered adolescents' intentions to be informed future voters. Furthermore, results indicated that exposure to an open classroom climate can partially compensate for the civic disadvantages of adolescents with low socioeconomic status (Wilkenfeld, 2009).

The National Educational Longitudinal Study (NELS) is another large-scale longitudinal dataset that occurred in five waves between 1988 and 2000. NELs allows researchers to specifically examine if participation in community service activities or student government were related to the academic outcomes of more than 15,000 high-school students. Hart and colleagues (2007) utilized the NELs dataset to examine long-term effects of civic knowledge, participation in community service, and participation in extracurricular activities on civic participation in early adulthood. Using a sample of 12,000 students, Hart et al. (2007) investigated how civic engagement and knowledge in twelfth grade (wave three; 1992) were predictive of civic outcomes eight years later (wave five; 2000).

Hart et al. (2007) found that the combination of civic knowledge in twelfth grade and participation in any form of community service (voluntary, mandatory, or both) are predictive of later voting behavior in local and national elections. Civic knowledge was found to be a negative predictor of volunteering in a youth organization (Hart et al., 2007). These contrasting findings suggest that over time, high-school students who are high in civic knowledge become increasingly interested in formal civic participation (such as voting) and less interested in the informal aspects of participation (such as volunteering).

These studies suggest that civic knowledge contributes to positive outcomes across several domains. In general, it appears as though civic knowledge is particularly useful in fostering civic participation (both in the present and the future) as well as civic attitudes. Civic knowledge also contributes to the reduction of other negative outcomes, where the classroom can become an important mediator. These findings would seem to suggest that civic knowledge contributes positively to overall development.

School Belonging

Belonging is considered to be a fundamental human motivation (Baumeister & Leary, 1995). School belonging may be defined as students' perceptions that they are liked, respected, and valued by others in the school and is characterized by positive interactions with others (Anderman, 2002; Hamm & Faircloth, 2005). In general, a sense of belonging entails more than feeling like one "fits in" with a cohesive group. A sense of belonging entails an emotional attachment and a feeling of security within the group that is derived from feeling valued by and valuing of the group (Hamm & Faircloth, 2005). A sense of school belonging is considered to be vital to adolescents' development because it

satisfies their need for relatedness, which is considered to be a basic human need (Deci et al., 1991).

Perceived sense of belonging is related to many positive developmental outcomes. A positive sense of school belonging has been found to serve as a protective barrier against many non-academic risk behaviors such as suicide ideation, pregnancy, and violence (Resnick et al., 1997). Anderman (2005) found that individual perceptions of belonging are inversely related to negative outcomes such as depression, social rejection, and other school problems.

A positive sense of school belonging is also associated with many positive academic outcomes. Connell and Welborn (1991) found that when teenagers feel a sense of school belonging, their level of engagement in school increases. Other positive outcomes include lower drop-out rates, higher grade point averages, stronger rapport with teachers, and peer support that results in higher educational goals and attainment (Anderman & Anderman, 1999; Anderman & Leake, 2005; Finn, 1989; Newman et al., 2000; Roeser et al., 1996).

Friendship is proposed to play a pivotal role in sense of school belonging. Friendships provide support and assistance that can assure adolescents that they can rely on others in a school setting (Hamm & Faircloth, 2005). Youniss and Smollar (1985) reported that adolescents discuss schoolwork and school problems with their close friends and provide each other with emotional support in regards to these topics. When adolescents are in a reliable and supportive friendship they will develop an emotional sense of security, which is considered to be the foundation of belonging (Furman and Robbins, 1985; McMillian and Chavis, 1986). Anderman (2002) found that a perceived

sense of school belonging was found to be lower in urban schools than in suburban schools. It is possible that because adolescents in urban schools are more transient, they are not able to develop the friendships necessary to form a sense of school belonging. Since they are not able to form a sense of belonging, these same adolescents may struggle to interpret social cues or receive feedback from their peers. According to the social information processing model, this could influence their decision-making process since being in a stressful situation and having a weak sense of security could contribute to these adolescents having difficulty in interpreting social cues and predicting likely response from their peers.

A qualitative study of adolescent school belonging by Hamm and Faircloth (2005) found that many adolescents considered their friendships to be critical to their school functioning, both socially and academically. Students perceived a lack of acceptance from the entire student body to be the reason they felt a lack of school belonging. Many students thought that the existence of cliques and racial biases were reasons they were not accepted. Other students experienced a lack of school belonging because they were disengaged in the classroom, due mostly to a teacher-centered approach that minimized interaction with their fellow classmates. Consistent with previous literature, friendships were found to provide the social and academic support that is necessary to facilitate a sense of school belonging. These findings indicate that school cohesion is essential to a student's sense of school belonging. As the next section will explain, perceived sense of school belonging also has the potential to affect student participation in school.

School Engagement

School engagement is a construct that is very relevant in discussing school mobility. School engagement is defined as a student's active participation in school and is directly related to how students behave, feel, and think in the school setting, and it is closely related to school belonging (Fredericks et al., 2005). School engagement has been found to be associated with fewer undesirable outcomes such as low achievement, student disruptions, high levels of student boredom and disaffection, and high dropout rates, even after controlling for socioeconomic status (Blumenfeld et al., 2005; Fredericks et al., 2005; National Research Council and Institute of Medicine, 2004). There are three types of school engagement. The first, *behavioral* engagement, is considered to be a student's active participation in school activities. These activities can be academic, social, or extracurricular (Fredericks et al., 2005). The second type, *emotional* engagement, involves having feelings of school belonging as well as any positive or negative feelings towards teachers, classmates, academics, or school (Blumenfeld et al., 2005). The final type, *cognitive* engagement, is the willingness to learn, understand, and master difficult ideas and skills (Corno & Mandinach, 1983; Fredericks et al., 2005; Newman et al., 1992). A study by Blumenfeld and colleagues (2005) found the three types of engagement to be significantly correlated. In this study the concept of belongingness will be assessed by two emotional engagement measures (feelings about the school as a cohesive group and trust in school).

Research has found school engagement to be related to positive social, emotional, and academic outcomes later in life. Most research on school engagement has focused on involvement with extracurricular activities because these activities often cater to the

child's interests, so the child is therefore more likely to become engaged. Larson (2000) proposes that school engagement is related to such positive outcomes because the nature of extracurricular activities is such that it allows students to participate in activities in which they are interested. Adolescents who are involved with extracurricular activities such as sports, clubs, and community service have higher academic achievement, more positive attitudes towards school, and are more likely to go to college (Eccles & Barber, 1999; Glacncy et al., 1986; Holland & Andre, 1987; Snyder & Spreitzer, 1990; Youniss et al., 1999). Adolescents who are engaged in school activities have also been found to report higher self-esteem, higher intrinsic motivation, higher feelings of control, and lower rates of depression (Holland & Andre, 1987; Kivel, 1998). High levels of school engagement have also been associated with involvement in civic engagement such as voting and volunteering (Glacncy et al., 1986; Youniss et al., 1999; Zaff et al., 2001).

Different classroom and school characteristics have been found to influence school engagement. These factors include teacher and peer relations, academic tasks, and classroom work norms (Kindermann, 1993; Marks, 2000; National Research Council and Institute of Medicine, 2004; Skinner & Belmont, 1993). Students who are least engaged in the classroom are most likely to be males (Blumenfeld et al., 2005; Connell et al., 1994; Finn & Rock, 1997; Marks, 2000). Older students are also less likely to be engaged in school (Blumenfeld et al., 2005). This could be due to the fact that younger students tend to have more positive attitudes towards school. As students become older and progress through school, the curriculum becomes more difficult, expectations increase, and students are better able to judge their own abilities in comparison to their peers (Ruble, 1983; Stipek & Daniels, 1988).

School engagement can be lessened when mobility becomes a factor for an adolescent. As students move from one school to another, it is difficult for them to become actively engaged in their school setting. A longitudinal study by Blumenfeld and colleagues (2005) utilizing student surveys and individual student interviews found that elementary school students who remained in the same school for long periods of time tended to become engaged in school early and this pattern of engagement remained fairly stable. By late middle childhood, this pattern is not as stable due to classroom variation. Since their study was conducted in one school over time, it is possible that certain school characteristics could have impacted levels of school engagement for those students. To become behaviorally engaged implies that the student is an active member of a school group or within a school activity. Students who are mobile may be less inclined to be involved within their school, since as a new student they do not feel comfortable with the routines of participation or feel uncertain around unfamiliar peer groups. Emotional school engagement is also affected by mobility because these students often do not have a chance to develop an understanding of how the school works and a feeling of familiarity and belonging. Students who did not feel a strong sense of school belonging were found to have more negative classroom perceptions and be less engaged in school (Blumenfeld et al., 2005). Cognitive school engagement is impacted by mobility in that transient students frequently miss the foundational principles necessary to learn, understand, and master future and more complex principles. This would all suggest that when a child is mobile their levels of school engagement could be threatened, which in turn could lead to other undesirable outcomes. Confidence in school participation is a logical outcome of school belonging and engagement. This confidence may be considered as a form of

empowerment. If an adolescent feels a sense of belonging to his or her school community, the student will feel more confident in participating in the activities in this community.

Trust in Schools

Trust in schools is an important consideration to take into account when discussing highly transient students. In the context of schools, trust is defined as “... one party’s willingness to be vulnerable to another party based on the confidence that the latter party is (a) benevolent, (b) reliable, (c) competent, (d) honest, and (e) open” (Hoy & Tschannen-Moran, 1999). Trust plays a pivotal role in the organizational health, openness, and effectiveness of schools (Hoy & Tschannen-Moran, 1999). Trust has also been found to have a profound affect on the education of students.

As students interact with others in the schooling environment, they are constantly interpreting the intentions embedded in the actions of others (Bryk & Schneider, 2003). For example, the student may question how the actions of their peers may work to either advance their own interests or harm their own self-esteem. The student may wonder if their teachers and other school staff truly have their best interests at heart. These judgments, however, depend upon previous interactions with these people, which Bronfenbrenner called proximal processes. Students who are new to a school have little previous interaction with their peers and school staff, therefore they may rely on already acquired schemas or commonalities such as race, gender, age, religion, or upbringing (Bryk & Schneider, 2003).

Bryk and Schneider (2003) identified four components that a student considers when evaluating their trust in schools. The first component is respect, which comes from

social exchanges within the school. Students should feel that their peers, teachers, and other school staff genuinely value them as persons and care about their thoughts and feelings. Without interpersonal respect, social interaction may cease and conflict may arise. The second component is personal regard, characterized by how the student interprets the intentions of their teachers and school staff. Optimally, a student should believe that their teachers and school staff are acting out of the best interest of the student and have a sincere interest in educating the student. The third component of student trust is competence in core role responsibilities. The student should ideally believe that all members of the school are capable of doing their assigned jobs to a satisfactory degree. This means that the principal should be able to run the school, and teachers should be able to teach their classes. Trust is undermined when there are many instances of inconsistencies. Likewise, teacher-student trust is necessary in order to foster the relationships needed to promote optimal learning. This is because in order to learn, students must trust not only the information that their teaching is imparting, but also that the teacher is competent in imparting that information (Rotter, 1967). The final component is personal integrity, or how the student perceives the moral and ethical character of others within the school. In order to foster trust, Bryk and Schneider (2003) believe that a school must go beyond traditional methods such as workshops, retreats, and sensitivity training that attempt to teach staff and students about trust. Instead, schools must build trust in daily interaction. In this way, schools are able to show their sense of obligation toward others and validate expectations of trust through words and actions.

Several school characteristics have also been found to be associated with more trust in schools. Having a small school size (schools with 350 or fewer students) has been

found to foster higher levels of trust (Bryk & Schneider, 2003). This is due to the fact that larger schools tend to have less face-to-face interaction and a higher prevalence of affiliations with subgroups. Individuals who identify themselves with smaller subgroups tend to have weaker ties with the larger group of the school as a whole. Voluntary association has also been associated to higher trust in schools. When students have a choice in the school they attend, they are pre-conditioned towards having trust in the school (Bryk & Schneider, 2003). If subsequent actions reinforce that the school was a good choice for the student, trust will only continue to grow in the school. Alternatively when students are forced to go to a certain school, there may be feelings of uncertainty and suspicion about the school in terms of the motivations and commitment of others. These negative feelings could create a barrier that inhibits the growth of trust in a school. A stable school community is associated with having more trust in schools. Repeated social exchanges are needed to build and maintain trust. It is difficult to develop and sustain direct positive engagement with teachers, staff, and peers when the school's student body is constantly changing.

State of the Literature and Contribution of the Present Study

The studies reviewed here contribute to an understanding of civic knowledge, how civic knowledge is related to other positive outcomes, characteristics of adolescents who are actively engaged, and how various contexts within the adolescent's microsystem affect adolescent civic knowledge and school belonging. For the current study, I draw upon this literature in my conceptualization of effects of school mobility on civic knowledge. In this section I employ my theoretical framework to interpret the findings,

describe the strengths and weaknesses in the current state of the literature, and identify the contributions my study will make to the current literature.

In accordance with my theoretical framework, there are various factors that influence the civic knowledge of mobile adolescents. Mobility can impact how students proceed through their daily thought processes. When students are mobile, their environment and peers are unfamiliar to them in many ways. It is difficult to interpret social cues or know what to expect from others. Schools act as communities of practice in which civic knowledge is acquired and group processes serve to enhance learning. Adolescents belong to groups within the school community that share common interests, routines, traditions, and experiences. Sharing civic experiences within the community allows the adolescent to construct meaning, which leads to them developing their own civic practices. When mobility becomes a part of this dynamic, students must integrate into new communities of practice. Related to this, mobile students are often less engaged in school.

Strengths of the Current Literature

A strength of the literature reviewed is that researchers have investigated elements of mobility in relation to achievement and to peer groups and there have been some longitudinal studies. Such studies provide valuable contributions to understanding (though most of them lack the perspective of a developmental theory). In terms of mobility, longitudinal studies are able to examine how the adolescent is affected over time and at specific moments in development. For civic knowledge, longitudinal studies are able to examine factors that contribute to civic knowledge over the course of a child's development. Longitudinal studies also make it possible to make predictions of any long-

term effects of mobility. The use of large-scale datasets by some researchers is also a strength of the current literature because findings are more generalizable.

Weaknesses of the Current Literature

The most serious weakness is the failure to bring together the various strands of school mobility, civic preparation, and students' relationships at school.

Another weakness is that many of the studies are conducted in a single school. This means that it is hard to generalize any findings. Many times these same studies do not account for influential contextual effects. Many of the samples in these studies are not representative and may contain an atypical amount of minorities or children of lower socioeconomic status. Furthermore, characteristics that are specific to a single school must be considered. The school's administration, level of teacher preparation, program offerings, number of students, and physical layout of the school are just some of many considerations that must be accounted for. These qualities differ from school to school.

Contribution of the Present Study

In the present study I utilized data from the IEA Civic Education Study to examine the association of school mobility with adolescent civic knowledge and school belonging, a topic that does not appear to have been previously investigated. Not only is this study providing a theoretical context, but it is also examining achievement and attitudinal school belonging in a single study. This is in contrast to most research in this area which is largely atheoretical and tends to focus on only one component at a time. Findings from the study have the potential to be more generalizable to a range of contexts within the United States due to the fact that I used a large-scale dataset.

I also investigated the demographic characteristics of gender and socioeconomic status. I included gender because previous research has shown that in general, males and females differ in trust relations to many institutions. Previous research regarding the social information processing model also shows gender differences in reading and responding to social cues, especially among students who tend to be aggressive (Dodge et al., 2003).

Socioeconomic status is also an important demographic characteristic to take into account because mobility has been consistently found to be greater for children of low socioeconomic status (Black, 2006; Gillespie & Everhart, 1999; Kaase, 2005; Sanderson, 2003).

Using data from the IEA Civic Education Study, I examined the microsystem settings of schools and peers as discussed throughout this chapter. My study included predictors related to the adolescent's characteristics, schools, and peers. Several studies have examined these contexts individually.

In summary, research contends that school mobility has a major impact on overall adolescent development. I am interested in extending this research by investigating school mobility as it relates to adolescent civic knowledge and school belonging (behavioral and attitudinal).

CHAPTER 3

Methodology

This study examined the associations between school mobility and the civic engagement and school belonging of a nationally representative sample of 14-year-olds in the United States. An existing dataset, the U.S. dataset from the International Association for the Evaluation of Educational Achievement (IEA) Civic Education Study of 1999 was utilized for this purpose.

In this chapter I will provide an overview of the IEA Civic Education Study including relevant information about design, sampling, and procedures. Next, I will describe the measures from the dataset, including how the measures are used to operationalize conceptual constructs. I will conclude with a description of the statistical methods I used to analyze the CIVED data.

IEA Civic Education Study

Background

The International Association for the Evaluation of Educational Achievement consists of governmental agencies and research institutions whose purpose is to conduct comparative studies on education. IEA conducted its first civic education study in 1971 (Torney, Oppenheim, & Farnen, 1975) and its second study in 1999 (Torney-Purta et al., 2001). The 1999 Civic Education Study is a cross-national study including approximately 90,000 adolescents in 28 countries. It is specifically comprised of 2,811 14-year-olds in the United States. The U.S. sample of the CIVED was utilized in this study.

*Research Design*¹

The 1999 CIVED is a cross-sectional study of 14-year-old adolescents (described by Baldi et al., 2001, and Torney-Purta et al., 2001). This age group was chosen because in many of the study's participating countries, compulsory schooling ended after age 14.

The first phase of the study (1994-1998) consisted of an in-depth examination of the nature of civic education in different countries. This included national case studies based on interviews with national experts and leaders in education. The qualitative data collected during this phase made it possible to determine that across the participating countries, there were certain universal principles that were considered necessary for 14-year-olds to understand. These universal principles were classified into three content domains: the meaning of democracy and democratic institutions, national identity and international relations, and experience with issues of social cohesion and diversity. The instruments in CIVED were designed to cover the content within each of the three domains.

In the second phase of the study (1997-2000), the two instruments used in CIVED, an assessment and a survey, were developed. The assessment was designed to measure a student's civic knowledge and civic skills. It is important to note that this assessment was not country-specific, as with other tests of civic knowledge (such as the NAEP). After pre-piloting and the piloting vetting process, the final assessment is

¹ The material in the following sections is adapted with permission from Wilkenfeld (2009). For her doctoral dissertation she merged and summarized the technical material from the IEA technical report and various reports of the team that conducted the U.S. data collection for the study. Her's is the most complete and recent such summary.

composed of 38 total items, with 25 items assessing civic knowledge and 13 items assessing civic skills.

The second instrument of CIVED is a survey of students' civic attitudes (70 items), conceptions of democracy and citizenship (52 items), and expected civic participants (24 items). The items reflect the three content domains. These items were piloted a year before the actual study was conducted. The survey also contains items that elicit demographic information, participation in activities, interactions with peers, and school experiences. The assessment and survey were administered to a representative sample of 14-year-old adolescents throughout all 28 countries in 1999. The administration procedure is discussed in greater detail in a later section.

Sampling Design

The sample utilized in the study was a three-stage, stratified, clustered sample (described by Baldi et al., 2001, and Schultz & Sibberns, 2004). In the first stage of sampling, researchers identified primary sampling units (PSUs) by geographic location. The PSUs were classified into different strata based on the characteristics of size, region, and type of community (metropolitan or non-metropolitan). From all of the PSUs, 52 were chosen with probability proportional to their representation in the population. Using stratification in this first stage made certain that the sample was representative of the different regions and communities in the United States.

In the second stage, public and private schools were selected within each of the 52 PSUs. Schools were selected using a probability proportional to their size for both groups. Using stratification in this stage made certain that there were enough private schools for the sample to be analyzed and that there would be diversity in both public and

private schools. The participation rate for schools was 65 percent before replacement and 83 percent after replacement. Replacement, or substitute, schools were assigned by key sorting variables. Replacement schools had to be comparable to the schools they were replacing.

In the third stage of sampling, there was random selection of an intact classroom within each school. The classroom had to be a ninth-grade class and preferable a non-tracked civic-related course (i.e. history or government). Within each class, all students were invited to participate in the study except for students who had severe disabilities or were not proficient in English. Informed consent from parents was obtained by Westat. The participation rate for students was 93 percent.

Weighting procedure. Sampling weights were used to account for different probabilities of selection since in the sample, all students do not have an equal chance of being selected to participate. In the CIVED dataset, sampling weights are used for each student and accounts for differential selection at each stage (PSU, school, and classroom). This data design allowed for a nationally representative sample of 2,811 ninth-grade students in 124 schools throughout the United States.

Instrument Administration

As required by IEA, each school had a school coordinator who was designated by the school's principal and made arrangements for the test and survey administration. The coordinator was usually a teacher in the school, however outside test administrators were also made available in certain cases. School coordinators had to maintain contact with the study's researchers, identify civic-related classes within the school, plan what dates the instrument would be administered, obtain parental permission, administer the assessment

and survey to students, administer the survey to teachers and principals, and finally return all completed materials to the researcher coordinators at Westat (the research organization that supervised field operations for the study).

All data for the U.S. was collected in October 1999. Students were given two hours during their class time to complete the assessment and survey. School administrators and teachers completed surveys as well in order to provide additional information.

School principals and teachers also answered surveys, but the analysis in the current study is limited to the student sample.

Measures

CIVED researchers used advanced statistical techniques to create scales that would allow for cross-national comparisons of student experiences and outcomes. These techniques include confirmatory factor analysis (CFA) and item response theory (IRT) models. CFA confirms the internal cohesiveness and structure of item instruments, while also providing evidence for the measures' construct validity. IRT scales provide common scales that allows for comparison of students from different countries, or for comparisons of groups of students within countries (by gender, socioeconomic status, or other characteristic).

Concerning the specific IRT models used in the study, the civic knowledge scale was developed using the one-parameter Rasch model so that the assessment items could be scored as either correct or incorrect. The model accounts for the difficulty in assessment items and specifies the probability of correct responses. A different type of IRT model, the generalized partial credit model, was used to develop the attitudinal

scales. This model was used because the responses were ordered categories (i.e. strongly agree to strongly disagree) as opposed to being dichotomous. Construction of the scales is detailed in Husfeldt, Barber, and Torney-Purta (2005) and Schulz and Sibberns (2004). I will next describe the measures (including the single item and IRT scales) that were used in the present study. All of the measures are from the U.S. CIVED dataset. Appendix A provides detailed text of the items used in the present study.

Outcome Variables for the Study

In this study, I examined civic knowledge and school belonging as measured by a cognitive measure (civic knowledge IRT score), and two attitudinal measures (the attitudinal IRT scale which includes items from the CIVED instrument regarding positive school climate that are closely related to belonging, and a single item measuring level of trust in schools). For detail about these measures and performance across the 28 countries, see Schulz and Sibberns (2004) and Torney-Purta, et al. (2001).

Civic knowledge. Civic knowledge is conceptualized as knowledge of fundamental democratic principles and skills in applying this knowledge. Civic knowledge (original variable name = TOTCGMLE) is an IRT scale composed of 38 test items (items BS101 through BS238) that measure content knowledge and ability to interpret civic messages. All of the original test questions are multiple-choice format with four response options, however the items were recoded to indicate whether the student had a correct or incorrect answer. The IRT scale was constructed from these recoded items. In the original study, the civic knowledge scale was set to have an international mean (M) = 100 (Torney-Purta et al., 2001). Reliability for the scale (Cronbach's alpha) was .90 in the United States (Torney-Purta, et al., 2001).

School belonging. For this study school belonging is conceptualized *attitudinally* as a student's sense of being respected and valued by others in the school and being incorporated into a cohesive school climate where problem-solving by students is effective. This construct was measured by a four-item IRT scale (CONFSMLE). This scale assesses the extent to which adolescents agree with the following statements (1 = strongly agree, 2 = disagree, 3 = agree, and 4 = strongly agree):

Electing student representatives to suggest changes in how the school is run
makes schools better (BS4J1)

Lots of positive changes happen in this school when students work together
(BS4J2)

Organizing groups of students to state their opinions could help solve problems in
this school (BSJ4J3)

Students acting together can have more influence on what happens in this school
than students acting alone (BS4J5)

Internationally the scale has a M of 10 and an SD of 2, (Torney-Purta, et al, 2001) and reliability in the U.S. of .79 (Wilkenfeld, 2009).

The assumption here is that the student who sees a school that is cohesive and where students are able to solve problems is more engaged and feels more sense of belonging than the student who believes that the school is characterized as lacking in cohesion and plagued by problems.

For this study school belonging is also conceptualized *attitudinally* as a student's trust in schools. This was assessed by a question in the student questionnaire asking "How much of the time can you trust schools (educational institutions)?" Possible

responses are: 1 = never, 2 = only some of the time, 3 = most of the time, 4 = always, 0 = don't know. Alpha is not appropriate here. The assumption here is that students who have a higher trust in schools are more likely to engage in these institutions and therefore feel more of a sense of belonging than students who do not have trust in schools.

All of the items for the released civic knowledge and skills items and the school belonging attitude measures are listed in Appendix A with their response options. For further information about these measures, refer to Schulz and Sibberns (2004).

Predictor Variables for the Study

I examined school mobility, gender, and socioeconomic status as my independent variables in the study.

School mobility. School mobility is conceptualized as moving from school to school that is not as a result of grade promotion, such as moving from middle school to high school. This construct is measured by a specific question that asks “How many times have you changed schools in the past two years as a result of moving?”.

Gender. Gender is a dichotomous item that indicates whether a student is male or female. The variable (BSGGEND) is coded so that 0=male and 1=female. The sample is 52% female and 48% male.

Socioeconomic status. Socioeconomic status is conceptualized as access to certain intellectual and educational resources at home. I measured this construct using the students' report of number of books in the home (BSGBOOK), used as a measure of SES in most IEA studies. In fact, number of books in the home is a widely used measure of socioeconomic status in educational research especially with young adolescents, because they often do not know their parents' educational level and cannot be asked to report

income (Campbell, 2007). The item asks for the amount of books students have in their home. Possible responses are: 1 = 0 books, 2 = 1–10 books, 3 = 11–50 books, 4 = 51–100 books, 5 = 101–200 books, 6 = more than 200 books.

Analysis

In order to examine the effects of school mobility on the civic engagement and school belonging of a nationally representative sample of 14-year-olds in the United States, I utilized the multiple linear regression model. In this regression model, it is possible to investigate multiple independent variables and in order not to have to reduce mobility and educational resources to dichotomous variables (which using an analysis of variance would have required). Data from students who did respond to the mobility question were deleted for the analyses. The multiple linear regression model for predicting Y from m predictors $X_{1,2,\dots,m}$ is expressed as:

$$Y_i = b_1X_{1i} + b_2X_{2i} + \dots + b_mX_{mi} + a + e_i \quad [1]$$

where Y_i represents the criterion variable for individual i , the X_k 's represent the predictor variables where $k = 1, \dots, m$, b_k represents the sample partial slope of the regression line for Y as predicted by X_k , a represents the sample intercept of the regression line for Y as predicted by the set of X_k 's, and e_i represents the residuals or errors of prediction.

Model assumptions are vital for statistical models. In research, it is nearly impossible to create a perfectly specified statistical model, so we must make assumptions about the models we do create. We therefore make assumptions to allow us to make valid inferences about our models. In my analysis, I checked the following assumptions of the multiple linear regression model:

Independence, or that samples are random and observations are independent of one another across groups and within groups in the population;

Homogeneity of variance, or that the distributions of the errors for each group have a constant variance across groups in the population;

Normality, or that the conditional distributions of the errors are normal in shape in the population;

Linearity, or that there is a linear relationship between criterion and the predictor variables;

Fixed-X, or that the values of X (the predictor variables) are fixed and not random; and

Noncollinearity, or that there is not a strong linear relationship between two or more of the predictors.

If I find that a certain assumption or set of assumptions has been violated, the conclusions will be qualified. The degree to which I can trust our conclusions essentially depends on how much I believe certain model assumptions have been violated and how robust the statistical model is to these violations.

Summary

This study involves secondary data analysis of the International Association for the Evaluation of Educational Achievement (IEA) Civic Education Study of 1999. The purpose of this analysis was to examine the effects of school mobility on the civic engagement and school belonging of a nationally representative sample of 14-year-olds in the United States. The use of the multiple linear regression model allowed me to investigate multiple independent variables on one criterion variable. Using a nationally

representative sample enabled any findings to be generalized to the larger population of 14-year-old adolescents in the United States and will be informative for policy purposes.

CHAPTER 4

Results

The purpose of this study was to examine the effects of school mobility on the civic knowledge and school belonging of a nationally representative sample of 14-year-olds in the United States. This chapter will present the results of statistical analysis relating to these issues. First, descriptive statistics are used to gain information about the students sampled in this study. Next, a multiple linear regression model will be used to address the study's two research questions.

Descriptive Statistics

Descriptive Statistics for Predictor Variables

Mobility was assessed by the question, "How many times have you changed school in the past two years?" Of the total sample of 2811 students, 394 students were excluded from the analysis because they did not answer this question. The remaining 2417 students' answers to a question about their gender and about their socioeconomic status, as estimated by the number of books in the home were used. These descriptive statistics may be found in Table 1.

Table 1. Descriptive Statistics of Predictor Variables

	N (%)	M	SD
School Mobility		1.37	.795
0 Moves	1878 (66.8)		
1 Move	293 (10.4)		
2 Moves	129 (4.6)		
3+ Moves	117 (4.2)		
Student Gender			
Male	1160 (48.0)		
Female	1239 (51.3)		
Missing	18 (0.7)		
Student SES (Books)	2417	3.47*	1.405

Note. N= sample size, M= mean, SD= standard deviation, * 3.47 corresponds to approximately 30 books

Descriptive Statistics for Outcome Variables

The two outcome variables for this study were civic knowledge and school belonging. Civic knowledge was assessed using overall civic achievement scores. School belonging was assessed attitudinally using a Confidence in Participation at School IRT and a question asking about the student's trust in schools. The average scores for these outcome variables may be found in Table 2.

Table 2. Average Scores for Outcome Variables

	M	SD	N
Civic Knowledge	107.173	22.391	2410
School Participation	10.110	2.183	2333
Trust In Schools	2.850	.837	2302

Note. M= mean, SD= standard deviation, N= sample size

Multiple Linear Regression Models Related to Central Research Questions

Results for Research Question 1

To assess how school mobility is related to adolescents' civic knowledge, a multiple linear regression analysis was run using civic knowledge as the outcome variable and school mobility, student gender, and student socioeconomic status as predictor variables. A house weight was used to insure that the findings would be nationally representative. The regression equation for this analysis is as follows:

$$\text{Civic knowledge} = b_0 + b_1(\text{Mobility}) + b_2(\text{Gender}) + b_3(\text{SES}) + e_i \quad [1]$$

Using a criterion of $\alpha < .05$, the regression was found to be statistically significant ($F(3,2395) = 93.793$, $p < 0.001$). This would indicate that significant proportion of the total variation in civic knowledge scores was predicted by school mobility, gender, and SES. The R-squared value was .105, indicating that 10.5% of the variation in civic knowledge is explained by the linear relationship with school mobility, gender and SES. The equation of the estimated regression surface is as follows:

$$\text{Civic knowledge} = 93.503 - 2.782(\text{Mobility}) + 1.778(\text{Gender}) + 4.822(\text{SES}) \quad [2]$$

These findings indicate that higher mobility scores are associated with lower civic knowledge scores ($p < .001$). Also, civic knowledge scores were significantly higher for

females than males (though this was marginally significant, $p < .040$). Having a higher socio-economic status was associated with higher civic knowledge scores ($p < .001$). This was the strongest predictor of civic knowledge, suggesting the importance in the future of an analysis of low SES students who have a high level of mobility. A summary of the multiple linear regression may be found in Table 3. All assumptions for this model were checked and there did not appear to be any violations.

Table 3. Regression of mobility, gender, and SES on students' civic knowledge (N=2399)

Predictor	B	Std. Error	Beta	<i>t</i>	Sig.
Mobility	-2.782	.551	-.098	-5.048	.0001
Gender (Female)	1.778	.866	.040	2.053	.0400
SES (Books)	4.822	.320	.294	15.073	.0001

Note. B= unstandardized beta, Std. Error= Standard Error, Beta= standardized beta, *t*= t-value, Sig= p-value

Results for Research Question 2

Confidence in Participation at School. To assess how school mobility is related to adolescents' attitudinal sense of school belonging, a multiple linear regression analysis was run using confidence in participation at school as the outcome variable and school mobility, student gender, and student socioeconomic status as predictor variables. A house weight was used to insure that the findings would be nationally representative. The regression equation for this analysis is as follows:

$$\text{Confidence in participation at school} = b_0 + b_1(\text{Mobility}) + b_2(\text{Gender}) + b_3(\text{SES}) + e_i$$

[3]

Using a criterion of $\alpha < .05$, the regression was found to be statistically significant ($F(3,2316) = 30.585$, $p < 0.001$). This would indicate that significant proportion of the total variation in confidence in participation at school scores was predicted by school mobility, gender, and SES. The R-squared value was .038, indicating that 3.8% of the variation in confidence in participation at school is explained by the linear relationship with school mobility, gender and SES. The equation of the estimated regression surface is as follows:

$$\text{Confidence in participation at school} = 9.739 - .278(\text{Mobility}) + .590(\text{Gender}) + .590(\text{SES}) \quad [4]$$

These findings indicate that lower confidence in school participation scores are associated with increased school mobility ($p < .001$). In addition, females displayed more confidence in school participation than males ($p < .001$). Having a higher socio-economic status was associated with higher confidence in school participation scores ($p < .001$). Gender was the strongest predictor of confidence in participation in schools, suggesting the importance in the future of an analysis of female students by level of mobility. A summary of the multiple linear regression may be found in Table 4. All assumptions for this model were checked.

Table 4. Regression of mobility, gender, and SES on students' confidence in participation in schools (N=2333)

Predictor	B	Std. Error	Beta	<i>t</i>	<i>Sig.</i>
Mobility	-.278	.057	-.101	-4.891	.0001
Gender (Female)	.590	.089	.135	6.621	.0001
SES (Books)	.128	.033	.080	3.897	.0001

Trust in Schools. To further examine how school mobility is related to adolescents' attitudinal sense of school belonging, a multiple linear regression analysis was run using trust in schools as the outcome variable and school mobility, student gender, and student socioeconomic status as predictor variables. A house weight was used to insure that the findings would be nationally representative. The regression equation for this analysis is as follows:

$$\text{Trust in schools} = b_0 + b_1(\text{Mobility}) + b_2(\text{Gender}) + b_3(\text{SES}) + e_i \quad [5]$$

Using a criterion of $\alpha < .05$, the regression was found to be statistically significant ($F(3,2281) = 4.646$, $p = .003$). This would indicate that a significant proportion of the total variation in trust in schools scores was predicted by school mobility, gender, and SES. The R-squared value was .006, indicating that 0.6% of the variation in trust in schools is explained by the linear relationship with school mobility, gender and SES. The equation of the estimated regression surface is as follows:

$$\text{Trust in schools} = 2.966 - .078(\text{Mobility}) + .035(\text{Gender}) - .007(\text{SES}) \quad [6]$$

School mobility is a negative predictor of trust in school ($p < .001$). Gender and SES were not found to be significant predictors of trust in schools. A summary of the multiple linear regression may be found in Table 5. All assumptions for this model were checked.

Table 5. Regression of mobility, gender, and SES on students' trust in schools (N=2284)

Predictor	B	Std. Error	Beta	<i>t</i>	<i>Sig.</i>
Mobility	-.078	.022	-.074	-3.530	.000
Gender (Female)	.035	.035	.021	1.004	.315
SES	-.007	.013	-.011	-.527	.598

Summary

Multiple linear regression was used to examine the effects of school mobility on the civic knowledge and school belonging of a nationally representative sample of 14-year-olds in the United States. In reference to the study's first research question, findings revealed that higher mobility scores are associated with lower civic knowledge scores. Civic knowledge scores were marginally higher for females than males. Having a higher socio-economic status was associated with higher civic knowledge scores. Two separate analyses were conducted in order to address the study's second research question. First, results indicated that low confidence in school participation was associated with higher school mobility, and females have higher confidence in school participation than males. Having a higher socio-economic status was associated with higher confidence in school participation scores. Results from the second analysis revealed that lower trust in schools is associated with higher school mobility, while gender and SES were not significantly related.

CHAPTER 5

Discussion

Summary of Findings

The purpose of this study has been to investigate the effects of school mobility as it relates to civic knowledge and school belonging. Lower civic knowledge scores were associated with higher school mobility and females were found to have marginally higher civic knowledge scores than males. In addition, civic knowledge scores were associated with having a higher socioeconomic status. School belonging was measured by confidence in participation in schools and trust in schools. Lower confidence in participation in schools was associated with higher school mobility and females were found to have higher confidence in participation in schools. Higher confidence in participation in schools was also associated with having a higher socioeconomic status. Having lower trust in schools was associated with having higher school mobility, while gender and socioeconomic status were not found to be significantly related. These findings will be discussed, as well as their connections to previous research.

Mobile students having lower civic knowledge scores may be a direct result of their frequent moves from school to school. As is consistent with previous literature, highly mobile students do suffer academically. Many of these obstacles come from disruptions in the learning process that originate from moving from one school to another, having an unsteady academic foundation, weak basic skills, and gaps in coverage between curricula in different schools (Mehana & Reynolds, 2004; Rumberger, et al., 1999; Sanderson, 2003). It seems plausible that as these students move from school to school, their levels of civic knowledge would be impacted. There is no standardized

curricula in the United States, meaning that there is no guarantee that what an adolescent was learning in one school will be continued in another school. This results in gaps in academic subjects, such as civics, where certain knowledge is not presented to a mobile student. This forms the foundation for a weak academic base, making it difficult to build civic knowledge and concepts. For example, if a student is learning about the Electoral College, it is first necessary for them to understand the voting and election processes in general. Without this basic knowledge, it may be hard for them to conceptualize what the Electoral College is and how it functions.

Civic knowledge scores were found to be marginally higher for females than males. Previous literature on this topic has been mixed, however a considerable amount of studies have suggested that men have higher levels of civic engagement than women (Delli Carpini & Keeter, 1996, 2000; Frazer & Macdonald, 2003; Hayes, 2001; Kenski & Jamieson, 2000; Verba, Burns, & Schlozman, 1997). Civic knowledge is a part of civic engagement. One of the findings of a study by Verba, Burns, & Lehman Schlozman (1997) was that women were less politically interested, informed, and efficacious than men. They attribute this gender difference in part to the fact that politics is widely regarded as male-dominated, and these suggestive cues can discourage females from being interested in civic topics. A study by Mondak and Anderson (2004), however, challenged how civic knowledge was measured in most studies and claimed that this is the reason such a gender gap exists between males and females in most studies of civic knowledge. They found that approximately 50% of the gender gap is illusory, reflecting response choices that favor male respondents. The present study used a comprehensive conceptual civic knowledge IRT scale and this could help explain why females were

actually found to have marginally higher civic knowledge scores than males. Overall, the IEA Civic Education Study did not find large gender gaps in knowledge (Torney-Purta, et al., 2001).

Having a higher socioeconomic status was associated with higher civic knowledge scores. Previous studies have shown that adolescents who have a high socioeconomic status are more likely to have adopted democratic norms and expect to be politically engaged in the future, than students of low socioeconomic status (Campbell, 2008; Gimpel et al., 2003). A plausible explanation for the present study's finding may be that students of higher socioeconomic status have more resources available to them in order to increase their civic knowledge, such as better textbooks, exposure to media that may talk about civics (such as the internet or cable television), and so on. Because voting behavior is also higher among people with higher socioeconomic status, it is likely that this model of civic engagement by the parent is transmitted to their child. If this student sees that their parent is civically involved and interested in discussing political issues, that child may be more likely to take an interest in civic-related activities and as a result, their civic knowledge may increase.

The present study's finding that low confidence in school (here seen as an index of school belonging) is associated with higher school mobility may be explained by the friendships mobile students establish. Previous literature suggests that when adolescents are in a friendship characterized as reliable and supportive, they will develop an emotional sense of security. This is considered to be a foundation of belonging (Furman & Robbins, 1985; McMillian & Chavis, 1986). When students change schools frequently it can be difficult for them to establish friendships at all, particularly ones that are

reliable. This is due to the fact that many highly mobile students may not have the time to commit to establishing these relationships. When students cannot establish these relationships with their peers, it is unlikely that they will develop the emotional sense of security that is needed to feel a sense of belonging. As Blumenfeld and colleagues (2005) discovered, students who did not feel a strong sense of school belonging were less engaged in school as is consistent with the present study's findings.

The finding in the present study that females have higher confidence in school participation than males is also consistent with previous literature. Several studies have found that males tend to participate less in school (Blumenfeld et al. 2005; Connell et al., 1994; Finn & Rock, 1997; Marks, 2000). A reason for this may be that males tend to be socialized to participate primarily in sports, whereas females tend to be encouraged to participate in a variety of activities. If males see sports as their only option to participate and do not feel confident in their ability to play certain sports (or sports in general), they may not be inclined to participate in school at all.

Higher socioeconomic status was found to be associated with higher confidence in school participation scores in the present study. One possible explanation for this finding is that those students with a higher socioeconomic status may have more opportunities to participate in school. Due to the school budgets in low socioeconomic areas, certain school activities may not be available simply because the school cannot afford to fund them. With limited options, it is plausible that students in these schools do not have activities that appeal to them and therefore are not inclined to want to participate in school. Likewise, low socioeconomic students might not have the resources to participate in school activities. Students from low socioeconomic backgrounds may not

have families who can support them financially should they wish to participate in certain school activities. Further, these students may be needed at home to assist with the household while their parents are working. These are all burdens not necessarily shared by higher socioeconomic students.

The finding that lower trust in schools was associated with higher school mobility may be explained by the fact that highly mobile students are not given the time to develop trust in schools. As Hoy and Tschannen-Moran (1999) claimed, trust is established when the student interprets the school and those in the school as being “benevolent, reliable, competent, honest, and open.”

According to Bronfenbrenner and Moran (1998), the relation of mobility to both measures of school belonging could be explained by the importance of the stable interactions over time that are called proximal processes. Mobile students often do not have the opportunity to establish proximal processes because they are moving so frequently. They do not have repeated exposure to familiar persons, symbols, or objects. Without this repeated exposure, the student may have difficulty in interpreting their unfamiliar school environment and therefore may not easily have trust in their schools.

Theoretical Implications

Ecological Systems Theory

The current findings can be examined within several theoretical frameworks, including that of the ecological systems theory. The nested ecosystem model proposes that people learn through repeated interactions within their social environment. It also proposes that a child exists in multiple contexts, or microsystems. Further, the ecological systems theory supposes that proximal processes, or repeated exposure to familiar people,

objects, and symbols over time, are necessary for development. When students are moving from school to school, they will most likely experience a disruption in their proximal processes because they are not *repeatedly* exposed to familiar people, objects and symbols.

The present study's findings pertain primarily to the microsystem setting of the school. Higher mobility scores were associated with lower civic knowledge scores, which may be explained by the fact that these students are not repeatedly exposed to the same teachers, civic information, or civic resources to develop higher levels of civic knowledge. For example, a student may develop a stronger rapport with a teacher they have had for an extended period of time because this teacher is familiar to them and the student has known them for awhile. This stronger student-teacher relationship may result in the student being used to the teacher's teaching style, feeling comfortable enough with the teacher to ask questions, and an overall willingness to learn on the part of the student. Conversely, the teacher may be better able to gauge the student's academic needs and can gauge how to best help that student. This reciprocal relationship between student and teacher can therefore result in higher civic knowledge scores. In addition, a student may come from a school with less resources such as textbooks, multimedia, adults in the home who are civically engaged and may have trouble catching up with their higher SES peers. A teacher who is unfamiliar with the student's academic history and does not know what the student has or has not previously learn will have difficulty addressing any gaps in the student's civic knowledge. This could result in a disconnect between the lower SES students and their higher SES peers.

When students are not repeatedly exposed to people, objects, and symbols in the school setting, it seems natural that mobile students would feel a lower sense of belonging in schools. The proximal processes have not developed for the people, objects, and symbols in their new setting to become familiar. This not only explains why higher mobility was associated with lower confidence in participation in schools, but also with lower trust in schools. Students may not be comfortable with those things that are unfamiliar to them because they do not know what to expect, and therefore would be less inclined to become engaged in or have trust in this setting. Without actively engaging in school or having trust in their school, it would follow that the student would not feel as if they belong in their new school environment.

Social Information Processing Model

The framework of the social information processing (SIP) model can also be used to examine the present study's findings, particularly those related to perceived school belonging. Although this model was originally intended to be used in the context of aggressive students, it can be argued that this model can be applied to *all* students in uncomfortable situations. When students are highly mobile, their decision-making processes may be affected due to the fact that they are in an unfamiliar environment. Not only will they have difficulty encoding social cues because they are in an environment with unfamiliar others, but they will also not know what the expected reactions from their peers will be because they do not know their peers. When students have trouble interpreting their school surroundings and do not know what to expect from their peers, it seems natural that they would be less likely to want to engage in activities with these peers. Likewise, it seems natural that they would not trust the school itself because they

do not know these peers or how the school functions. These students may find it hard to decipher intentions when their previous knowledge and experiences of the school and those in it are limited. Students who do not participate in activities in school nor have trust in schools would not feel a strong sense of belonging.

Communities of Practice Theory

The communities of practice is another framework that can be used to improve our understandings of the present study's findings. Like proximal processes, the social communities in which a child learns are disrupted when they move from one school to another. Higher mobility scores being associated with lower civic knowledge scores may have been due to the fact that as the student moved from school to school, it disrupted many of the social environments in which civic learning occurred. The most obvious environment is the classroom setting where traditionally, most of the learning about civic knowledge takes place. As has been previously discussed elsewhere in this paper, moving to a new school brings along several challenges to civic knowledge learning such as gaps in the curriculum, adjusting to a new teacher, and so on. There are multiple settings, however, in which an adolescent could obtain civic knowledge. Certain areas of the country may be more politically-savvy than other areas, and therefore an adolescent can be exposed to more civic knowledge just by living in a certain neighborhood. For example, the Washington, DC area is very civically-oriented. The local news outlets (television and newspaper) focus heavily on politics and many people have government jobs. For these reasons, an adolescent in this area will be exposed to more civic-related information and activity by virtue of living in that area. Other communities of practice can aid in the understanding of civic-related information. Some churches, for instance,

are structured similarly to certain political systems and in many cases *are* political systems. Adolescents who belong to this community of practice become familiar with the workings of the church and it may be easier for them to transfer this knowledge when learning about civics. When these adolescents move to a new school and communities of practice they lose the exposure to this system. The student may not know, understand, or remember how that system functioned.

The communities of practice model can also help to understand the present study's findings related to school belonging. Students who are new to a school and thus are introduced to several new communities of practice may be less inclined to immediately become active participants in those new communities. Being in an unfamiliar environment, these students will most likely wish to observe how the new communities function, what and how things are done in the new communities, and become more familiar with the people associated with these new communities. It is likely these mobile students will become legitimate peripheral participants who observe new communities of practice from the outside before taking a more active role and getting involved. This could explain why higher school mobility was associated with lower confidence in participation in school as well as lower trust in schools.

Research Implications

Although the present study found negative outcomes to be associated with school mobility, it is important to note that moving may not always be a negative experience. Several studies have shown that children in military families are not affected by the negative processes usually associated with mobility. A study by Marchant and Medway (2006) found that frequent relocation as a part of being in the military was positively

associated with higher child and social competence. A study by Simpson and Fowler (1994) found similar results and attribute this to the fact that the military provides support services to facilitate moving that are not available to most people who move, especially frequently. There also tends to be a common curriculum on military bases, so children in the military are not subject to gaps in curriculum that are common to most children who move frequently.

It would seem that other factors may also make moving a positive experience for children. For example, some children may change schools due to bullying in their previous school. In this case, they are more likely to be happy to be changing to a new school. In this case, they may be able to better focus on their schoolwork because they do not have the distraction of bullying; they may become involved in their new school because they did not feel that they could become involved in their old school. Moving to a new school could also be a result of a desire to move where there are better opportunities. Parents tend to desire the best for their children, so they may move into a neighborhood that is safer, has more resources, and has a lower cost of living so that the family can be better off financially and more secure in this aspect. Once again, a child in this situation may be eager to take advantage of this better lifestyle and therefore may work harder and become more involved in school. This could have positive affects on their levels of school belonging.

In talking about school mobility, normative school transitions should also be discussed. Most research on this subject has focused specifically on the transition between middle school and high school, which coincidentally is when most adolescents in the United States are around 14 years of age. Previous studies have found that many

students experiencing the transition from middle to high schools exhibit declines in motivation, increases in mental health problems, and increases in risky behaviors (Eccles et al., 1993; Lerner & Steinberg, 2004). Students during this time may also experience high absentee rates, several course failures, and difficulty in accumulating enough credits as a ninth grader to move onto the next grade (Cohen & Smerdon, 2009; Isakson & Jarvis, 1999). Some of these students are unable to rebound from this tough start to high school and as a result, drop out of school. The achievement loss experienced in this transition affects grade point average as well as standardized achievement test scores for high- and low- achieving students (Cohen & Smerdon, 2009). This is often attributed to the increased rigor of courses in high schools.

The transition from middle school to high school creates a disruption in the relationships students have with their teachers and peers, as new teachers and some new peers are introduced in the high school setting. For some students, particularly those who have struggled academically, the competitive and impersonal nature of high school has a negative impact on students' performance and behaviors (Calabrese, 1987; Cohen & Smerdon, 2009; Goodenow, 1993). In contrast to middle school, high school can also bring added pressures to perform well academically because there are important implications for a student's future, such as if and where they will go to college.

Structural and organizational differences between middle school and high school may also contribute to any difficulties a student experiences during this transition. In middle school, students tend to follow a similar path of coursework as their peers and generally move less freely through the school building. High schools, on the other hand, tend to offer more choices in their curricular and extracurricular activities (Cohen &

Smerdon, 2009; Eccles, Midgley, & Adler, 1984). These changes can be overwhelming for a student entering high school and they may be unprepared for these changes. This may explain why students tend to exhibit decreased school engagement by the end of ninth grade (Alspaugh, 1998). Involvement in extracurricular activities during this time has been associated with positive adjustment during this transitional period, specifically in terms of having higher than expected grades, higher school value (perception of importance of school for the future), higher self-esteem, more resiliency, exhibiting prosocial peers, and lower than expected risky behavior (Feldman & Matjasko, 2005; Fredricks & Eccles, 2008; Mahoney & Stattin, 2000). A possible explanation for this is that students are able to form a strong peer group through their involvement with school, and this support from peers can help mediate the negative affects associated with school transitions.

The transition from middle school to high school has been found to have varying effects on students depending on their level of academic preparation for high school, emotional stability and ability to adapt, family situations and demographics, and programs available in middle and high schools to help to ease the transition (Cohen & Smerdon, 2009). Individual student characteristics such as gender, race, and ethnicity have also been found to have varying effects on how students transition from middle to high school. A study by Akos and Galassi (2004) found that girls feel less connected to their high schools than boys. Girls also expressed more concerns regarding the social and academic changes related to this transition and experienced greater drops in self-esteem and less dependence on family for support. Research by Oates, Flores, and Weishew (1998) found that during the transition from middle school to high school, students with

lower socioeconomic status were at greater risk for academic failure and showed declining levels of school satisfaction.

It should be noted that all of these situations involve mobility that is for the most part by choice and infrequent, rather than mobility that is forced and more extensive. It is critical to disentangle the two when discussing mobility and the possible outcomes associated with mobility.

Applied Implications

The findings of the present study have several implications for educators and policy makers. Frequently changing from school to school was associated with negative outcomes such as having lower civic knowledge scores and a lower perceived sense of school belonging, as conceptualized by confidence in participation at school and trust in schools. Knowing this information, educators should target this special population of students and address (or at the very least, acknowledge) the challenges they face that separate them from other students. By addressing these issues, hopefully educators can help lessen the impact of school mobility and help these highly mobile students to achieve better outcomes. Along with this, policy makers should use these findings as evidence for why forced school mobility may not always be the best option. These are the people that may decide when schools close, create and enforce redistricting policies, and make other important decisions that could require a large number of students to change schools. Evidence from the present study in addition to numerous other previous studies all point to the fact that school mobility has several detrimental outcomes, and for this reason policy makers may want to explore other options before forcing students to change schools.

Limitations

In evaluating the results and contributions of this study, it is important to acknowledge the limitations associated with the study. One such limitation is that this study employed data from a survey of students. While the IEA Civic Education Study is indeed a large and nationally representative dataset which separates it from many other studies, what is reported here was an exploratory analysis. Experimental methodology would have allowed for stronger conclusions to be made about any findings my study may have yielded.

Another limitation associated with using this existing dataset was that items and scales were limited to what was available within the dataset. For example, it could be argued that highly mobile students have a strong need to belong, but also have better coping skills that come from repeatedly moving from one school to another. It was impossible to assess this, however, because data about coping skills was not available in this dataset. Although the present study was limited in this respect, this is the case with any secondary data analysis and it should be emphasized that the broad scope of the IEA Civic Education Study does still allow for many constructs to be analyzed.

This data was measured at only one point in time, therefore there is no way to determine any lasting effects of mobility. It is possible that the affects of mobility stabilized over time, but there is no way to tell from this data. It is also possible that the affects were only felt when the student first moved to a new school, but the data does not indicate exactly when the student moved other than that it was in the past two years.

A few of the items used in the present study were not ideal in assessing the constructs they were designated to measure. First, mobility was measured by a single

question asking “How many times have changed schools in the past two years as a result of moving?” This question limits the scope of the analysis to recent moves, and may not include other highly mobile students who have not changed schools within this two year window. Second, trust in schools was measured using a single item. Results for the other two dependent variables showed that IRT scales, such as the ones used to measure civic knowledge and school participation in the present study, are much more robust. Ideally, a trust in school IRT scale would have been used had it been available. This may also help to explain why gender and socio-economic status were not found to be significantly related to trust in schools and why the percent of variance explained was so small.

A statistical limitation of this study was that an alpha level of .05 was used. Given such a large sample, an alpha level of .01 may have been more appropriate. The analyses involving school participation and trust both had violations of the regression assumption of normality.

Future Directions

While studies are increasingly investigating school mobility, there is still much work to be done in this area. Future analysis should employ such statistical methods as multilevel models that are more complex in nature and would also allow for looking at interactions among variables. Future studies should use methodologies tailored to issues in school mobility and specific factors that characterize or influence it. This will allow for stronger conclusions to be made, and researchers will be able to uncover more information about this group of students. It is critical to know and understand any long-term effects of mobility, therefore further work might investigate the topic of school mobility using a longitudinal approach. This will also allow researchers to examine the

duration of any affects and possibly identify any trends among these mobile students. Future research should investigate the demographic profiles of those adolescents who have moved most frequently. This analysis has the potential to uncover who these students are, why they are moving so frequently, and other relevant aspects of school mobility.

Future studies regarding school mobility should also examine the role of peer groups and friendships. It is possible that highly mobile students have developed deliberate strategies for adjusting to new peer groups, which may be related to being in the stressful situation of moving. Because they change schools frequently, this population may become more resilient and adaptable to change and may therefore know how to make friends quickly. These studies should also look at the peer groups in which these students belong. Highly mobile students may not establish peer groups because they know they are likely to leave. Conversely, it is plausible that highly mobile students are not necessarily isolates in their new schools, but rather do fit into social groups. Studies can explore if and which social groups these mobile students are associated with, and further how they are associated. For example, a mobile student may associate themselves with a certain social group, but the members of that social group may not consider that student as affiliated to them. It is worth mentioning that the possibility of doing social network analysis was considered for the present study, however it was not possible due to the complexity of the technique required.

Future research should examine the roles of both school socio-economic status and family socio-economic status and the impact each may have on school mobility. Socio-economic status in both contexts could have implications for how a highly mobile

student is impacted by changing schools frequently. Family socio-economic status may be related to parental education and can therefore be indicative of the amount of scaffolding a parent is able to provide to support what is being learned at school. In addition, family socio-economic status may be related to a family's ability to provide additional resources to the child such as tutoring, as well as be associated with stressors on the child, like living in poverty and having to work. Socioeconomic status in schools may also be related to the amount of resources a school can provide to aid students who have changed schools, as well as the amount of time and attention a teacher may give an individual student due to school characteristics such as large class sizes.

Lastly, more research is required to disentangle normative school mobility from more extensive school mobility, which may be forced. This would have required more items dealing with the reasons for moving. As mentioned previously, most studies concerning school mobility do involve more normative changes, such as through traditional grade promotion or in military families. Most studies have not focused on students who move as a result of redistricting policies, school closures, gentrification of neighborhoods, and so forth. Students within these categories have been neglected in past studies concerning school mobility and for this reason, they warrant further exploration. It is possible that this research could have implications for the policies that forced many of these students to become mobile.

Conclusion

If one thing is evident from this study, it is that school mobility has an impact on the academic achievement and sense of well-being at school for the student involved. The findings in the present study contribute to a body of literature that emphasizes the

detrimental effects that school mobility has on students and supports the need for more research to be conducted in this area. School mobility not only impacts civic knowledge but also perceived sense of school belonging. It is a fact that school mobility will continue to occur and often, not by choice. For this reason, school mobility should be the focus of teachers, parents, administrators, and policy makers in order to address the many issues associated with moving from one school to another and how they should best be handled for the benefit of the students and schools as a whole.

APPENDIX A

Civic Knowledge IRT Scale

2. Which of the following is an accurate statement about laws?
 - Laws forbid or require certain actions [behaviors].
 - Laws are made by the police.
 - Laws are valid only if all citizens have voted to accept them.
 - Laws prevent criticism of the government.
3. Which of the following is a political right? The right...
 - of pupils to learn about politics in school
 - of citizens to vote and stand for [run for] election
 - of adults to have a job
 - of politicians to have a salary
5. A woman who has a young child is interviewed for a job at a travel agency. Which of the following is an example of discrimination [injustice]? She does not get the job because...
 - she has no previous experience.
 - she is a mother.
 - she speaks only one language
 - she demands a high salary.
7. In a democratic country [society] having many organizations for people to join is important because this provides...
 - a group to defend members who are arrested.
 - many sources of taxes for the government.
 - opportunities to express different points of view.
 - a way for the government to tell people about new laws.
11. In democratic countries what is the function of having more than one political party?
 - To represent different opinions [interests] in the national legislature [e.g. Parliament, Congress]
 - To limit political corruption
 - To prevent political demonstrations
 - To encourage economic competition.
12. In a democratic political system, which of the following out to govern the country?
 - Moral or religious leaders
 - A small group of well-educated people
 - Popularly elected representatives
 - Experts on government and political affairs
16. What is the major purpose of the United Nations?
 - Safeguarding trade between countries

Maintaining peace and security among countries
Deciding where countries' boundaries should be
Keeping criminals from escaping to other countries

17. Which of the following is most likely to cause a government to be called non-democratic?

People are prevented from criticizing [not allowed to criticize] the government.
The political parties criticize each other often.
People must pay very high taxes.
Every citizen has the right to a job.

18. Which of the following is most likely to happen if a large publisher buys many of the [smaller] newspapers in a country?

Government censorship of the news is more likely.
There will be less diversity of opinions presented.
The price of the country's newspapers will be lowered.
The amount of advertising in the newspapers will be reduced.

The next three questions are based on the following imaginary political leaflet [political advertisement].

23. This is an election leaflet [political advertisement] which has probably been issued by...

the Silver Party.
a party or group in opposition to [running against] the Silver Party.
a group which tries to be sure elections are fair.
the Silver Party and the Gold Party together

24. The authors of the leaflet think that higher taxes are...

a good thing.
necessary in a [free] market economy.
necessary for economic growth.
a bad thing.

25. The party or group that has issued this leaflet is likely also to be in favor of...

reducing state [government] control of the economy.
lowering of the voting age.
capital punishment.
more frequent elections.

26. Two people work at the same job but one is paid less than the other. The principle of equality would be violated if the person is paid less because of...

fewer educational qualifications.
less work experience.
working fewer hours.
gender [sex].

The next question differs from those earlier in the test. The following question contains three statements of fact and one statement of opinion. Read each question, and then choose the opinion.

31. Three of these statements are facts and one is an opinion. Which of the following is an OPINION?

- Actions by individual countries are the best way to solve environmental problems.
- Many countries contribute to the pollution of the environment.
- Some countries offer to cooperate in order to diminish acid rain.
- Water pollution often comes from several different sources.

36. What is the message or main point of this cartoon? History textbooks...
are sometimes changed to avoid mentioning problematic events from the past.
for children must be shorter than books written for adults.
are full of information that is not interesting.
should be written using a computer and not a pencil.

The next question differs from those earlier in the test. The following question contains three statements of opinion and one statement of fact. Read each question, and then choose the fact.

38. Three of these statements are opinions and one is a fact. Which of the following is a FACT [the factual statement]?

- People with very low incomes should not pay any taxes.
- In many countries rich people pay higher taxes than poor people.
- It is fair that some citizens pay higher taxes than others.
- Donations to charity are the best way to reduce differences between rich and poor.

School Belonging IRT Scale

Listed below you will find some statements on students' participation in school life.

Please read each statement and select the box in the column which corresponds to the way you feel about the statement. (1 = strongly agree, 2 = disagree, 3 = agree, and 4 = strongly agree):

- Electing student representatives to suggest changes in how the school is run makes schools better
- Lots of positive changes happen in this school when students work together
- Organizing groups of students to state their opinions could help solve problems in this school
- Students acting together can have more influence on what happens in this school than students acting alone

Trust In Schools

How much of the time can you trust schools (educational institutions)?

- 1= never
- 2= only some of the time
- 3= most of the time

4= always,
0= don't know

Mobility

How many times have you changed schools in the past two years as a result of moving?

Gender

Are you a girl or a boy? *Tick one box only.*

1= girl

2= boy

Socioeconomic Status

About how many books are there in your home?

Do not count newspapers, magazines, or books for school; tick one box only.

1 = 0 books

2 = 1–10 books

3 = 11–50 books

4 = 51–100 books

5 = 101–200 books

6 = more than 200 books

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