This is the author's final, peer-reviewed manuscript as accepted for publication. The publisher-formatted version may be available through the publisher's web site or your institution's library.

The Middle School Syndrome

Huston Gibson

How to cite this manuscript

If you make reference to this version of the manuscript, use the following information:

Gibson, H. (2014). The Middle School Syndrome.

Published Version Information

Citation: Gibson, H. (2014). The Middle School Syndrome. Society, 51(2), 152-155.

Digital Object Identifier (DOI): 10.1007/s12115-014-9755-4

Publisher's Link: http://link.springer.com/article/10.1007/s12115-014-9755-4

This item was retrieved from the K-State Research Exchange (K-REx), the institutional repository of Kansas State University. K-REx is available at http://krex.ksu.edu

The Middle School Syndrome

Huston Gibson

Housing Prices and [School] Amenities

When consumers shop for housing, they are shopping for a package of amenities. Desirable amenities will add monetary value to the selling price of a home. Some attributes are fairly straightforward: number of bedrooms, and bathrooms, whether the home has a basement, garage, and so forth. Property features serve as amenities too: size and characteristics of a lot, for instance. At the same time as they shop for housing and property characteristics, consumers simultaneously shop for location and neighborhood amenities. The physical design of the community, such as having streets sidewalks or pedestrian paths, or nearby parks, or good schools, involves amenities. A perceived high quality school is particularly desirable to most consumers. However, evaluating schools as amenities is somewhat problematic.

Perhaps the single greatest access to opportunity a society can offer a child is an education. As a result, households with children logically seek out housing in locations that offer high quality schools, so local school quality is a significant influence on housing price. Housing consumers without children will pay premiums for homes zoned for high quality schools, because that gives solid resale value. Consumers seem to understand this phenomenon and consume accordingly. Realtors also understand this phenomenon and market accordingly. And public officials seem to understand this phenomenon too and plan accordingly, with many cities recognizing the importance of schools in their community development efforts.

Yet we still have the problem of how to actually measure school quality. In empirical studies, one common way to evaluate school quality is with standardized test scores.

Standardized test scores are essentially a measure of student preparedness. However, preparedness comes not just from school resources but also home resources. In the United States, standardized test scores are positively correlated with student household socio-economic status. The 1966 Coleman Study pointed out that in neighborhoods where households have at home encyclopedias, you find schools with high test scores. Today, this might apply to at home computers or children who have smart phones.

Another way to evaluate school quality is by the age of the facility, which also has its drawbacks, particularly when you consider "new" as a criterion. In fact, "new" as a criterion may also have social implications. The context of new as a measure of school quality, or at least perceived quality, was first outlined for me in a 2004 editorial piece in Governing magazine titled "Edge-ucation," where homeowners in the Midwestern United States were depicted as chasing new, elaborate "Taj Mahal" style school facilities into the peripheral exurban countryside, away from older city centers, with the older, outdated school facilities. The rationale for building new facilities on the edges of communities is simple; this is where land is available. However, the regional and community planning implications of this are fairly widespread, from the agonies of suburban sprawl to the systemic disinvestment and despair in our often abandoned urban centers.

The phenomenon of building our new schools on the outskirts has a deep social component to it, including the de facto (re)segregation of our regions and communities based on socio-economic status, a direct result of one's financial ability to move to new exurban-suburban communities, with the new (and better?) schools. And if your family does move, your personal health may be in jeopardy due to the automobile dominated designed suburban environments in these new areas, with disconnected local street systems inhospitable to pedestrians. This

phenomenon is depicted in the book "Why Johnny Can't Walk to School"; many even feel the standard American "lollypop" cul-de-sac suburb design is a significant leading cause of childhood obesity.

Background Research

For my doctoral dissertation (2009), I empirically investigated how physical school facility traits, such as a facility's age, might influence location choice among home buyers, via their willingness to pay premiums for housing zoned for newer schools. Even if newer schools do not necessarily create a better environment for learning, although they might, I hypothesized that society at least perceives newer school facilities as better quality, largely based on a "newer equals better" sentiment which seems prevalent in our culture.

To test my hypothesis, I measured the relationship of school facility age against housing prices in the Orlando, Florida, metropolitan area of the United States during the calendar year 2005. At that time, Orlando was one of the faster growing regions in America. For my research, I used a cross-sectional hedonic price model to assess the relationships between various public school attributes and the selling prices for all single-family homes sold during 2005 in the study area, which included two county-wide school districts for Orange and Seminole counties and well over 100 schools, comprising elementary, middle, and high school facilities.

The elementary schools contained Kindergarten (K) through grade five, the middle schools grades six through eight, and the high schools grades nine through twelve. While this arrangement varies in other US locations, these breaks are typical for facilities in the American K-12 public school system. Different levels reside in physically separate buildings, in most cases, usually on separate lots of land.

The independent variable of primary interest in the study was school facility age, but I controlled for many other possible school quality characteristics/proxies, including, but not limited to, standardized test scores, teacher training and reputation, classroom technology, classroom size, and student socio-economic characteristics. Physical housing and neighborhood characteristics were also controlled, including, but not limited to, the number of bedrooms and bathrooms in a house, special housing features, the age of a house, the size of a house, the size of a residential lot, and proximity to water and other local amenities.

While I found that elementary and high school facility age did indeed have a statistically significant correlation with selling prices of houses, the age of middle schools was not significant. After noticing this phenomenon over and over, in several variations of the model, I began to call this "Middle School Syndrome."

Although my original study included only elementary schools, much like most housing studies I reviewed in the literature, I obtained data for all three school types and figured I might as well include them all to see if there were any noteworthy differences. There were, and that brings me to the purpose of this particular manuscript.

The Middle Child Syndrome

I derived the term "Middle School Syndrome" from what is commonly known as the "Middle Child Syndrome," or [perhaps more tongue in cheek] the "Jan Brady Syndrome," making reference to the popular Brady Bunch television series that originally aired in the 1960s and 70s, later gaining a somewhat immortal status via international syndication (Leman 1998). The "Middle Child Syndrome," as portrayed on the screen by the character Jan Brady, the family's middle daughter, is a condition where the middle child feels that she receives less attention from her parents than the oldest and youngest siblings.

The oldest, or first born, will often receive inflated attention because they are the first to reach certain milestones, such as first birthday, learning to talk, learning to walk, and eventually attending their first day of school, and then their last day of school (graduation). Parents usually consider these major life events extremely exciting because they are seeing a child reach these milestones for the first time. For that reason, these milestones will be celebrated with great enthusiasm.

The youngest, or the last born, will likely receive plenty of attention as well; they are the baby, the last child in the immediate family to progress through such important developmental phases. As a result, parents are again likely to pay great attention to these events and over celebrate them enthusiastically, as a way to hang onto the child rearing years, or maybe just to try and get that last one right, so to speak.

However, the unfortunate middle child, like Jan Brady, and like the middle school, is sandwiched between the exciting first and last and can be inadvertently overlooked and under celebrated (Arnstein 1978; Leman 1998). Alas, as seen through the fictional life of Jan Brady, the middle child can fall into the trap of receiving the least amount of attention from their parents, compared to the oldest and youngest siblings. They begin to feel left out. This is the "Middle Child Syndrome."

The Middle School Syndrome

The "Middle School Syndrome" basically works much the same way. In essence, parents are highly likely to get overly excited about the local elementary school, a child's first experience in the public K-12 system of American education. Given the importance placed on education as window of opportunity for children in our society, it is natural that this first educational experience for children will be very important to parents. On the other end of the K-12 journey, there is the high school. Parents seem to hold the high school experience as very important as well: the last K-12 educational experience. After all, this is the place for the child to "get that last one right" [so to speak], to get into a good college, a good job, have a successful career, happy life, and so forth. Yet, like the middle child, like poor little Jan Brady, the middle school is overshadowed.

The Bargain in the Middle

The magnitude of similarity among the three types of schools (elementary, middle, and high) was but present, but no linear relationship occurred between home selling prices and associated school facility age for any school level. Instead, a U-shaped pattern emerged for categorical increments of "newness." Elementary and high schools fell into four general ages: newly built, middle-aged, older, and vintage (or historic). Newly built and historic schools were the most attractive, while the two middle categories were less attractive. Much like the middle school, or the middle child, the middle-age also seems to have little value.

In Gibson (2011b), which examined the elementary school relationship with housing costs, I referred to this phenomenon as "The Mustang Effect," a reference to the Ford Mustang automobile. The snapshot explanation of this is that people prefer both newer and vintage/historic goods, while overlooking the middle ground. Newer goods offer the "latest and the greatest" features, but vintage/historic goods offer nostalgia. Using an example of three red convertible Ford Mustangs, a 1967 model, a mid-eighties model, and one that is just off the lot,

the audience reaction to these three cars in a parking lot will likely show a preference for the newest and the vintage models. This same story could be told using many items. Take housing itself, for example.

The market for new housing will likely always be strong. People like to be the first to park in a garage, use a kitchen or a tub, walk on fresh carpet, and so forth. People pay a premium for being first when buying new housing. In addition, the market for nostalgic, vintage, "historic" homes in certain communities is also strong. Once homes become old enough, they achieve the status of having a weathered, but classic, architecture, with desirable vintage features such as masonry fireplaces, hardwood banisters, or a phone nook in the hall. While you could include all of these items in a new home, it would not possess the same character. The point is, once again, the middle ground is the least attractive; the middle-age housing stock is not new, nor is it old enough to be considered classic. Instead, middle-age housing stock is just considered outdated, like the mid-eighties Mustang.

If you are seeking a bargain, however, the middle-age housing stock may provide you with solid and comparably inexpensive housing in many communities. For this reason, housing age was a control variable in my study's regression model.

It is this middle-age sink, similar to that of housing and cars that seems to be happening with school building age desirability and their place in the K-12 system (aka "The Middle School Syndrome").

Dollars and Sense

In the case of single-family housing sales in the Orlando, Florida, metropolitan area during 2005, "The Middle School Syndrome" transferred into real US dollars. While the findings demonstrated that there was a relationship between school facility age and the selling price of single-family housing in the sample, the relationship was only statistically significant for elementary and high schools, not for middle schools. Newer schools did affect housing sale prices for all arms-length single-family home real estate transactions in Orange and Seminole counties, Florida, during 2005, when all other school, housing, and neighborhood attributes are held constant.

At the elementary school level, a newer school, those built since 1990, in the neighborhood increased house prices by \$13,130.22. In other words, all other things being equal, if two identical houses were sold in the same neighborhood, one zoned to attend a newer elementary school and the other an older elementary school, the one zoned for the newer school would sell for \$13,130.22 more. This calculation even factors in historic schools with the older category. For high schools, house prices increase by \$15,090.74 in the same situation. However, no statistical association between newer middle schools and housing prices occurred. Basically, middle schools, regardless of age, had no effect on housing prices.

Technology Follows Suit

I originally hypothesized that people might perceive newer schools to be superior to older schools because people seem to think that newer is better. Newer facilities, I thought, were more likely to have the most current, up-to-date technology resources. Thus, I included classroom technology as a possible explanatory variable in the overall regression model, as well as also separated classroom technology into a focused auxiliary model. Again, "The Middle School Syndrome" cropped up: the level of classroom technology in the auxiliary model was only positively associated with the selling prices of houses for elementary and high schools. Middle school classroom technology had no significant relationship with housing costs. Furthermore, I found that classroom technology was not associated with school facility age for any level, elementary, middle, or high school. The reasons for this are fully discussed in Gibson (2011a).

Concluding Remarks

In summary, elementary and high schools influenced housing choice, but not middle schools, not because middle schools are not important, to either education or in terms of housing decisions. Middle schools are part of the overall schooling sequence in the K-12 American education system, and logically the package in its entirety influences most decisions on housing. However, the middle school is seemingly overshadowed by elementary and high school. This is the "Middle School Syndrome."

This study does not go into is how this syndrome might play out in education policy and/or parental involvement in school activities nor how the syndrome affects middle-school environments and student development at that stage. Research on this is needed.

Further Reading

Arnstein, H. 1978. Brother and Sisters/Sisters and Brothers. New York: Dutton.

- Beaumont, C. & Elizabeth, G. 2002. *Why Johnny Can't Walk to School* (2nd Edition). Washington DC: National Trust for Historic Preservation.
- Briggs, X., editor. 2005. *The Geography of Opportunity: Race and Housing Choice in Metropolitan Community*. Washington DC: Brookings Institution Press.

Gibson, H. 2012. New School Facilities and their Association with Student Achievement, American Clearinghouse on Educational Facilities, 2(2), 47-61.

2011a. School Facility Age and Classroom Technology: The Influence of Stakeholder Participation in the Technology Planning Process. *American Clearinghouse on Educational Facilities*, 1(1), 39-50.

- 2011b. The Value of New: Elementary School Facility Age and Associated Housing Price. *Journal of Housing Research*, 20(1), 67-86.
- Gurwitt, R. 2004. Edge-ucation: What compels communities to build schools in the middle of nowhere? *Governing: The Magazine for State and Localities*, March, 22-26.
- Leman, K. 1998. *The Birth Order Book: Why You Are The Way You Are*. Grand Rapids, MI: Fleming H. Revell.
- Schindler, R. & Holbrook, M. 2003. Nostalgia for Early Experience as a Determinant of Consumer Preferences. *Psychology & Marketing*, 20(4), 275–302.

Huston Gibson is an Assistant Professor of Regional and Community Planning at Kansas State University. He has studied school facilities and their communal impact on society extensively, including most notably, his doctoral dissertation *Perceived School Quality and its Effect on Monetary Housing Value: school facility age and its association with housing sale price* (2009).