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The Self-Actualization of Education:

Factors that Affect Educational Motivation

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By

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Abstract

Researchers have found that many students of public and private education seem to lack the fundamental motivation to learn they had as toddlers. Educators are starting to realize that teaching through students' interests and letting them learn at their own pace produces the best results. This research tested the hypothesis that a student's motivation to learn is influenced by the degree of structure in education with an inverse relationship. A survey was distributed via email to 107 homeschooler discussion lists where there is a wide variance in how much structure parents include with daily instruction. The parents who participated in this research study were drawn from the online homeschooling population in all inclusive, secular discussion/support groups. As predicted, motivation means were highest at the lower end of the degree of structure.

The Self-Actualization of Education:

Factors that Affect Educational Motivation

Many students of public and private education seem to lack the fundamental motivation to learn they had as toddlers (Deci, 1996). They complete academic work only for the grade (Deci, 1996), they don't relate to the material (Pope, 2003), and they don't pursue intellectual activities outside of the classroom (Holt & Farenga, 2003). The purpose of this study is to define the factors that motivate and de-motivate students to learn. The main hypothesis is that the degree of structure in education will have an inverse relationship with a student's motivation to learn. This study was conducted to determine varying effects on the motivation of homeschooled students including degree of structure of the curriculum and the attitudes of people in the family's social circle.

Effects on the motivation to learn in the classroom setting were drawn from the quantitative research of Edward L. Deci and Carol Dweck as well as the qualitative research of John Holt and other authors. Motivation can be influenced by innumerable factors; the ones chosen for this study were: parental involvement, extrinsic motivators and goal-setting, self-esteem, the curriculum and competition. To fully understand the impact of these factors, it is important to look at the history of education, its evolution towards the future, and some of the different methods people have developed to teach their children.

Evolution of Education

Education is at a critical point in its evolution. Throughout the last century, educational reform has swung back and forth on its pendulum to try and satisfy the needs of students, cries of parents, and demands of professional educators (Ravitch, 2000). Many schools of thought have

been passed along to encourage students' motivation to learn (Ravitch, 2000). Unfortunately, the consequence of generations of people living with slavery in the United States, and then segregation for decades after has taken its toll in public schools (Ravitch, 2000). It all began in 1908 with a report on high school curricula stating: "every high school student should have a solid, liberal education regardless of the student's ultimate occupation" (Ravitch, 2000, p. 123). By 1918, the pendulum swung the other way with the National Education Association's (NEA) report on the same subject. This report stated that high schools should "provide different curricula for different groups of students, depending on their likely occupation in the future" (Ravitch, 2000, p. 123). This practice remained the common view in the public schools up until the 1960's with the student revolution, the war in Vietnam and the defiance of all authority in general. This curriculum reinforced the status quo, sharpening segregation and sexism all over the country, but especially in the Deep South.

The idea to put students on paths to a preordained future was reborn again and again as a fresh and new idea masked under new names and spoken by new faces (Ravitch, 2000). The invention of standardized tests and the IQ test before WWII made it easy to decide who should be put in which program. Professional psychologists of the 1920's believed that intelligence was innate and unchanging; students who scored high were put on the college track and not expected to waste their time on less rigorous courses. Likewise, students who scored low were expected to study courses for future jobs that didn't require the skills of college preparatory work. "Curricular Differentiation (one of the first names this practice held) dealt a deadly blow to the aspirations of African Americans . . . they did not need an education that would fit them to their preordained roles in society—this led to the likely destinations of domestic servants, farmhands and blacksmiths" (Ravitch, 2000, p. 108).

The school system debate of the early 1900's started out as *how* children should learn; which brought forth more fame to the idea of 'child-centered' learning even though the idea had already been around for centuries, and probably practiced in homes far before that (Ravitch, 2000). Later the debate turned to *what* children should learn, and fueled the Curricular Differentiation movement. Child-centered learning is education focused around the child's interests. Child-centered learning was reborn again and again, just as Curricular Differentiation was; or Social Adjustment, or Life Adjustment as it was called after WWII. A prominent critic of these adjustment movements in the 1930's was William C. Bagley of Cornell University. He said, "No country in the world had witnessed so many educational reforms in the past generation as the United States" (Ravitch, 2000, p. 291). School reform repeated the same motions and ideas, while expecting different results—the precise definition Einstein gave for the term "insanity" (Tangredi, 2012).

Private schools were formed to allow children an alternative to the "curriculum chaos," as Bagley described it (Ravitch, 2000). People continued to turn to the idea of child-centered learning as it saw the best results in accordance with motivation to learn. John Dewey's school in the 1920's and *Summerhill* in the 1960's exposed learning in its natural state without the oppression of grades, tests and irrational expectations. In the 1960's and 70's public schools tried to use at least some forms of this method to boost motivation in the schools. Open classrooms were implemented to follow the Open Education movement which emphasized more freedom for each student to decide what to learn and when (Ravitch, 2000). It soon fell out of favor when it proved not to work for every child. Numerous books came out in the sixties critiquing the giant flaws of public schools: "John Holt (1964) *How Children Fail*, Jonathon Kozol (1967) *Death at an Early Age*, Herbert Kohl (1967) *36 Children*, and James Herndon

(1968) *The Way It Spozed to Be"* (Ravitch, 2000, p. 389). John Holt, regularly referred to as the father of modern day Homeschooling, taught in a progressive school in Colorado. He wrote a stack of books on child-centered education and is widely quoted in the homeschooling community today.

With the rise of the internet limitations on education and information to all students is no longer tolerated by most people (Barr, 2005). When the internet was in its infancy, Bill Gates, founder of Microsoft, gave a keynote speech entitled 'Information at Your Fingertips'. He saw the future where anyone with a computer could expect to find reams of information on all of their interests. "Information, as defined by Gates, was 'All the information that someone might be interested in, including information they can't even get today" (Barr, 2005, p. 1). In the past, when intelligence was thought to have been a fixed trait, I. Q. tests were used as a means to provide preordained futures for every student (Ravtich, 2000). Today, even as the educational professionals insist the American Education system has evolved beyond that, the rise in tuition costs for higher education can still deal a heavy blow, especially to those people from a low socioeconomic class.

The internet has helped everyone become aware of the fact that intelligence is not unchanging and people are not incapable of learning beyond what an IQ test predicts (Ravitch, 2000). The mistakes of previous reforms are still relevant in modern public schools as psychologists like Edward L. Deci (Deci, Koestner, & Ryan 2001) have found student motivation to decline every year they are in school. Deci's books and experiments come to the same conclusion that intrinsic motivation, doing a task just for the enjoyment that comes from the task itself, brings better work and results than extrinsic motivation, doing a task for a reward at the end. Furthermore, external motivators seem to be highly detrimental and undermine

intrinsic motivation in serious ways (Deci et al., 2001).

This evidence was also found in 1918 by William Kilpatrick of Columbia University with "The Project Method" (Ravitch, 2000). "If students were told to do something by their teacher (for an extrinsic reward) they would not do it wholeheartedly, so such activities would not qualify as projects by Kilpatrick's definition" (Ravitch, 2000, p. 179). If students felt like their project was forced upon them, then they wouldn't see the need to complete it. "The students must have a genuine purpose of their own and must really want to see the project through to a conclusion in a 'whole hearted' way" (Ravitch, 2000, p. 179). Completing project after project for the satisfaction of someone else must feel like your life is passing you by while forced to do work you're not interested in. "Dewey demanded that education should be 'life itself' and not merely preparation for future living" (Ravitch, 2000, p. 179).

Deci (et al., 2001) and his colleagues composed a Cognitive Evaluation Theory to specify extrinsic effects on intrinsic motivation.

Cognitive Evaluation Theory (CET)

> CET proposes that underlying intrinsic motivations are the innate psychological needs for competence and self-determination. Events that decrease perceived self-determination (i.e., that lead to a more external perceived locus of causality) will undermine intrinsic motivation, whereas those that increase perceived self determination (i.e., that lead to a more internal perceived locus of causality) will enhance intrinsic motivation. Rewards (and other external events) have two aspects: The *informational* aspect conveys self-determined competence and thus enhances intrinsic motivation. In contrast, the

controlling aspect prompts an external perceived locus of causality (i.e., low perceived self-determination) and thus undermines intrinsic motivation (Deci et al., 2001, p. 4).

Deci (et al., 2001) goes on to say that "verbal rewards" can be undermining as well, but only in certain contexts that lead "people to engage in behavior specifically to gain praise." Tangible rewards however, "are frequently offered to people as an inducement to engage in a behavior in which they might not otherwise engage" and so are controlling the person, according to the CET (Deci et al., 2001, p. 4). On the bright side, "if tangible rewards are given unexpectedly to people after they have finished a task, the rewards are less likely to be experienced as the reason for doing the task and are thus less likely to be detrimental to intrinsic motivation" (Deci et al., 2001, p. 4).

Deci's (et al., 2001) findings were criticized when other psychologists believed they found evidence proving him wrong (as cited in Baumrind, 2012). "Contrary evidence to Deci—Nisan (1992) found that most students perform better when traditional learning incentives are used in the classroom than when these external inducements to perform optimally are absent" (as cited in Baumrind, 2012, p. 45). Unfortunately, since public schools and parents initiate extrinsic motivators from the time students are very young, there isn't really a way to be certain that those children would have reacted so well to extrinsic motivators if they were never exposed to them before. There is no control group. By the time Nisan did his experiment the students were already addicted to extrinsic rewards. They were raised in a biased environment. Edward Deci describes an astute analogy in his book *Why We Do What We Do* where zookeepers train seals to do tricks for tasty treats. With the external motivators readily available, the seals are enthusiastic and excited about pleasing the zookeepers (Deci, 1996). Once the treats are gone, the seals go back to their natural state. It is unlikely that someone would see one of the seals

performing one of these tricks just for the fun of it. The animals would only do these tricks if they were getting a treat; no pay, no play. Likewise, if students have extrinsic rewards readily available whenever they do something (for example a math problem) they most likely would not attempt it anywhere else as there will be no "treat" at the end.

Edward L. Deci's (1996) findings along with his Cognitive Evaluation Theory of "extrinsic rewards undermine intrinsic motivation" have been found in other studies; specifically, research done by psychologist Carol Dweck and associates (1986, 2007). She discovered children have their own perceptions about their intelligence, and based on what they believe, challenges, criticisms and even praise can have varying affects (Dweck, Cimpian, Arce, & Markman, 2007).

For instance, praising children on their ability (or end result) instead of their effort can lead children to believe their intelligence is a fixed trait; one that cannot be changed and their ability will remain at its current level forever (Dweck et al., 2007). Repeated exposure to this generic praise can develop an external locus of causality (Deci, 1996) in the child, or as Dweck describes it, develops performance-goals instead of learning-goals (Dweck, 1986). "For performance-goal children, satisfaction with outcomes is based on the ability they believe they have displayed, whereas for learning-goal children, satisfaction with outcomes is based on effort they have exerted in pursuit of the goal" (Dweck, 1986, p. 1042).

Learning-goals promote an idea that intelligence is malleable, and therefore can improve with practice and development (Dweck, 1986). Learning-goals focus on progress through effort, challenging tasks, and the value of the skill to be learned. Performance-goals focus on ability level and the judgments of others. This research shows how a focus on ability judgments can

result in a tendency to avoid and withdraw from challenge. Dweck's study of the 'genericness' of praise in 2007 seems to set children up for either performance or learning-goals. "Generic praise implies there is a stable ability that underlies performance (intelligence as a fixed trait), subsequent mistakes reflect on this ability and can therefore be demoralizing" (Dweck et al., 2007, p. 315). The phrases used in this study are so similar that the researcher readily admitted most parents are likely to use them interchangeably in practice: "You are a good drawer" (generic) versus "You did a good job drawing" (non-generic, focus on effort) (Dweck et al., 2007). In fact, before any mistakes were made, there was no significant difference in the child's reaction between the praise conditions (Dweck et al., 2007). "However on the post mistake measures, children who received generic praise exhibited significantly more helpless behavior than children who received non-generic praise" (Dweck et al., 2007, p. 315).

> Children who were told they had done a good job had less extreme emotional reactions and better strategies for correcting their mistakes. In sum, subtle differences in the generics of language can influence children's conception of their abilities and their achievement motivation (Dweck et al., 2007, p. 316).

Children who develop performance-goals focus on the end result of the ability, disregarding all effort if the ability is judged as low (Dweck, 1986). This mindset would be more practical in a sports setting, where ability level is what moves an individual up the ladder. The Deweys, founders of the Dewey School in the 1920's, argued that competition had no place in academia, and only promoted needless stress on the students (Ravitch, 2000).

> Ames et al (1977), for example, found that with an autonomous rewards structure (learning goal), children's pride in their performance in both the success and the failure

> conditions was related to the degree of effort they perceived themselves to have exerted. However, within the competitive reward structure (performance-goal), pride in performance was related to the degree of ability (and luck) they believed themselves to have. Thus, failure within a performance-goal, because it signifies low ability, yields little basis for personal pride or satisfaction (Dweck, 1986, p. 1042).

Performance-goal children must have high confidence in the ability to stay involved on some task; but that is difficult to maintain when they are more likely to foresee negative outcomes and view failures as predictive of continued failure (Dweck, 1986). All of this goes along with the fact that extrinsic rewards, competition and generic praise undermine intrinsic motivation (Deci, 1996; Dweck, 1986; Dweck et al., 2007). "Indeed, performance-goals may well create the very conditions that have been found to undermine intrinsic interest" (Dweck, 1986, p. 1042).

Public and private schools are renowned for their (1) extrinsic motivators (grades, stickers, approval), (2) competition (spelling bees, mathletes, bullying), and (3) use of generic praise (Ravitch, 2000). "[School] may present neither tasks that are difficult enough to create failure and debilitation nor the choice of not pursuing a given subject area" (Dweck, 1986, p. 1044). Licht and Dweck, (1984) revealed through an experiment they conducted in classrooms that most students have developed performance-goals to survive the competitive culture of mainstream education (Dweck, 1986). "When confusion accompanied the initial attempt to learn new material, mastery of the material [was] seriously impaired for these children" (Dweck, 1986, p. 1044).

The youth of America were taught since the Social Adjustment/Curricular Differentiation

movements that conforming to the group and society as it is was more important than to better oneself through education (Ravitch, 2000). This belief led to an "adolescent society [which was] devoted to superficial, consumerist concerns, were anti-intellectual and materialistic" (Ravitch, 2000, p. 369). Media was quick to catch on, and began advertising their consumer markets toward adolescents. Students in modern society still hold many of these beliefs (Pope, 2003). In a book called *Doing School: How we are Creating a Generation of Stressed Out, Materialistic and Miseducated Students*, the author, Denise Clark Pope (2003) followed students around to observe their daily lives.

She went to one of the top schools in America, boasting that approximately 95% of its graduates went on to college (Pope, 2003). She asked for a random sample of students "who the administrators considered to be *successful*" (Pope, 2003, pg. xiv). Kevin Romoni was content with his high grade-point-average, and did not feel motivated to do what was necessary to gain a perfect academic score. "He convinces himself that he can really 'live life' (go to parties, goof off in class, hang out with his friends) and that this is a fair trade off to getting a 4.0" (Pope, 2003, pg. 28). But getting the A on the report card does not always reveal the student has truly learned. Public schools focus on teaching to the test by providing facts, equations and answers to memorize. Memorization is not learning, however, especially when what is memorized is forgotten soon after taking the test. "Everybody does the minimum required to get by and everybody focuses on grades instead of learning the material" (Pope, 2003, p. 28).

The school reform battles continue to make an effort to evolve the way we educate our youth. Still, the main concern is focused on motivation. Schools take the stance that learning is something to put into the student, never-mind whether or not the student is truly engaged (Holt, 1990). "Learning . . . means participating—being a scientist or musician rather than watching

from the outside" states Grace Llewellyn (1998), author of "the Teenage Liberation Handbook". When students can't relate to the material and/or don't see a use for it in their current or future lives, their interest will dwindle down to embers (Llewellyn, 1998). "When interest is lacking—learning tends to be less permanent, less deeply rooted, less successful" says Alfie Kohn, (2000) author of "What to Look for in a Classroom" (p. 6). This situation can easily turn into a vicious cycle of less motivation on the student's part and more external motivators on the school's part (Kohn, 2000). "Practices such as rewards assemblies and spelling bee's teach students that they must triumph over each other to be successful" (Kohn, 2000, p. 6).

"The Deweys [knew] competition, extrinsic goals, and genuine performance were valuable in games but should be abolished from the rest of the curriculum; these factors were treated as undue pressure when it was time to learn academic subjects" (Ravitch, 2000, p. 177). Intrinsic motivation seems to be more prevalent in children and especially in infants (Deci, 1996). "Intrinsic motivation describes perfectly the learning behavior of young children" (Deci, 1996, p. 21). Toddlers and babies are not encouraged to learn about their world through extrinsic motivators such as cookies, stickers or grades. Babies learn to walk, talk and navigate because they want to. Young children are not passively waiting to be drawn into learning by the offer of rewards but rather are actively engaged in the process of learning. "Indeed, they are intrinsically motivated to learn" (Deci, 1996, p. 20). Children are naturally curious and have a built-in desire to learn first-hand about the world around them (Hunt & Hunt, 2008).

Renowned developmental psychologist Jean Piaget (1896—1980) discovered the same traits as he studied children (Bjorklund, 2005). "A central thesis in Piagetian theory is the idea that the child is intrinsically active" (Bjorklund, 2005, p. 80). Children are not passive learners in the beginning; they are curious and engaged when they are allowed to learn through their own

interests.

> Intrinsic activity in children can be viewed as curiosity. Children are not content with what they already know but seek to know more. Although a child can be enticed to acquire certain information through external rewards, such exogenous reinforcements are not necessary to motivate learning and development. The motivation for development is within the child; children are the movers and shakers of their own experiences and thus are primarily responsible for their own development. Piaget made the child not only the focus of development but also its major contributor (Bjorklund, 2005, p. 80).

Once children become school age, and regularly spend hours in a cramped desk, their thirst for knowledge begins to decline (Deci, 1996). "In schools, many children are passive, lacking the interest and excitement of learning that seems so natural in three-year-olds" (Deci, 1996, p. 20). "This seeming fragility [of intrinsic motivation] relates directly to the question of why there is not more intrinsic motivation for learning in older children" (Deci, 1996, p. 21). The craving diminishes even with a plethora of external motivators provided by the teachers, administrators and parents.

As the achievement gap between privileged and underprivileged students slid wider through the 1960's, 70's and 80's, the education professionals were becoming ever more concerned (Ravitch, 2000). Self-esteem was quickly pinpointed as the reason behind all low achievement for every student. "By the 1980's, self-esteem was touted in professional literature as both a means and an end of education" (Ravitch, 2000, p. 427). If children could feel good about themselves, their race, ethnic identity, or their gender—they would achieve better in short order. Self-esteem was blamed for slow learners, procrastinators, and aggressive reactions to

criticism. Barbara Lerner, a journalist for *The American Educator*, wrote in 1985 that students who received ample praise even without hard effort or quality work "never learned to persevere in the face of obstacles or to tolerate frustration" (Ravitch, 2000, p. 427). The editor of the periodical reprinted Lerner's essay in 1996, for these misguided notions have become even more embedded in our society's schools.

> In 1998, a team of social scientists challenged the widespread belief among educators that low self-esteem caused violent and aggressive behavior. They noted that aggressor's such as playground bullies, members of street gangs, and "master race" ideologues often think very highly of themselves. Those who have a "grandiose self-image" are likely to respond aggressively to criticism. Persons who are urged to think that they are "the greatest," in the absence of any concrete accomplishments, may develop narcissistic attitudes based on nothing but the desire to feel superior. Stable self-esteem, as Damon had argued, is well founded in objective reality and the result of having done something to feel proud of, not of repeating slogans in praise of oneself (Ravitch, 2000, p. 429).

Dweck (1986) recognized this potentially hazardous practice in her research as well. "Much current educational practice aims at creating high confidence performers and attempts to do so by programming frequent success and praise" (Dweck, 1986, p. 1045). Positive reinforcement (as studied by Pavlov and his dogs) was becoming more famous in classrooms, though misunderstood by laypeople (Dweck, 1986). "The motivational research is clear in indicating that continued success on personally easy tasks is ineffective in producing stable confidence, challenge seeking, and persistence" (Dweck, 1975; Relich, 1983 as cited in Dweck, 1986, p. 1046). "Teachers were committed to the proposition that students should feel successful even when their work was poor. Consequently, many of them believe more in the value in self-

esteem than in the value of what they teach" (Ravitch, 2000, p. 428).

> In 1995, psychologist William Damon's (of Brown University) own daughter came home one day from kindergarten with an index card saying, "I'm terrific." Children were sure to distrust adults who dispensed such empty flattery, he argued. Children do not need false assurances, Damon insisted, but patient help to develop character and competence. They need guidance to learn valuable skills and knowledge from adults whose judgment they respect. "Like happiness," he advised, "self-esteem is a goal that cannot be pursued directly or for its own sake" (Ravitch, 2000, p. 429).

There are many of people around the world today who decided public schools were not providing what they thought their children needed for a well rounded education and healthy socialization (Hunt & Hunt, 2008). Anyone who has taken a step back from the mainstream view of how to teach children is baffled by the attitude it holds (Hunt &Hunt, 2008). "The schools assume that children are not interested in learning and are not much good at it, that they will not learn unless made to, that they cannot learn unless shown how, and that the way to make them learn is to divide up the prescribed material into a sequence of tiny tasks to be mastered one at a time, each with its appropriate morsel of shock" (Holt, 1990, p. 151). John Holt spoke with many teachers as he advocated for child-centered learning and was saddened by some of the things they had to say (Holt, 1990). "At a highly rated private elementary school, a veteran teacher put it this way: 'If the children don't learn what we teach, it's because they're lazy, disorganized, or mentally disturbed,' and all but a few of his colleagues agreed" (Holt, 1990, p. 150).

Adults are often quick to blame the children for their own short-comings (Kohn, 2000). "Motivation has weakened because more students (of all races and economic classes, let it be added) don't like school, don't work hard, and don't do well" stated Robert J. Samuelson (2010, p. 21), the author of an article called "Why School Reform Fails" in Newsweek magazine. This excuse has become tired as it has been used for decades (Ravitch, 2000). Experts continue to *find* that lost desire, interest and motivation in students when they are not impeded by useless restrictions (Deci, 1996).

Amanda Ripley, author of the article "Is Cash the Answer?" in Time magazine, interviewed an economist who made the most rigorous study of public school student motivation in years. ". . . a Harvard economist named Roland Fryer Jr. did something education researchers almost never do: he ran a randomized experiment in hundreds of classrooms in multiple cities" (Ripley, 2010, p. 42). He found evidence in his results that supported his hypothesis that money raises student motivation. Motivation in school students continues to rear its head when searching for the cause of the decline in the quality of American education (Deci, 1996).

Deci's (1996) research has shed some light on the matter, "today the petty bribes—a sticker for using the toilet or a cookie for sitting still in church—start before kids can speak in full sentences" (Ripley, 2010, p. 42). We encourage children to work for rewards, and then become disappointed when they act materialistic. "Teachers complain that we are rewarding kids for doing what they should be doing of their own volition" (Ripley, 2010, p. 42). Psychologists (like Deci) warn that money can actually make kids perform worse by cheapening the act of learning" (Ripley, 2010, p. 42). "Parents predict widespread slacking after the incentives go away" (Ripley, 2010, p. 42). We tell children mixed messages about what motivation and respect for teachers really mean.

Alfie Kohn (2000) puts it best:

> . . . adults who criticize children for acting disrespectfully . . . [set] an example of precisely what they are complaining about: they talk *at* the students rather than listening, fail to take students' needs or points of view seriously, try to control students' behavior by dangling rewards in front of them or threatening them with punishment and make little or no effort to involve them in decision making (p. 5).

Fryer pushed forward with his experiment despite criticisms (Ripley, 2010). He used money, approximately $6.3 million of mostly private money to encourage good grades, good behavior and the like in students. "The experiment ran in four cities: Chicago, Dallas, Washington D.C., and New York" (Ripley, 2010, p. 42). Eighteen thousand kids participated in the study. "The results represent the largest study of financial incentives in the classroom, and one of the more vigorous studies ever on anything in education policy" (Ripley, 2010, p. 42).

"In the last city, [Dallas], something remarkable happened—it was as if those kids had spent three extra months in school compared with their peers who did not get paid" (Ripley, 2010, p. 42). As the results came in, Fryer and his team found evidence to support their hypothesis of money as an incentive raises student motivation—certainly extrinsic motivation. "Money is not enough—(it never is)—but for some kids, it may be part of the solution" (Ripley, 2010, p. 42). In our materialistic society, money is the most powerful extrinsic motivator available.

"The most damning criticism of Fryer came from psychologists like the University of Rochester's Edward Deci; money does not work very well over the long term, particularly in tasks that involve creativity" (Ripley, 2010, p. 44). Deci (1996) went on to explain how external,

tangible rewards undermine intrinsic motivation. "People of all ages perform better and work harder if they are actually enjoying the work—not just the reward that comes later" (Deci as cited in Ripley, 2010, p. 44). Ripley interviewed some of the students to see how they felt about the incentives:

> "For the most part, I'm still Chyna," she says. "But once in a while I just snatch it back, 'cause I know that pay check is coming." Then I ask her about the psychologists' argument that she should work hard for the love of learning, not for short-term rewards. "Honestly?" she asks. "Yes, honestly," I say. She looks me dead in the eye. "We're kids. Let's be realistic" (Ripley, 2010, p. 47).

With mainstream America's view of what teaching and learning is, the real intrinsic essence of it has been lost (Hunt & Hunt, 2008). Consumerism and a fast paced world have choked intrinsic motivation like weeds on a flower. It's hard to notice anymore when real learning actually does happen; and we dismiss it when the next quick-fix fad comes along.

Self-Actualized Education

The true essence of learning as it is found in the very young can continue on well into the school age years and even into adulthood if children are not overwhelmed with the wants of society (Hunt & Hunt, 2008). Without triumphing over each other, without constant distractions of external rewards, without the dissatisfaction of completing a project for the approval of someone else—children can blossom in amazing ways (Hunt & Hunt, 2008). This form of education could be considered as the "Self-Actualized" form, where the student is doing all they are capable of through personal growth and self-fulfillment (McLeod, 2012). "In self-actualization a person comes to find a meaning of life that is important to them" (McLeod, 2012,

p. 1). Maslow's hierarchical theory suggests that not everyone is self-actualized or will ever be self-actualized; the struggle to get there is to better oneself whether or not you reach the end. Maslow's hierarchy of needs starts with the basic biological and physiological needs of everyone; i.e. the need to survive (McLeod, 2012). Once those needs are met, one feels the freedom of safety, which is the next step on the pyramid. Number 3 are the belongingness and love needs; number 4 are the esteem needs. On this step, one has achieved well enough amounts of self-esteem, achievement, independence, prestige, managerial responsibility, etc. The 5th and final step on the hierarchy is self-actualization (McLeod, 2012).

The condition of the American education system can be compared to these steps. Schools can range from a place where students focus mainly on surviving the day unscathed to environments where parents and professionals work together to create an enlivening learning environment. So many different people are homeschooling today that homeschooling could land on any of Malsow's hierarchical steps. The one form of education that claims to have similar characteristics to an ideal way of learning is called "unschooling," a type of homeschooling.

Unschooling

Unschoolers claim they have raised children who regained, or never lost in the first place, their natural intrinsic motivation they expressed as toddlers (Hunt & Hunt, 2008). Unschoolers place no value on needless competition, a plethora of extrinsic motivators, or the need for hollow flattery and encouragement as seen with the self-esteem movement in Ravitch's (2000) book or Dweck's (2007) generic praise study. They claim to educate the whole child, not certain abilities or talents (Hunt & Hunt, 2008). Even the term "teach" has developed a negative connotation in unschooling circles because they believe children should be allowed to seek out knowledge on

their own terms. "As George Bernard Shaw wrote, 'what we want to see is the child in pursuit of knowledge, not knowledge in pursuit of the child" (Hunt & Hunt, 2008, p. 14). Parents choose unschooling when they want to see their children live life in freedom. "We believe that turning the relationship of parent and child into a relationship between teacher and student is detrimental" (Hunt & Hunt, 2008, p. 2).

Natural learning is like a river without a dam. It is not coerced or forced in any manmade direction; it flows in its natural path, eventually cutting through the earth in new directions. When children are allowed the freedom to experience beautiful days or think by themselves without any intrusion from others, their learning flows faster (Hunt & Hunt, 2008). As unschooler Rue Kream wrote: "We can't help but learn as we live full and interesting lives together" (Hunt & Hunt, 2008, p. 1). When unschooling is successful, parent and child learn together, regardless if the parent knows more or less about a subject. Kim Houssenloge, unschooler and former teacher, wrote: I learned more about the nature of learning in a few short months than I ever did as a student in the school system and later on as a university student (Hunt & Hunt, 2008, p. 36). Unschooling opened her eyes to the alternatives to compulsory schooling that she already knew intimately.

> "No wonder students needed so many incentives and rewards to keep them going! They were learning, but they were learning what I wanted them to learn (or the Department of Education wanted them to learn). They weren't learning what was important to them. They were very rarely given the freedom of choice" (Hunt & Hunt, 2008, p. 37).

Unschoolers believe that subjects such as science, math, history and literature (and all the rest) should not be blocked off from each other and then learned in small sound bites (Hunt &

Hunt, 2008). They believe everything is connected and each subject is woven into the other. This makes it easy to move smoothly from one subject to the next as the child's interests evolve and change. Unschooling parents see themselves not as teachers, but as facilitators, encouraging and aiding the seeking of knowledge, not trying to pour it into an 'empty vessel'. This environment promotes a creative and joyful learning experience all day, every day. Unschooler Jan Hunt wrote about her son's journey:

> Jason has had no lessons in the conventional sense. He has taught himself, with help as needed and requested by him, reading, writing, math, art and science. However, these subjects are not treated as separate categories, but as parts of the topic of current interest" (Hunt & Hunt, 2008, p. 59).

As noted earlier, child-centered learning has been advocated throughout history (Ravtich, 2000). "Kilpatrick firmly opposed the idea of 'sugar-coating' subject matter by trying to make it interesting—He insisted that the curriculum must begin with the child's interests, not with subject matter selected in advance" (Ravitch, 2000, p. 181). Unschoolers insist that it is not practical to try to learn in advance what you might need to know in the future; that is uncertain and not written in stone (Hunt & Hunt, 2008). Instead, children should learn to teach themselves and become seekers of knowledge for the rest of their life. Just like the saying: Give a man a fish, he'll eat for one day; Teach a man to fish, and he'll eat for a life time. If one acknowledges that all subjects are connected in some way, then it is easy to consider using math or science through the interests of the child, and not the other way around. "As unschoolers, we live our life and learn from every situation we encounter" (Hunt & Hunt, 2008, p. 15). Parents encourage and assist while their children follow their hearts and take responsibility for their personal growth.

Through the evidence brought forth by Piaget (as cited in Bjorklund, 2005) Deci (1996), Dweck (2007) and Holt (1990), it is obvious that children are born with a natural love of learning. Unfortunately, it is also clear that this love diminishes each year they are in school (Deci, 1996). Jan Hunt stated in the book *The Unschooling Unmanual*:

> "While infants and toddlers teach us many principles of learning, schools have adopted quite different principles, due to the difficulties inherent in teaching a large number of same-age children in a compulsory setting. The structure of school—required attendance, school selected topics and books, and constant checking of the child's progress—assumes that children are not natural learners, but must be compelled to learn through the efforts of others" (Hunt & Hunt, 2008, p. 9).

Grace Llewellyn, author of *The Teenage Liberation Handbook*, wrote, "society gives you so many condescending, false, and harmful messages about yourselves that most of you wouldn't trust yourselves with freedom" (Llewellyn, 1998, p. 39). Freedom and trust are the key elements of unschooling (Hunt & Hunt, 2008). "We trust our children to know when they are ready to learn and what they are interested in learning—We trust them to know how to go about learning" (Hunt & Hunt, 2008, p. 5).

Unschoolers state they have raised children who still have that natural motivation to learn as seen when they were toddlers. "There is no need to motivate children through the use of extrinsic rewards, which suggest to the child that the activity itself must be difficult or unpleasant; otherwise, why is it being offered?" (Hunt & Hunt, 2008, p.7). A highly structured curriculum requires more extrinsic rewards to keep the children interested (Deci, 1996). "Natural learners do not need such a structure" (Hunt & Hunt, 2008, p. 9). The more the

students pull away the stronger the rewards try and pull them back (Deci, 1996). Unschoolers believe this approach is detrimental to personal development. If natural learning is allowed to flourish, such extrinsic motivators are no longer needed.

When school and unwanted extra-curricular activities aren't siphoning away a family's time together, suddenly there is a great deal of time to complete projects, read books, and even just listen to the body's natural rhythms. "Time is the most endangered commodity in our lives—fully-scheduled hours leave little time for children to dream, to think, to invent solutions to problems, to cope with stressful experiences, or simply to fulfill the universal need for solitude and privacy" (Hunt & Hunt, 2008, p. 6).

In the utopian society described in the book *Walden Two* written by psychologist B.F. Skinner (1975 reprinted in 2005), the main goal was to provide everyone with as much free time as possible to live out their days naturally. Time allowed the residents to complete grand works of art, think critically about complicated problems, or read to their heart's content (Skinner, 2005). The people were so happy because they were not rushed to live life as fast as possible, they were allowed to go at their own pace and delve deep into their own interests with little disruption (Skinner, 2005).

Children of mainstream society have so little time to themselves with school and extracurricular activities that it has become normal for them to grow emotionally detached from their parents (Hunt & Hunt, 2008). "Many unschooling parents feel that family cohesiveness is perhaps the most meaningful benefit of the experience" (Hunt & Hunt, 2008, p. 8). When children seek emotional support from their peers instead of their parents, bad advice can lead to bad behavior.

Time gives children more opportunity to learn from the good example set by their parents and, possibly even more important, to play. Animals that play the most are seen to be some of the most intelligent on earth (Borrell, 2009). "Play is a way of making sense of the world" (Hunt & Hunt, 2008, p. 24). Children learn best through play as well; they love to learn when it feels like a game. Unschooling children play intricately and for many hours, turning rooms into magnificent imagination factories. "John Holt noted in *Teach Your Own*, "Children who are good at fantasizing are better both at learning about the world and at learning to cope with its surprises and disappointment" (Hunt & Hunt, 2008, p. 6). Play is best experienced without restriction. Public school children love to play, but seem to go about it differently. Unschooler Nanda Van Gestel noticed the difference when her son's friends from public school came over to 'play'.

> Jochem once said to me, "Mom, did you know that schoolchildren can't play?" When I asked him what he meant, he explained, "Well, whenever we have schoolchildren over, I notice that they run and shout a lot, but they never seem to really play. I think it's because they haven't had much time to themselves, and that's very sad." I was impressed by Jochem's observations, and I've noticed the same pattern myself. Young children have so many commitments and appointments nowadays. How can they find the time and peace of mind to play? No wonder so many of them run around and shout when they have a free moment! I can only agree with Jochem that it's very sad (Hunt & Hunt, 2008, p. 24).

Critics of unschooling repeatedly mention socialization as a worry for keeping children out of school (Hunt & Hunt, 2008). Unschoolers provide a grand supply of socialization opportunities for their children because they know how important it is; they don't believe,

however, the type of socialization available in the schools is 'healthy'. Unschooling support groups and discussion lists help them connect and get together on a regular basis.

> In his book *Dumbing Us Down*, New York State Teacher of the Year John Taylor Gatto states, "It is absurd and anti-life to be part of a system that compels you to sit in confinement with people of exactly the same age and social class. That system effectively cuts you off from the immense diversity of life and the synergy of variety; indeed, it cuts you off from your own past and future, sealing you in a continuous present (Hunt & Hunt, 2008, p. 7).

Another concern from mainstream parents is that they don't understand how a mother can decide to not allow herself a break by putting her children in school for some part of the day (Hunt & Hunt, 2008). Unschooling parents respond by explaining that they don't spend the day continuously correcting their child's behavior, but enjoy their company; and in that way parenting becomes a pleasure. Allowing children to learn from their own mistakes instead of spending so much time and energy saying "no," can be liberating. Unschoolers throw out the 'supposed-to's' and the 'have-to's' of society while maintaining the common sense rules of safety, so their children can live life to the fullest. "Unschooling gives us the opportunity to truly enjoy life with our children" (Hunt & Hunt, 2008, p. 27). Unschooling parents want their children to experience the world first hand, without so many societal filters. "Ironically, the most common objection about unschooling is that children are "being deprived of the real world" (Hunt & Hunt, 2008, p. 8).

Many unschoolers believe children are treated as second-class citizens in mainstream America (Laricchia, 2012). Schoolchildren lose confidence in their own opinions and lose self-

esteem when it seems what they think doesn't matter (Hunt & Hunt, 2008). "The reflex, almost automatic, *no* accomplishes so much: it reminds the child where the power in the relationship sits; it discourages messes and hassles; and eventually it deters the child from bothering the parent in the first place—but what if those aren't your goals?" (Laricchia, 2012, p. 67).

Parenting does not always have to mean establishing control and power in order to assert action and compliance (Laricchia, 2012). Unschoolers feel the parent and child bond grows more naturally and deeply when they live as equals; knowing the unique perspective of a child is just as valid as the more experienced adult's (Hunt & Hunt, 2008). Messiness is a part of life. When the 'supposed-to's' and the 'have-to's' made by society are thrown out the window, it's going to get a little messy. Learning is more permanent with a hands-on approach. Unschoolers want their children to voice their opinions, so as adults they will have confidence in their principles and beliefs. Unschooler Van Gestel wrote:

> We really value our children's opinions and ideas, and we love talking with them about different subjects. We find it fascinating to hear what they think and feel. They all have their own opinions, and would find it strange not to be allowed to express them (Hunt & Hunt, 2008, p. 17).

"Saying *no* can make life seem easier in the moment but saying *yes* encourages children to explore their world and cultivates their ability to live confidently" (Laricchia, 2012, p. 67). Unschoolers want their children to be seekers of knowledge (Hunt & Hunt, 2008). Every opportunity that shows itself they seize upon; there is no need for a summer vacation or weekends because learning is living life. In fact, unschoolers believe that there is little to nothing one does not learn from in the course of daily life that they created a holiday for

themselves called: Learn Nothing Day. Learning is all the time because everything is connected. With that mindset, it is a challenge to find a moment when one is not learning.

The Future of Education

It has become evident that many of the findings of the psychological experts, such as Deci (et al., 2001) and Dweck (2007), and the philosophies inherent in Unschooling are seeping into the public education system with the rise of technology (Bornstein, 2012). Intelligence is not a fixed trait, and students of every age, with access to the internet, can learn new things with the click of a button (Dweck, 2007). "In a sense, we are in the midst of a natural experiment, in which a new tool of intellectual adaptation has been introduced, and we should not be surprised if, in decades to come, we are a different-thinking people than we were before the computer revolution" (Bjorklund, 2005, p. 64). Training children to be passive learners is entirely impractical with the advancement of technology. "As John Holt wrote, "Since we can't know what knowledge will be most needed in the future, it is senseless to try to teach it in advance. Instead we should try to turn out people who love learning so much and learn so well that they will be able to learn whatever needs to be learned" (Hunt & Hunt, 2008, pp. 60-61). David Bornstein (2012), author of the article *A Digital Tool to Unlock Learning* in the New York Times, discovered some movement toward natural learning with the introduction of PowerMyLearning, a platform designed to engage learners through interactive academic games on a computer.

The teachers and administrators were wary of the idea at first; concerned it would impede their daily schedule, or undermine their teaching techniques (Bornstein, 2012). As those teachers watched their students suddenly wake up from their usual passive state, and enjoy this knew

learning process, the teachers embraced it. All the teachers [Bornstein] spoke with admitted that they had had reservations when the platform was introduced to them; now they say that the digital learning not only increases student attention and engagement in school—a finding that conforms with research—but has also encouraged students to take ownership of their own learning *and* made it easier for teachers to differentiate instruction without embarrassing students. Tristan Wright, a veteran teacher of struggling students stated, "After 12 years, it's completely changed my experience as a teacher" (Bornstein, 2012, p. 1).

Schoolchildren tend to be self conscious about voicing their opinions in front of others. They feel like they're on stage and a wrong answer can leave them feeling inadequate and hurt. "In his classic book, "How Children Fail," John Holt noted that, unlike toddlers who are undaunted experimenters, many children in grade school become more concerned with avoiding embarrassment than learning new things" (Bornstein, 2012, p. 1). Self-esteem can become very low (Ravitch, 2000).

> "People aren't going to believe me when I say this," Wright said. "But when the kids are using technology, they don't care what other kids are doing. They're just focused on the activity." The students are less self-conscious, so they try more experiments. If an answer I wrong, the computer gives feedback, and they can adjust — quite a different experience from saying the wrong answer out loud. Technology offers students different ways to visualize information. And students can continue working at home.
>
> "Sometimes the teacher doesn't explain it to you as well as a computer," added Lisa Lora, a seventh grade student. "And there are no interruptions. No one is shouting answers. You can concentrate and go at your own pace."

> "I used to think I would fail math," said Juan Guzmán, a seventh grade student, who loves playing a baseball math game. "Sometimes teachers would go too fast for me. But I like PowerMyLearning because I can take a break if I get tired. The main thing is that it feels like I'm not in school," he added. "I'm just playing a game. But then when I finish I realize that I learned something. It's weird."
>
> "Yeah," added Maria de Leon: "I never thought that fun could go with learning" (Bornstein, 2012, p. 1).

In 2011, Stephanie Banchero and Stephanie Simon wrote an article about online classes and even online schools in the *Wall Street Journal*. Their article was entitled: *My Teacher is an App*. "Students all over the country are going to school in their homes through the internet" (Banchero & Simon, 2011, p. 1). "It's all part of a burst of experimentation in public education fueled in part by mounting budgetary pressures, by parental dissatisfaction with their kids' schools, and by the failure of even top-performing students to keep up with their peers in other industrialized countries—in the nation's largest cities, half of all high-school students will never graduate" (Banchero & Simon, 2011, p. 2). Cybereducation saves the schools money in staffing, utensils, and taxes.

"Advocates say that online schooling can save states money, offer curricula customized to each student and give parents more choice in education" (Banchero & Simon, 2011, p. 2). Kids can take a break when they need to, learning at their own pace. "Critics worry that kids in online classes don't learn how to get along with others or participate in group discussions" (Banchero & Simon, 2011, p. 2). These concerns gave rise to "hybrid schools, which blend online study with face-to-face interaction with teachers" (Banchero & Simon, 2011, p. 3). Even

with all its benefits, there is evidence that online classes are not all they could be. "A Colorado study based on 2010 standardized test scores found that full-time cyberschool students' consistently lag behind those of non-online students', even after controlling for economic status and other variables" (Banchero & Simon, 2011, p. 5). (Footnote 1).

> Dennis Van Roekel, president of the National Education Association, the nation's largest teachers union, says that his organization opposes full-time online schools but supports integrating virtual lessons into classrooms. "Obviously, we all want to save money," he says. "But to replace teachers with online learning is a mistake" (Banchero & Simon, 2011, p. 5).

Parents seem to like the self-directed approach, and see their children taking initiative with their own learning. "Allison Brown, a Georgia mother of three, says: I don't think learning has to happen at school, in a classroom with 30 other kids and a teacher . . . corralling all children into learning the same thing at the same pace (Banchero & Simon, 2011, p. 3).

Mitchell Landsberg (2009) wrote an article in the *Los Angeles Times* about experimental artistic high-schools called Da Vinci Science High and Da Vinci Design High. "Students learn by producing elaborate projects—paper roller coasters, models of Chicago tenements, children's books from scratch" (Landsberg, 2009, p. 1). They learn through their own interests, which promotes an intrinsic motivation in everything they do (Landsberg, 2009). "We learned about potential energy, kinetic energy, velocity and the conservation of energy,' said Verann Lambert" (Landsberg, 2009, p. 2). Both parents and students found this approach enlightening (Landsberg, 2009). "Students praise the school for, among other things, challenging them and making learning fun" (Landsberg, 2009, p. 3).

The other high-schools in the district were not up to par, and leaving the community dissatisfied. "Jared Copher . . . attended Hawthorne High last year but transferred to Da Vinci for 10th grade: 'It's like night and day,' said his stepmother, Kathy Gimelli" (Landsberg, 2009, p. 4). "At Hawthorne, Jared said, his classes were 'pretty boring' and he wasn't inspired by the challenge of scoring well on a test—'But here,' he said, 'on a project; you have almost a limitless potential" (Landsberg, 2009, p. 4).

The education professionals are starting to realize that teaching through students' interests and letting them learn at their own pace produces the best results. Intrinsic motivation is fragile, but invaluable in true learning. The future of education must evolve towards natural learning, and not the cookie cutter version that has been around for too long. The internet is the vehicle to take us there.

Survey Literature

Data for this study was collected with a survey, and the questions were derived from the following literature: Questions 1through 9 are from Ray's (1997) study about academic achievement, family characteristics, and longitudinal traits as are the questions about Grandparent support, library access, degree of structure, and educational history since turning age 5. "The purpose of [Ray's 1997] nationwide study was to examine the academic achievement and social activities of home educated students and the basic demographics of their families, to assess the relationships between student achievement and selected student and family variables, and to describe and explore certain longitudinal changes among home educated students and their families" (Ray, 1997, p. xii). He collected data from 1,657 families and their 5,402 children. Ray wrote an article in the *Peabody Journal of Education* that summarized his

nationwide study. "Studies in Alabama, Oklahoma, Pennsylvania, Texas, nationwide in the U.S., and nationwide in Canada all revealed that there was no significant relationship between student achievement and the teacher certification status of their parents" (Havens, 1991; Rakestraw, 1988; Ray, 1990b, 1992, 1994 as cited in Ray, 2000, p. 76).

The question about public school support and the question ranking the reasons parents home-schooled their child(ren) came from Evan Todd Yeager's dissertation from Texas A&M University. It was a study of cooperation between home, public and private schools (Yeager, 1999). This study analyzes the effect of different factors on motivation.

The only two questions provided by the researcher were about motivation to learn before and during home-schooling, derived from Edward L. Deci and Ryan's (1980 as cited in Deci, Koestner, and Ryan, 2001) Cognitive Evaluation Theory. The researcher proposes that highly structured environments are more likely to include extrinsic rewards to engage learners. Less structured learning environments are more based around the child's interests (Ray, 1997). Therefore it is likely that the child is already intrinsically motivated. Deci, Koestner, and Ryan (2001) conducted a meta-analysis of 128 experiments on the undermining effects of external rewards on intrinsic motivation. They competed with the works of Cameron and Pierce's (1994 as cited in Deci et al., 2001) meta analysis that insisted Deci and Ryan's (1980) cognitive evaluation theory should be abandoned, and that "teachers have no reason to resist implementing incentive systems in the classroom" (p. 397, as cited in Deci et al., 2001). "The new meta-analysis showed that tangible rewards do significantly and substantially undermine intrinsic motivation" (Deci et al., 2001, p. 2).

As stated earlier this research tested the hypothesis that a student's motivation to learn is influenced by the degree of structure in education with an inverse relationship. The study also compared the means of: parent's formal education level, the attitudes of the local public schools and the attitudes of the grandparents, the number of trips to the library, the family's geographical location and motivation to learn prior to homeschooling with the mean of motivation to learn during homeschooling. The study examined the implications of how these factors impact motivation.

Method

Participants

The individuals who participated in this research were drawn from the online homeschooling population in Massachusetts, Illinois, Oregon and Missouri. All inclusive, secular discussion/support groups with lists available to join online were contacted. List owner emails were found on "yahoogroups.com." These lists were most likely to have a mixture of people in the area than those lists specific to a religious affiliation or ethnicity. Out of 107 contacted discussion groups, 41 replied, and 37 of those replied with positive feedback to post the survey on the list. Twenty-eight surveys were completed and submitted for a total of 68 children, 47 of whom proved to be relevant to the research study. Children were not accepted into the study because not all children in one family were homeschooled, and in other instances a student was either never in school prior to being homeschooled, or had never homeschooled at all.

The survey asked participants to state if one parent was more involved in the homeschooling of their child(ren). Overwhelmingly, the mother was cited as more involved.

Only one had the father listed, and only one other stated that duties were shared equally. If it is assumed that the parent more involved in homeschooling was the person that filled out the survey, then participants were almost 100% women representing 44 boys and 24 girls in the study.

Materials and Apparatus

The instrument used to gather data in this study was the survey. The survey contains 20 questions focused on the factors that would and could have an effect on the motivation to learn. The structure of the survey begins with questions under the topic of demographics numbered 1 through 9. How many children are there in the family, are all of the children being homeschooled, are both parents in a relationship and involved in daily instruction, how long did each parent stay in school and the general location in which they live. Next on the survey the participant must consider the perspective of others on homeschooling; specifically the paternal and maternal grandparents and the attitude of the public schools. Undue pressure from these external factors can increase stress and influence a child's motivation to learn.

Many parents feel that museums, learning centers and libraries are helpful to broaden their children's understanding of the world. Therefore, under the topic "Use of Community Resources," are two questions about how frequently homeschoolers go to a library in any given month. The next topic is the "Type of Homeschooling Experience," with the degree of structure the parents incorporate into home education. Degree of structure was reported on a scale of 1 to 7 on which a lower score indicated less structure in daily instruction. Intrinsic and extrinsic, as addressed earlier, are very different types of motivation. Research has revealed that a highly structured learning environment is more likely to encourage extrinsic motivation with rewards;

while an unstructured learning environment is more likely to encourage intrinsic motivation with a focus around the child's interests.

The following questions are titled: "Homeschooling History and Results." The first question considers the child's educational history since turning age five. Students who did not attend public or private school before homeschooling were excluded from the study. The purpose was to examine the student's motivation to learn in two different education settings. This brings us to the next questions on the survey; motivation to learn prior to and during homeschooling. Motivation to learn was ranked on a scale from 1 to 7 on which a higher ranking indicated higher motivation from the student. Expectations were that the student's motivation would be ranked higher during homeschooling, especially if their degree of structure was ranked lower.

The final question on the survey was a list of 12 reasons for homeschooling that the parents were to choose from. Choices had to be ranked in importance from 1 (most important) to 11 (least important). At the very end of the survey is a brief acknowledgement and thanks to the participant.

Questions 1 through 9 at the beginning of the survey were chosen from Ray's study to gain a basic understanding of the demographics of each participant. Extra factors in the home environment that cause stress, for example separated parents, more than one sibling, can have an effect on motivation to learn during homeschooling. Ray's (1997) study did not find a significant relationship between teacher certification of the parents and student achievement. As student achievement is only gained through student motivation, this reasoning extrapolated that there would be no relation to teacher certification of the parents and student motivation as well.

When homeschooling is effective, both child and parent learn together. Questions on this topic were not included in the survey. However, a question about parents' educational attainment was included, for even though Ray (1997) did not find a statistically significant relationship between that variable and student achievement, it could prove to have an effect on student motivation. Seeing how important higher education is to their parents may very well encourage their children to be motivated to learn whether or not they are certified teachers.

The reasons why a parent or parents would home school their child and the degree of support from the school system (questions derived from Yeager's dissertation) are important factors that may influence motivation to learn. A supportive school system could provide additional resources to enhance the student's experience. An oppositional school system could distract the parents from conducting quality experiences. The reasons behind the decision to homeschool could be to eliminate many stressors from a student's environment interfering in their motivation to learn.

The question regarding grandparental involvement and support used in Ray's (1997) study was included because as indicated by other articles, family support can have a very influential impact on student motivation. Grandparents opposed to homeschooling could put strain on the family dynamic. The only two questions provided by the researcher were about motivation to learn before and during homeschooling, derived from Edward L. Deci and Ryan's (1980 as cited in Deci, Koestner, and Ryan, 2001) Cognitive Evaluation Theory. It was expected that a student's motivation would be higher during homeschooling, especially if the degree of structure was low, because the stress and demands of a public or private school would be greatly reduced.

Procedure

To make initial contact with a discussion list/support group owner or leader, an introduction email was sent. The email introduced the researcher, stated the project and goal of the project and then requested permission to distribute a survey in a way the list owner deemed appropriate. After a positive invitation from the group owner or leader, the researcher replied with the survey, informed consent and a letter to participants in the body of an email. (See Appendixes C, D, and E). Attachments were more difficult to post online. Ninety-nine percent of the time, when there was positive feedback, the list owner volunteered to post the survey on their discussion board. The rest of the time, the researcher was asked to join the list in order to post the survey herself. Potential participants decided whether or not to complete the survey, by copying and pasting the two pages into a word document or email, at their convenience and then send it back to the researcher via email. Participants most likely received notification of the study from their personal computers at home while visiting their support group-discussion list. Any questions or concerns from participants were addressed promptly and courteously. None felt the need to contact the researcher with a phone-call. Replies with completed surveys usually took about one to two weeks after initial contact of each online list. The data was kept organized in an Excel spreadsheet and then transposed to SPSS for analysis. Some participants corresponded a little more after completion of their survey; all were polite and positive.

Results

Means were compared individually with the 'motivation to learn during homeschooling' in the survey. First, degree of structure and motivation during homeschooling were analyzed. (See table 1). As expected, motivation means were highest at the low end of the degree of structure, with a structural level of 2.5 having one student who ranked 7 on the motivation scale.

Most students (10) had a degree of structure score of 5; and their mean of motivation during homeschooling was ranked at 5.40. The seven students who had a degree of structure of 1 ranked higher on their motivation than the four students whose structure score was 7.0. The average motivation mean for all students was 5.89 out of 7. A one-way ANOVA revealed that the difference between the means of degree of structure and motivation during homeschooling was statistically significant at the .05 level indicating that students' motivation went up when the degree of structure in the environment went down ($F = 3.557$, $df = 7, 39$, $p = .005$). The null hypothesis was rejected.

Second, motivation to learn during homeschooling was compared with the father's formal education level, and then the mother's formal education level. Most students (19) had fathers that reached 16 years of formal schooling and their average ranking in motivation to learn was 5.58. Seven students had a motivational mean of 6.43 when their father had 12 years of formal schooling, which was lower than the 4 students that had a motivational mean of 6.50 whose fathers completed 22 years of formal schooling. A one-way ANOVA revealed that the difference between the means of father's education and motivation during homeschooling was not significant at the .05 level ($F = 1.472$, $df = 6, 40$, $p = .212$). When the mother had 20-22 years of formal education, motivation to learn for six students was ranked at 7. Twenty-four students had mothers who achieved 16 years of formal schooling and had an average motivation to learn of 5.96. A one-way ANOVA revealed that the difference between the means of mother's education and motivation during homeschooling was significant at the .05 level indicating that when the mother had more years of formal education the students' motivation was higher as well ($F = 3.492$, $df = 8, 38$, $p = .004$).

Next, the attitude of the local public schools was compared with motivation to learn during homeschooling. Most students (29) in this survey had indifferent public schools with a mean average of 5.79 in motivation to learn. Those who categorized their local schools as supportive also had a motivation ranking at 6.18 out of 7. Two students had the lowest motivational mean of 5.50 when their public school's attitudes were described under the category of "other." A one-way ANOVA revealed that the difference between the means of attitudes of the public schools and motivation during homeschooling was not significant at the .05 level (F = .411, df = 3, 43, p = .746).

The attitudes of the paternal and maternal grandparents were also compared with motivation to learn during homeschooling. Most students (16) had neutral paternal grandparents with a motivation ranking of 5.94 out of 7. One student had the highest motivation ranking of 7 with supportive and participating paternal grandparents. Those students with 'neutral' and 'opposing but not interfering' paternal grandparents ranked the highest with motivation. The lowest motivation ranking with 5.29 out of 7 had seven students with 'opposing at first but now supportive' paternal grandparents. A one-way ANOVA revealed that the difference between the means of paternal grandparents and motivation during homeschooling was not significant at the .05 level (F = 1.903, df = 4, 42, p = .128). Eighteen students had supportive maternal grandparents with a motivation ranking at 5.78. Five students held the highest ranking at 6.20 out of 7 with 'opposed but not interfering' maternal grandparents. The lowest motivational ranking of 5.50 for 8 students also had 'neutral' maternal grandparents. A one-way ANOVA revealed that the difference between the means of maternal grandparents and motivation during homeschooling was not significant at the .05 level (F = .549, df = 4, 42, p = .701).

The number of visits to the library each month was then compared with motivation to learn during homeschooling. Motivation to learn seemed to steadily incline along with the number of visits to the library. Two students ranked their motivation at 7 with about 6 visits every month. Most students (11) went about twice a month and their motivation was ranked at 5.45. Motivation was high (6.38) for 8 students who didn't go to the library at all, and the three students who were at the library 8 or more times a month ranked their motivation at 4.33. A one-way ANOVA revealed that the difference between the means of visits to the library and motivation during homeschooling was significant at the .05 level indicating that more trips to the library influenced a greater motivation to learn ($F = 3.377$, $df = 7, 39$, $p = .007$).

Motivation to learn during homeschooling was also compared with the students' geographical setting. Most students (27) lived in a suburban area and their average mean ranking of motivation to learn was at 5.70. Seven students ranked their motivation at 6 while living in an urban area, and one student who had homes both in urban and rural communities also ranked at 6 in motivation to learn. Twelve students ranked the highest in motivation (6.25) while living in a rural setting. A one-way ANOVA revealed that the difference between the means of geographical setting and motivation during homeschooling was not significant at the .05 level ($F = .689$, $df = 3, 43$, $p = .564$).

Motivation to learn during homeschooling was also compared with motivation to learn prior to homeschooling with a Pearson correlation. The correlation revealed a moderately strong direct relationship at the .01 level ($r = .577$). In a comparison of their means, most students (14) who were ranked at a higher motivation to learn prior to homeschooling were also more likely to be ranked with a higher motivation to learn during homeschooling. For nine students, motivation to learn started at 3 prior to homeschooling, and then was ranked at about 5.56 during

homeschooling. Five students ranked at 2 for motivation to learn prior to homeschooling and then were ranked at 5.40 during homeschooling. Fourteen students were ranked at 7 for motivation to learn prior to homeschooling, and then were ranked at 6.71 during homeschooling. A one-way ANOVA revealed that the difference between the means of motivation prior to homeschooling and motivation during homeschooling was significant at the .001 level indicating that the students' motivation to learn rose from prior to during homeschooling ($F = 4.620$, $df = 6, 40$, $p = .001$). (See table 2).

Discussion

Major Findings

The null hypothesis was rejected for the relationship between 'degree of structure' and 'motivation to learn during homeschooling.' As expected, the relationship was inverse; motivation was ranked higher when there was less structure in the environment. This is consistent with the findings of Deci (1996), Dweck (1986) and the philosophies of unschooling (Hunt & Hunt, 2008). According to Deci (1996), Dweck (1986) and Hunt's (2008) research, when more structure is apparent in a learning environment, motivation to learn is impaired because the lessons are not centered on the students' interests; therefore extrinsic motivators are used to regain the students' attention. As discussed earlier, extrinsic rewards are detrimental to intrinsic motivation—completing a task for the love of learning—finding joy in the task itself—instead of completing it for the reward at the end (Deci, 1996). Students also learn better and retain more knowledge when learning is experienced with intrinsic motivation (Hunt & Hunt, 2008).

There was also a significant relationship between 'number of visits to the library each month' and 'motivation to learn during homeschooling.' A love of words and stories can inspire children to discover the possibilities around them. Unschooling research also indicates that parental involvement in aiding the seeking of knowledge by going to places like the library is invaluable to intrinsic motivation (Hunt & Hunt, 2008). Geographic location can play a role in how often a homeschooling student is able to get to the library; although there was no significant relationship found between 'geographic location' and 'motivation to learn during homeschooling.' On the survey, those who chose zero for how often they went still ranked high in motivation, most likely because their parents found a suitable alternative; providing a wealth of books at home, for instance. Conversely, those students who apparently went to the library 8 or more times a month ranked low in motivation; perhaps desensitizing them to the wonder it holds or turning the visits into more work than play; or simply going to the library for more unorthodox reasons.

It was interesting to find a significant relationship between 'mother's education level' and 'motivation to learn during homeschooling' but not between 'father's education level' and 'motivation to learn during homeschooling.' The reason could partially be due to the fact that in this sample, almost 100% of the time the mother was listed as the main parent involved in daily learning. Perhaps more motivation to learn on the mother's part could instill a higher motivation to learn on the child's part.

Motivation to Learn Prior to Homeschooling and Motivation to Learn During Homeschooling had a very significant relationship with a comparison of their means and a moderately strong pearson correlation. Motivation to learn seemed to remain consistent from prior to during, regardless if it started low or high. Most of the time motivation was towards the

higher end prior to homeschooling and remained high during homeschooling. The reason for homeschooling, 'concern with standards,' was ranked number one by parents the most on the survey. For most students, it seems motivation wasn't the main issue; it was the schools that didn't meet their needs and continued to fail *them*. The children wanted to learn, but what they were offered in school obviously wasn't working. They weren't being challenged enough.

'Family,' was most often ranked as number two for reasons parents chose to homeschool their children at the end of the survey. As discussed earlier, mainstream families in America are incredibly busy in their day to day lives. From school to extracurricular activities, to jobs, to meetings to home economics, to maintaining relationships family time has to be scheduled or else put to the side of the priority checklist. Unschoolers say family cohesiveness in one of the things they are most grateful for as a consequence of their decision (Hunt & Hunt, 2008).

Limitations of the Results and Suggestions for Future Research

The present research has a few limitations. First, social circles with different schools of thought on the subject have slightly differing ideas about what motivation to learn actually looks like. Some parents and teachers would name it when they saw a child completing workbook pages, others would say they saw it when there was an A on the report card, and still others insist children have an innate motivation to learn that blossoms when unrestricted but stifled with grades and tests (Hunt & Hunt, 2008). The survey takes the assumption that homeschooling parents have a basically homogeneous definition of motivation to learn that they can see in their children.

Second, mostly 'inclusive' homeschooling discussion lists were selected to be contacted for this research in an attempt to get a true sample variation of the population. Discussion lists

that were religious or ethnic specific were not contacted for this reason. Unfortunately, due to financial and/or social situations not every family that wants to, can homeschool their children. Families in a comfortable socioeconomic status that can afford to keep a parent home have the ability to homeschool or unschool. Due to this effect, this sample is likely to be mostly middle to upper middle class and Caucasian.

Third, on the survey itself, the grandparents were presented as pairs, not taking into account that not all grandparents stay married or have the same opinions about their grandchildren. The survey should also provide room for up to three homeschooled children, and give directions on how to include more. And finally, both the 'degree of structure' and 'motivation' scales have numbers 1 through 7, which can be confusing. Future research done with this survey could lengthen one of those scales in order to provide greater differentiation.

Future researchers in this field should strive for a much bigger sample. And if the email method is used again, researchers should contact at least 200 list owners. Homeschooling conferences are a great way to meet homeschoolers and discuss structure. Perhaps this could lead to interviews to include in the study.

Other studies that could be done in the future could be longitudinal, following 2—4 students from k—12th grade, comparing the public school and unschooling styles. Another study could compare private school students and unschoolers. Deci's C.E.T. could spur on future research, delving deeper into the concepts of extrinsic motivators and infants; how young do they start? This makes me think of Erikson's developmental theory and the first stage of "trust vs. mistrust."

Conclusion

Motivation to learn is difficult to shape or change or forcefully direct into a certain subject area (Ripley, 2010). When students learn how to get by in school, they focus on getting grades instead of learning the material (Pope, 2003). Rewards for work only impede intrinsic motivation (Deci, 1996), and school continues to promote competition (performance goals) instead of recognizing strenuous effort (learning goals) (Dweck, 1986). When students fall behind, teachers try to keep up their self esteem with meaningless buzz words like "terrific" and "awesome" even for poor work which in turn can encourage narcissistic tendencies (Ravitch, 2000). Societal expectations and rules that have been around for the past century (Ravitch, 2000) are no longer practical with the evolution of the computer and internet age (Barr, 2005). Students should be facilitated to become engaged learners not passive observers, so that they can learn well whatever the future holds (Holt, 1990).

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APPENDIX A

TABLES

Table 1

Degree of Structure and Motivation to Learn during Homeschooling

Source of Variation	***Df***	**Sum of Squares**	**Mean Square**	***F***
Between Groups	7	22.003	3.143	3.557
Within Groups	39	34.465	.884	
Total	46	56.468		

p<.01

Table 2

Motivation Prior and During Homeschooling

Source of Variation	***df***	**Sum of Squares**	**Mean Square**	***F***
Between Groups	6	23.115	3.852	4.620
Within Groups	40	33.353	.834	
Total	46	56.468		

P<.01

APPENDIX B

FIGURES

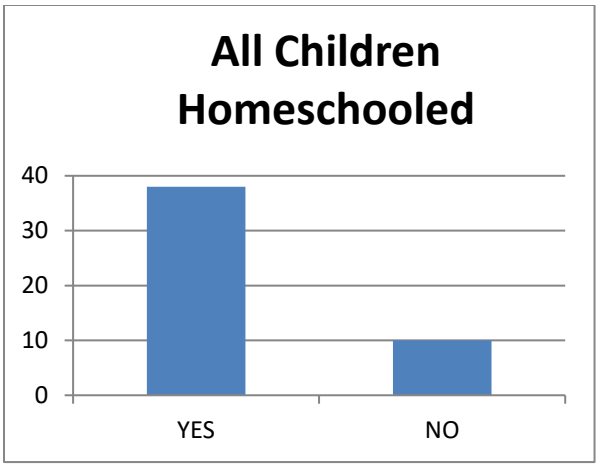

Figure 1. *Number of families homeschooling all of their children at once.*

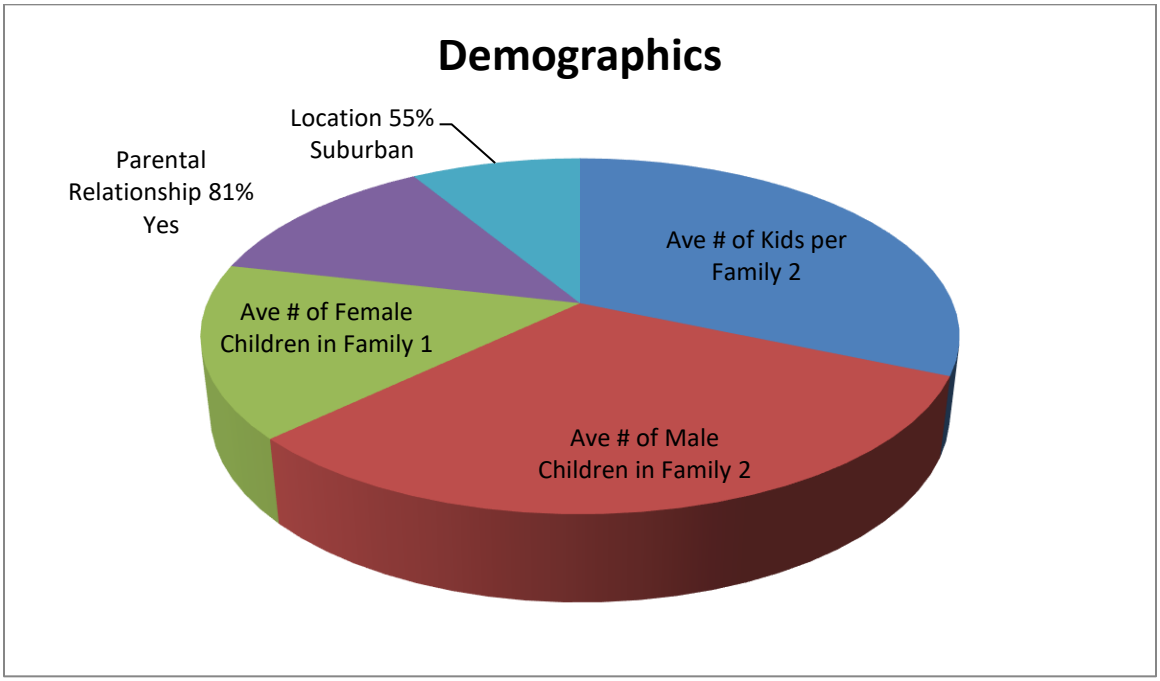

Figure 2. *Family demographics.*

APPENDIX C

EMAILS

EMAIL 1:

Dear List Owner,

My name is Katherine Love and I am a Graduate Student at National-Louis University. I'm a former homeschooler working on my master's thesis about homeschooling students' motivation to learn. I'd like to submit a brief survey to be distributed as you see fit, please let me know if this would be a possibility. I need many participants to help make my data collection valid. Thank you for your consideration.

-Katherine Love

EMAIL 2:

Dear Homeschooling parents,

My name is Katherine Love and I am a graduate student at National-Louis University. I am currently working on a research project for my master's thesis and gathering data through a brief two-page questionnaire. The title of my thesis is: The Self-Actualization of Education and the Factors that Affect Motivation in a Classroom Setting. The "classroom setting" refers to regular school environment. What I need are participants with children who were educated in public or private school but are now being home-schooled. The children of parents participating in the study should be between 2nd and 12th grade to have had enough time to compare levels of motivation between the two styles of education. If you are interested, please answer every question to the best of your ability, I need quantifiable data for the analysis. The form before the questionnaire is the "informed consent," which you must read in its entirety (one page) before completing the questionnaire (only two pages). Then, please save the questionnaire into your word documents when completed so that you can attach it to your return email. You can email me the completed questionnaire to the following address: klove222@gmail.com. I need as many participants as possible to make my data valid and I would greatly appreciate your involvement. Thank you very much for your consideration. I look forward to working with you.

-Katherine Love

APPENDIX D

SURVEY

Thesis Questionnaire

Demographics

1. How many children do you have? ____
2. _____Age of each child(ren)
3. #____Male # ____Female
4. Are you in a relationship with the child's other parent? Yes No
5. Are both parents involved in the child's life? Yes No
6. Are all of your children homeschooled? Yes No(if not, how many are homeschooled?)____
7. Is one parent more responsible for the child's daily teaching? Yes No (If yes, which parent?) _____
8. How many years of formal schooling did each parent have? (e.g., completed high school = 12; bachelor's degree =16; master's = 18; doctorate = 22) ____Father ____Mother
9. What is the geographical setting of your home?
    a. ____Urban, central city
    b. ____Suburban, are surrounding a central city
    c. ____Rural, area outside of suburban and not central city

Attitudes toward Homeschooling

What is the response of your children's grandparents to your home schooling? (Check one per column).

Paternal	**Maternal**
_____	_____ Opposed
_____	_____ Opposed, but not interfering
_____	_____ Neutral
_____	_____ Originally opposed, now supportive
_____	_____ Supportive
_____	_____ Supportive and participating

The attitude of **public** school officials or representatives toward home schoolers in your community can be best described as:

____Supportive
____Indifferent
____Interfering
____Opposing
____Other, please specify _____

Use of Community Resources

____On average, how many times per month do your children go to the public library?
____How many times per month do your children go to any library (e.g., private and/or church and/or public)?

Type of Homeschooling experience

The **degree of structure** in the practice of home education varies greatly. It goes from a very unstructured (unschooling) learning approach, centered upon the child's present interests, to the use of a planned, structured, and highly prescribed curriculum. The method used for this child was (please circle response):

Very Unstructured 1 2 3 4 5 6 7 Very Structured

Homeschooling History and Results

Please answer the following concerning your child's educational history since turning age 5.

_____is the number of years **taught at home** since reaching age 5.

_____is the number of years attending **public school prior to home** schooling.

_____is the number of years attending **private (independent) school prior to home** schooling.

Please rank your child's **motivation** to learn **prior** to home schooling:

Poor 1 2 3 4 5 6 7 Very High

Please rank your child's **motivation** to learn **during** home schooling:

Poor 1 2 3 4 5 6 7 Very High

Reasons for Homeschooling

Please rank any of the following reasons why you prefer to educate your child(ren) at home. Rank all applicable responses, 1 for the most important reason, 2 for the next most important, etc.

____Lack of religious integration into curriculum offered by public schools
____Curriculum or instruction of public schools incompatible with beliefs or values
____Concern with poor level of academic standards associated with public schools
____Special needs of child/children not adequately met in public schools
____Concern with decline of discipline or safety in public schools
____Negative peer socialization associated with public schools
____Good family relationships fostered in home school environment
____Promote solid character development through home school program
____Desire to delay formal, structured instruction until child/children ready
____Unable to afford private school tuition
____Private education unavailable in their area
____Other, please specify: _____

Thank you for taking this survey. You have participated in furthering research on this subject and making the world a more educated place.

APPENDIX E

INFORMED CONSENT

INFORMED CONSENT - PARTICIPANT

Thank you for agreeing to participate in this study that will take place from TBD to TBD. This form outlines the purposes of the study and provides a description of your involvement and rights as a participant.

I consent to participate in a research project conducted by Katherine M. Love, a master's student at National-Louis University located in Elgin, Illinois.

I understand that this study is entitled The Self-Actualization of Education and the Factors that Effect Motivation in a Classroom Setting. The purpose of this study is: to determine the level of motivation to learn in school-age (K-12) home schooled students whom have been in public or private school. 2.) To identify the predominant factors that influence motivation in school-age students. 3.) To determine if correlations exist between factors and their effect on motivation.

I understand that my participation will consist of one 2-page questionnaire lasting between 10-30 minutes depending on my thought process.

I understand that completing this survey and then emailing it back to the researcher *is* my informed consent.

I understand that my participation is voluntary and can be discontinued at any time without prejudice until the completion of the thesis.

I understand that only the researcher, Katherine M. Love, will have access to the completed questionnaires participants have completed.

I understand that I may request a copy of the findings from the study.

I understand that the results of this study may be published or otherwise reported to scientific bodies, but my identity will in no way be revealed.

I understand that in the event I have questions or require additional information I may contact the researcher: Katherine M. Love: klove222@gmail.com 817 S. Hough St. Barrington, IL 60010 Phone: (847) 962-6744.

If you have any concerns or questions before or during participation that you feel have not been addressed by me, you may contact my Primary Advisor: Claudia Pitts at (847) 905-8041.

Thank you for your participation.

Footnote

1. While learning at home with a computer sounds similar to homeschooling, let us not forget the importance of fieldtrips, board games, books, puzzles, pets, and innumerable other things parents provide to create an enriching learning environment; not just allowing their child to sit at a computer all day, only getting educated by a few educational games.