
Relationships that Foster Intrinsic Motivation for Information Seeking

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Based on a study conducted in the fall of 2008, this article highlights relational aspects of the experiences of upper elementary (age 10) children identified as intrinsically motivated for information seeking. Research for the study was conducted using an inductive naturalistic approach in order to address the following question, "What are the experiences in the lives of upper elementary school children that foster an intrinsic motivation to seek information?" The Self-determination Theory provided the basis for the theoretical framework. Participants were selected from a pool of fifth graders from three diverse schools within a single community in the USA. Initially, the children were chosen based on the results of a survey especially developed for the study. Interviews and a drawing activity were used to collect the data that served as the foundation for analysis. Findings featured in this article are the students' affinity for play, point-of-passion experiences, "anchor" relationships, and indication by students that working in a group was a component of their favorite information seeking episodes. Importance of relationships to students of particular cultures is also discussed. Implications and recommendations for practitioners include suggestions for defining the missions, directing the services, and structuring the environments of school library programs toward the goal of supporting and developing intrinsic motivation in school children through relationships and relational activities.

Introduction

Most young children begin school with an excitement that is evident in their shining faces, their wiggling-all-over bodies, and their irrepressible impulses to call out answers and happily share experiences with their classmates and teachers. As an elementary library media specialist, I often observed these young children as they raced into the library media center, rushing in as though in a hurry to capture its overflowing bounty of treasure. While some exhibited a shy streak, most of these overcame their timidity when drawn into the simplest of conversations about pets, toys, or almost any topic with which they had even a modicum of experience. I observed these characteristics as typical of the early elementary student (age five to eight), but as the years went by I often saw what seemed like a natural exuberance and interest in learning begin to wane. Students who once saw school as an experience that was as exciting as an African safari began to see it instead as something they simply had to endure. By the time I sent many of those young students off to middle school (age 11), I wondered if they still possessed even a bit of that "kindergarten spark."

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An accepted goal of library media specialists is to help students become lifelong learners (American Association of School Librarians & the Association for Educational Communications and Technology, 1998). As professionals, school librarians are exhorted to enable students to use skills and resources in order to “share knowledge and participate ethically and productively as members of our democratic society” and to “pursue personal and aesthetic growth” (American Association of School Librarians [AASL], 2007, p. 3). While the attributes of lifelong learning have not been definitively established, Dunlap and Grabinger (2003), researchers in the field of adult education, describe the lifelong learner as having the “capacity for self-direction, meta-cognitive awareness, and disposition toward lifelong learning” (p. 7). AASL emphasizes that in order “to become independent learners, students must gain not only the skills but also the disposition to use those skills” (2007, p. 2). These, as well as other descriptions of lifelong learning (e.g., Flew, 2002; Hargreaves, 2004), include the importance of the learner’s motivation. In fact, it is considered to be the *key* attribute, for the other attributes are “insufficient if learners are not disposed to engage in lifelong learning” (Dunlap & Grabinger, p. 9). Even though they possess the skills to learn, people who are not inclined, or *motivated*, to use them—will not.

There is a tension for library media specialists in the United States in this age of testing and the *No Child Left Behind Act* (2001), a broad-sweeping federal law that aims to improve student performance by increasing standards of school and district accountability. Library media specialists want to help their schools meet state standards (or educational requirements) for learning, yet they also want to provide environments for students that foster a love of information seeking that will endure into students’ adult lives. Current standards and testing procedures in schools often skew attention away from learning in the broad sense and reduce education to what is being tested (Sheldon & Biddle, 1998). How do these educational practices affect the intrinsic motivation of students? How do they affect the potential for cultivating lifelong learning in students? Are the goals of our school systems and the resultant teaching strategies “sabotag[ing] a key goal of education—creating a flexible population of life-long learners who can adjust to the changing needs of society and the workplace” (p. 164)? Is the educational system actually working against the goals of fostering students’ intrinsic motivation to seek information, and therefore, lifelong learning?

Of course, school success and student motivation are affected by factors other than the school environment. The home environment, especially parental support for learning, is also key. While a family’s socio-economic level has been seen as an important variable (e.g., Lance, Wellborn, & Hamilton-Pennell, 1993; Lance, Rodney, & Hamilton-Pennell, 2000) there is certainly no research to support a cause and effect relationship. True, those students with more resources at home tend to obtain higher grades, and many display a heightened interest in school as well; yet there are always low-income students who seem just as eager to seek information as many of the more financially-advantaged students. What experiences outside of school might be contributing to this eagerness to learn?

This article is based on the findings from a recent research study undertaken during the fall of 2008 in the public school system of a mid-size U.S. city. The study sought to understand the experiences of children in order to inform school library media specialists’ practice in fostering the development of intrinsic motivation for information seeking in young library users. The research was conducted using an inductive naturalistic approach in order to address

the question, "What are the experiences in the lives of upper elementary school children that foster an intrinsic motivation to seek information?"

Theoretical Framework

The theoretical framework for the study was the Self-Determination Theory (SDT). SDT is based on an organismic/dialectical approach with differentiated conceptualizations of intrinsic and extrinsic motivation. The dialectical approach, simply stated, is an orientation that accounts for the "other side of the coin." In its organismic approach to motivation, SDT suggests that environments and social contexts facilitate or undermine intrinsic motivation and the self-regulation of externally motivated behaviors. Intrinsic motivation and self-regulation will flourish if conditions are conducive for it and will not flourish if conditions are not conducive. In fact, SDT goes further to suggest that social conditions that foster intrinsic motivation and self-regulation are crucial for well-being, and that environments that thwart intrinsic motivation and self-regulation contribute to issues of alienation and ill-being (Ryan & Deci, 2000b).

As conceptualized in SDT, intrinsic motivation is "the inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn" (Ryan & Deci, 2000b, p. 70). It is different from extrinsic motivation because, when people are intrinsically motivated, they act out of interest and enjoyment; whereas when they are extrinsically motivated, they act to produce a separate outcome (Ryan & Deci, 2000a). In SDT, the construct of intrinsic motivation is also differentiated from extrinsic motivation in that it both acknowledges the importance of the interest level of a given task (in the tradition of Koch, 1956), and emphasizes the organism's striving to satisfy its psychological needs (Murray, 1938), specifically the innate needs for competence, autonomy, and in a distal sense, relatedness (Ryan & Deci, 2000a).

SDT has evolved over the past three decades into a complex theory consisting of four mini-theories. These logically coherent and readily integrated mini-theories are: cognitive evaluation theory, organismic integration theory, causality orientations theory, and basic needs theory. The mini-theory used as the basis for the theoretical framework of the study being described here was the cognitive evaluation theory.

Cognitive evaluation theory (CET) is a specific framework for the examination of social contexts that facilitate or undermine intrinsic motivation (Ryan & Deci, 2000b). This sub-theory proposes that social conditions that produce a sense of *autonomy* and feelings of *competence* catalyze one's inherent tendency toward intrinsic motivation. *Relatedness* has also been found to be a significant factor (Ryan & Deci) and is of particular interest to the topic of this article.

The need for relatedness "encompasses the need to feel securely connected to the social surround and the need to experience oneself as worthy and capable of love and respect" (Connell & Wellborn, 1991, p. 51-52). SDT posits that while the needs for autonomy and competence are the most influential in maintaining intrinsic motivation, relatedness also plays an important role. Attachment theorists (e.g., Bowlby, 1979) suggest that infants exhibit more exploratory behavior when securely attached to a parent. Recent research points to *the need to belong*, or the desire for interpersonal attachments, as a fundamental human need. Theorists propose that the need to belong has two main attributes: a) frequent, primarily positive contacts

with another person (or persons), and b) interpersonal bonds that are characterized by stability and affective concern (Baumeister & Leary, 1995).

CET postulates that this dynamic is important over the life span and that an individual's sense of relatedness and security will contribute to his intrinsic motivation (Ryan & Deci, 2000b). Anderson, Manoogian, and Reznick (1976) discovered serendipitously that children who were working on an interesting task in the presence of an adult who ignored them exhibited less intrinsic motivation for the task. Ryan and Grolnick (1986) found that students maintained lower levels of intrinsic motivation when they perceived their teachers as uncaring and cold.

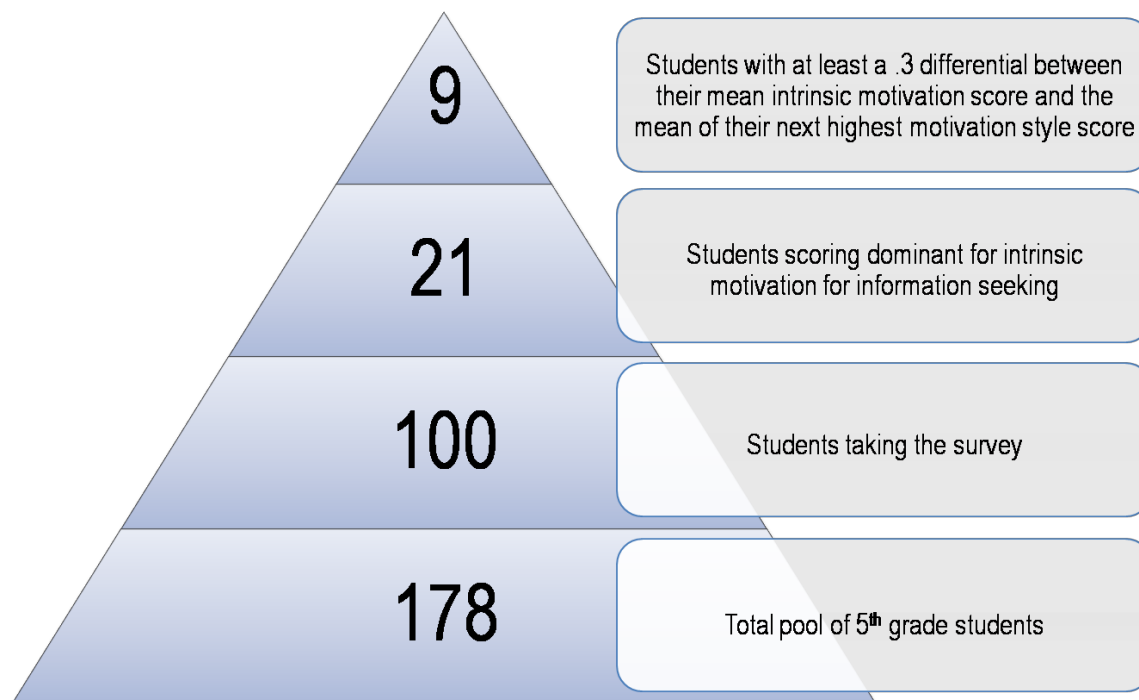
Certainly, there exist situations in which the need for relatedness is not central, such as when people participate in solitary activities such as hiking or painting, suggesting that relatedness is not a necessary component of intrinsic motivation. However, "a secure relational base appears to provide a needed backdrop—a distal support—for intrinsic motivation, a sense of security that makes the expression of this innate growth tendency more likely and more robust" (Deci & Ryan, 2000, p. 235).

Research Methodology

Participants were selected from a pool of fifth graders (age 10) from three diverse schools (high, medium, and low socio-economic status based on the percentage of students on free or reduced lunch, as well as diversity in the schools' ethnic and racial profiles) within Colorado Springs, Colorado, USA. Initially, the children were chosen based on the results of a survey especially developed for the study, the Information Seeking Self-Regulation Questionnaire (see Appendix). Of the 178 fifth grade students in the three schools, 100 returned informed consent forms and were present and able to complete the survey. Of the 100 students, 21 (21%) were found to have a dominant intrinsic motivation style. Because of the need to clarify and emphasize the salient aspect of the intrinsic motivation style, a differential of at least .3 points between the intrinsic motivation composite subscore and the next highest motivation style subscore for each student was used as a measure to determine informants. Of the 21 students with a dominant intrinsic motivation style, nine were identified with scores that met this criterion (see Figure 1 which illustrates the process for selecting research informants for this study). In the study, the nine identified informants were referred to by aliases—Alexandra, Bailey, Bob, Carl, Michael, Mickey, Melissa, Nicole, and Victoria. These same aliases will be used in this paper when referring to individual informants.

The data for the study was collected primarily through interviews with the nine identified students, but information also gleaned from parents and teachers, as well as from drawings that were gathered from an art activity that I conducted with the informants. The information sought from these data collection methods was: (a) the factors in the students' life experiences that contributed to their dispositions toward seeking information generally, and (b) the factors surrounding their information seeking experiences.

Figure 1. Process of identifying informants.



Findings

Analysis of the data indicated that students came from various family situations and socio-economic backgrounds, exhibited different communication styles, and described varied school experiences. Three students had been identified as Gifted and Talented (Alexandra, Mickey, and Victoria), one child (Bailey) was receiving special services at school to help her with a reading disability, and two were struggling with school work (Bob and Carl). All nine students exhibited an affinity for play, a tendency toward creativity, and the disposition of non-competitiveness. With regard to their information seeking behavior, informants indicated a variety of information seeking styles and interests, engaged in information seeking in order to facilitate maturation into their next developmental stage (adolescence), and recounted diverse and successful information seeking episodes. A *point-of-passion* experience occurred in the lives of all of the informants, and the presence of “anchor” relationships helped in fostering their intrinsic motivation for information seeking. Students specified that interest/relevance of topic, working in a group, at least some choice in the task, creating a final product, and fewer time constraints are all components of intrinsically motivating information seeking episodes.

This article highlights four key results pertaining to relationships: students’ affinity for play, the point-of-passion experience, the presence of “anchor” relationships, and the indication by students that working in a group was a component of their favorite information seeking

episodes. The importance of relationships to students of particular cultures is also a topic of discussion.

Play

During the process of interviewing, I was struck from the beginning by the amount of time students spent talking about play. My first question, "What makes a good day for you?" nearly always elicited a response about play. I pursued students' responses in this area, and soon discovered that the love of play was a salient quality possessed by each of the informants. Students described many play experiences, mostly social, many outdoors, some taking place indoors using various types of media, and many involving information seeking. They also described protecting time for play, especially at school. Through play, children meet the three psychological needs portrayed in SDT (Deci & Ryan, 1985) as important to intrinsic motivation; in fact, play is considered a prototypical example of intrinsic motivation because it is action motivated by enjoyment (Ryan, Kuhl, & Deci, 1997).

Learning to socialize and cooperate with others is connected to the need for relatedness and is an important function of play. Parten (1932) listed cooperative play as a major stage of play occurring in middle childhood. She contended that students engage in this type of play in order to develop group identity and cooperation skills. Bergen (1988) listed social play and games as activities that result in children's increased ability to interact with peers.

All of the students described experiences of play with friends and family. "My friends are kind and they're fun to play with and they like to hang out with me and I like to play games with them" (Carl). Other students went to great lengths to describe their social play activities, including sleepovers with fifteen or more girls (Alexandra), and an extreme sports club he had founded called "The Tricksters" (Michael). One student described learning about social interaction and cooperation through play in this way:

Okay, sometimes certain friends can get a little bit bossy and sometimes they can get me in trouble like last week, one of my friends threw a thing of mustard and got me in trouble for some strange reason, even though I didn't touch it. Everything else, I pretty much like about my friends. Well, I guess I could say like when we have arguments on like if we do this game or not, like if I want to play this game but they don't and they want to play this game but I don't, and stuff like that. (Mickey)

It is important to note that children do not consciously engage in play with the purpose of meeting their psychological needs. They engage in it for fun and enjoyment. Researchers suggest, however, that the positive feelings that accompany intrinsically-motivated activities such as play are "selectively evolved features of human nature" (Ryan, Kuhl, & Deci, 1997, p. 721), which result in advantages such as increased knowledge, independence, and secure relationships with others (competence, autonomy, and relatedness) that in turn help the organism to survive. They contend that other species that "are hatched more or less fully developed and their survival depends less on acquired knowledge than on a functional design well fit for their niche" (p. 721) show less participation in intrinsically-motivated activities. These theorists suggest a connection between the enjoyment of intrinsically motivated activities and the survival instinct. This connection may help to explain the penchant of the students to

play. It may also point to an association between their robust sense of play, and their strong intrinsic motivation for information seeking.

Anchor Relationships

The family configurations of the informants varied in the study. While most of the students were living with both their mother and father (Alexandra, Bailey, Bob, Carl, Michael, Mickey, and Nicole), Victoria lived only with her mother, and Melissa was living with neither (she was living in a foster home). What the students did have in common, however, was at least one information seeking “anchor” relationship in their families. The seven children with both mother and father at home spoke often and positively about their parents. Some mentioned special outings and occasions with them (as well as with grandparents) but all spoke of at least one parent as being active in their daily information seeking lives. Bailey mentioned her mother more than once with regard to her support of finding and/or buying books. Nicole described an elaborate “assignment” by her grandmother involving an information seeking excursion to find and photograph wild animals. Though Victoria lived only with her mother, she spoke of both her mother and father, and actually described more information seeking experiences with her father. While Melissa’s family life was described by her aunt (also her foster mother) as previously unstable, Melissa described seeing her father regularly through the years and always at appointed visitations. Her information seeking “anchor” relationship, however, was with her grandmother. She was the one who provided Melissa with an office for her teacher role-playing, and it was at her house that Melissa checked under the bricks for crawling things.

Other studies have pointed to the importance of relationships in fostering intrinsic motivation, and they further show that adult relationships—though not always with family members—tend to be the most influential. Furrer and Skinner (2003) discovered that relationships to parents, teachers, and peers all played a role in third to sixth grade students’ (ages eight to eleven) academic motivation. However, the authors also found that it was the relatedness to their teachers that provided the most influence on these students’ emotional engagement in the classroom. In their study of middle school students (ages twelve and thirteen) Ryan, Stiller, and Lynch (1994) found that “whereas relatedness to parents and teachers was predictive of school motivation and adjustment, relatedness to friends generally was unrelated to these outcomes” (p. 27). In the current study, the presence of adult anchor relationships in the lives of all the informants seem to support the SDT principle that relatedness plays a role in fostering intrinsic motivation (Ryan & Deci, 2000b). Not only did the students’ supportive family relationships seem to furnish a secure base for their autonomous actions in general, their “anchor” relationships appeared to provide a support for their information seeking behavior in particular.

Point-of-Passion Experience

In my data collection, I began early in the interview process to recognize a phenomenon that I found to be true for all the informants. The experience, which I have termed *point-of-passion*, is the students’ first remembered experience regarding an interest or fascination they have since pursued. For six of the informants (Carl, Melissa, Michael, Mickey, Nicole, and Victoria) this experience occurred at the age of four or five. For the other three informants (Alexandra, Bailey,

and Bob) the experience occurred between the ages of seven and nine. It must be considered, however, that both children and adults usually do not have memory of events much before the age of four (Santrock, 2006), and early childhood experts report that parents can recall incidents of children beginning to show innate personal interests as early as 18 months or two years of age (D. Mollenkopf, Ph.D., personal communication, October 31, 2008).

It may be developmentally significant that the majority of the informants' point-of-passion experiences occurred during the preschool years. Piaget (1954), in his *Stages of Cognitive Development*, describes that at the age of four to seven years a child goes through the *intuitive thought substage*. This substage is characterized by the beginning of primitive reasoning, and children begin asking questions about many topics. Children of this age also exhibit *centration*, or the "focusing, or centering, of attention on one characteristic to the exclusion of all others" (Santrock, 2006, p. 236).

Passion can be defined as "a strong inclination toward an activity that people like, that they find important, and in which they invest time and energy" (Vallerand et al., 2003, p. 756). Vallerand et al. posited that there are two types of passion: harmonious passion (HP) and obsessive passion (OP). HP is the pursuance of an interest or activity by choice and "is in harmony with other aspects of the person's life" (p. 757). HP results in positive outcomes. OP, on the other hand, results from an internal pressure that compels a person to engage in the interest or activity, and which is in conflict with other aspects of the individual's life. It is linked to negative outcomes. Some of the informants in the current study exhibited a stronger inclination than others to pursue their passions (Michael, Nicole, and Victoria); however, none showed signs of obsessive passion. There were also indications that informants had assimilated positive aspects of their passions into their self identity, such as the students who wore clothing featuring their passion (Michael and Victoria), and others who had begun to explore careers based on their passions (Melissa, Nicole, Mickey, Victoria, Bailey, and Michael). Self-identity is an outcome of both HP and OP, but the self-identification does not conflict with the individual's other activities in HP as it does with OP (Vallerand et al., 2003). No conflict with other activities was indicated by the informants' self-identification with their passions.

Do the passions for specific topics or activities demonstrated by young children persist into adulthood? Research by Hidi and McLaren (1990) suggests that they do not. They reported that "children in grades four and six had interest ratings of topics and themes only moderately correlated with adult's ratings" (p. 18). However, adults have reported having point-of-passion experiences when they were young children, and then maintaining that passion into adulthood and even throughout their lives.

On an airplane ride I had the good fortune of meeting and talking with Betty Birney, award-winning children's author. We engaged in conversation and the topic changed to the point-of-passion experience I had discovered with my informants. Birney revealed that she too had had such an experience. This sparked a series of email conversations in which she related the following story:

When I was about four, I had an "aha" moment when my sister came home from school and showed my mother a story she'd written. It was about mermaids and mermen in a kingdom beneath the sea and was vividly illustrated with colored pencil drawings. I was enthralled by the

beauty of this thing my sister had created. I couldn't read yet, much less write, but I understood that a person could create a story just like the ones in books and I set that as a future goal for myself when I could read and write.

At seven, when I had reading and writing well in hand, I sat down and wrote my own book. It was called *Teddy Bear in the Woods* and it had chapters and illustrations, though my drawings were not as beautiful as the ones my sister had drawn. I gave it to my parents and announced that I was going to be a writer. They were surprised but enthusiastic. I, in turn, was surprised when shortly afterwards, my father presented me with a delightful shoebox diorama of Teddy Bear's house exactly as described in the book, with furniture and cut-out figures. I sat down and wrote a sequel to the book and I haven't stopped writing since. (B. Birney, personal communication, October 26, 2008)

Another such story is that of Eric Carle, world-renowned illustrator of children's picture books. Carle tells the story of a visit his mother made to his kindergarten teacher at the teacher's request. His mother was worried Eric was in trouble, so was surprised when the teacher pointed to several pictures on display in the room, all signed by Eric. The teacher told Eric's mother that he had indicated to her that he liked art, and she felt he was good at it. She encouraged Eric's mother to "nurture this talent and respect it." Carle related how his parents always did nurture his talent, providing him with art materials, encouraging him, and "showing off" his work whenever possible. He considers this single experience the most important "door" that opened for his future career as a children's book illustrator (Fulton, 1993).

Like the author and artist in the previous stories, most of the informants in the current study also experienced support for their passions from others in their lives. They described experiences of support from parents, teachers, friends, and grandparents. Some of the support was elaborate, some just simple help in giving students what they needed to further their passions. Victoria described media her parents bought for her about her passion—dinosaurs—and also related the details about an elaborate "Dinosaur Road Trip." Michael told about the ride he received from his grandfather when he needed to go to the library for more information about his idol and member of the Pro Football Hall of Fame, Michael Irwin. Melissa talked about the special "office" her grandmother set up so she could play teacher. Nicole described an experience of getting a job training the dog belonging to her mother's friend.

The point-of-passion stories raise questions. Are such experiences unusual, or do all children have point-of-passion experiences? How does the support from adults affect the longevity of the interest kindled by the point-of-passion experience? One might conjecture that the point-of-passion experience, as well as the support by others, contribute to fostering an interest that will last into adulthood. More study is required to answer such questions, and time will tell if the interests ignited by students' point-of-passion experiences in the current study will last a lifetime.

Relational Aspects of Favorite Information-seeking Episodes

In the interviews' second line of questioning, I asked students to describe specific information seeking episodes. They all described at least two episodes, explaining to me upon further questioning the type of questions or topics addressed in each episode, how the episode came to be, the circumstances surrounding the information seeking, and whether or not they thought

the experience was successful. In all cases, the students described their preferred experiences as successful. Then, I asked them which of the episodes they liked the best and why.

Students described experiences that were varied in structure and purpose; however, three students preferred the same Colorado city assignment, and another two preferred a similar Colorado region assignment. Because of this duplication, there were actually only six preferred assignments. What follows is a brief description of the six assignments.

The Colorado Cities assignment (required by all fourth grade students in the high socio-economic school) was a group project based on a city chosen by the students in the group. Students were allowed to govern their own groups and could use any resource. Bob, Carl, and Nicole all chose this as their favorite information seeking episode. While all three students were from the same school, they were not in the same assignment group. The Colorado Region assignment, conducted in all fifth grades in the schools, was very similar to the Colorado Cities assignment. The fact-finding process was more open for this assignment than the city assignment, however, and students were allowed more choice in presentation style. Alexandra and Victoria both chose this information seeking episode as their favorite. They were not from the same school. For the Olympics Assignment, fifth grade students were asked by their physical education teacher to find information about a country participating in the Olympics. Mickey was assigned Germany, and she could choose any information she wanted to report. For her preferred episode, Melissa described that while playing teacher, she experimented with different strategies in order to find out how to keep her "student" (her brother) more focused during her play lessons. Michael's favorite episode involved his writing a book about his idol, Michael Irwin. He described his frustration with an online search for the right kind of information for a passage, but then his grandfather took him to the public library where he found a book that contained exactly the information he needed. Bailey described a time when she asked the public librarian for a book recommendation, which Bailey checked out, read, and enjoyed very much.

Several children mentioned the *group experience* in talking about their information seeking episodes, and five of nine chose a group information seeking project as their favorite. There was no mention of how the groups were chosen, but students indicated knowing, and for the most part, liking, the students in their groups for these two assignments.

Learning from peers is an important educational concept. Vygotsky, a social constructivist, emphasized the "social contexts of learning and the construction of knowledge through social interaction" (Santrock, 2006, p. 239). Research on the social interaction of students educated in traditional versus collaborative environments suggests that children from the collaborative environments build on each other's ideas and work better together than those students from traditional schools (Matusov, Bell & Rogott, 2001). The students in the current study indicated that they both succeeded in their preferred information seeking tasks and enjoyed them when they involved working in a group. Additionally, four informants (Mickey, Michael, Bailey, and Melissa) chose individual information seeking episodes as their "favorite," which may indicate that they prefer individual information seeking experiences to those involving group work; however, of the four, only one indicated working completely alone during the episode. The other three episodes involved interacting with another person.

Informants in the current study were asked their reasons for choosing their “favorite” information seeking episodes. The reasons they gave were (some students gave more than one reason): relevance of/interest in topic (5 mentions), working in a group (3), the experience of the information seeking itself (2), creating the final product (2), choice of aspect within topic (1), and no time limit (1). “Relevance of/interest in topic” was the most-given reason by the informants, which points to the importance of *interest in the task* as outlined in SDT (Deci & Ryan, 1985). “Working in a group” was the second highest reason given by informants for preferring information seeking episodes. This reason also coincides with SDT principles, particularly the importance of relatedness need fulfillment. Indeed, the high occurrence of this reason, coupled with the low occurrence of *choice of aspect* and the fact that none of the students mentioned “working individually” as a reason for their preferences, may indicate that this need was salient over autonomy with the informants in this study, suggesting the importance of the relational aspect of intrinsically motivating information seeking episodes to the students.

Culture and Relationships

Eight of nine of the students were Caucasian; however, one informant was of Filipino descent (Bob). Bob’s family and origins were important to him, as evidenced when he took the time to tell me how his paternal grandparents migrated from the Philippines to San Francisco, where his father was born. One of his primary interests was history, including American history of the West and Southwest, which seemed to stem from the family stories he had heard. He spoke with loving emotion when describing his family. He also indicated the importance of relationships he has with friends, particularly two who had been lifelong companions.

Ethnicity and culture have been topics of study in the area of intrinsic motivation. In a project that compared the intrinsic and extrinsic motivational orientations in the classroom, Lepper, Corpus and Iyenger (2005) found that the line between intrinsic and extrinsic motivators, especially with regard to pleasing the teacher, was not as distinct for Asian American students as it was with the Caucasian children in the study. In other research, extrinsic motivators (such as pleasing the teacher) were found negatively to influence intrinsic motivation (Amabile, DeJong & Lepper, 1976, Deci & Cascio, 1972, Lepper & Greene, 1975, Deci & Ryan, 1985), presumably because people feel controlled by these circumstances and therefore experience a shift in their perceived locus of causality from internal to external. However, a positive correlation between intrinsic motivation and pleasing the teacher was indicated for the Asian American students (but not for the Caucasian students) in the Lepper, Corpus and Iyenger study. The researchers posited that “children in more interdependent contexts may see useful supports that serve the needs of the family and society” (p. 193).

SDT research also indicates differences between cultures with regard to psychological needs satisfaction and intrinsic motivation. Research points to the *universality* of the connection between need satisfaction and intrinsic motivation, but the emphasis may differ depending on the culture. There seems to be a tension between the needs for autonomy and for relatedness. Autonomy is seemingly the dominant need for people to maintain intrinsic motivation in individualistic societies, and relatedness is the dominant need in collective societies (Chirkov & Ryan, 2001; Deci, Ryan, Gagné, Leone, Usunov & Kornazheva, 2001, Hayamizu, 1997; Yamauchi & Tanaka, 1998).

Bob (Filipino descent) described several close and supportive relationships in his life, as well as several information seeking episodes he experienced with his friends and his family. He also indicated that one of the reasons he chose the Colorado City assignment as his preferred information seeking experience was because he was able to work in a group. The close and supportive relationships Bob described, both in general and specifically in reference to information seeking, not only suggest that his psychological need for relatedness was being met, but also that it was the most influential force in fostering intrinsic motivation for information seeking in his life. It is possible that his ethnicity and family culture played a part in this phenomenon.

Conclusions, Implications, and Recommendations

The purpose of conducting qualitative research is to gain understanding of an issue or phenomenon. The purpose is not to determine a single causal explanation, to generalize, nor to predict. The aim is “to tell a richly detailed story that takes into account and respects a context and that connects participants, events, processes, activities, and experiences to larger issues or phenomena” (Bloomberg & Volpe, 2008, p. 134-5). In this way, I hoped to contribute to an understanding of the students in the study, upper elementary school children who were identified to be intrinsically motivated to seek information.

It is important to remember that the observations drawn from this exercise are applicable only to the study’s pool of informants. Limitations of the study, such as the gathering of students from one geographic area and the use of a purposive sample, preclude generalizability of the results and conclusions to all students in all situations. Nevertheless, the following conclusions, implications, and recommendations based on the current study may shed some light and give suggestions to practitioners on relational issues surrounding the general topic of intrinsic motivation within the framework of information seeking.

Play contributes to individuals’ intrinsic motivation for information seeking.

The play experiences the informants described were indicated to contribute to the fulfillment of students’ need for relatedness, a principle supported by SDT (Deci & Ryan, 1985) to foster intrinsic motivation. While it may be true that most students—intrinsically motivated for information seeking or not—enjoy and thrive on play, my experiences working with children suggest that the students in the study seemed to have a particular affinity for it. In fact, not only did they discuss play often and enthusiastically, students also connected play with information seeking. It is my conclusion that the play life of children may be an important contributor to their intrinsic motivation for information seeking. However, further study is required to determine whether students who are intrinsically motivated for information seeking have a greater affinity for play than other children.

Play can be incorporated into both the service aspects and environments we create in our libraries. By using strategies that are playful and by exhibiting an attitude based on play, the library professional helps fulfill students’ need for relatedness. Using teaching strategies that include whimsical situations, role playing, and imaginative activities builds play into instruction. With regard to environment, the attitudes of the library media specialist and other library personnel are central to the atmosphere in the library. By exhibiting a sense of humor

and enjoyment in the company of their patrons, library personnel provide an atmosphere of acceptance, likability, and approachability (Radford, 1993, 1998).

While students who are intrinsically motivated for information seeking have various family configurations, “anchor” relationships seem to be the norm and appear to be a factor in fostering intrinsic motivation for information seeking.

Informants’ family configurations and situations varied, but all described “anchor” relationships, people who supported their interests and information seeking behavior. The conclusion from this and other research (Furrer & Skinner, 2003; Ryan, Stiller, and Lynch, 1994) is that these anchor relationships are influential in fostering intrinsic motivation for information seeking, and that though these relationships are usually adult relatives, they need not be. Others can and have stepped into the anchor relationship role.

It may seem that anchor relationships either exist for a child or they don’t, and that this may be one realm that we, as library media specialists, cannot influence. However, there *are* ways we as library professionals can assist in this area. First, we can work to educate parents and guardians in their role as information seeking anchors. We can do this by parent/guardian education and by helping families get library cards and news about other information-rich environments such as zoos and museums. Grandparents also can play an important role, and arranging for “grandfriends” (older citizens to volunteer to show interest in children; Grandfriends101.com, 2008) can help fill that gap for children without their own grandparents. We can be on the alert for students’ interests and talents and notify students’ primary caregivers about these interests and talents. This may be particularly important with regard to very young patrons. The library media specialist who cultivates relationships with preschool and kindergarten students may be one of the first to notice a point-of-passion experience. It was a teacher who notified Eric Carle’s parents about his artistic talent, and it was she who urged them to respect and encourage it (Fulton, 1993). Library professionals are in an ideal position to observe students pursuing their interests and talents as we monitor their interaction with media. Paying attention and being proactive in connecting students to resources is one way to serve as supportive relationships ourselves.

Mentoring is another way to help provide anchor relationships. In my years as a library media specialist at an International Baccalaureate® (IB) Primary Years Programme school (preschool through fifth grade, ages four to ten), I helped to implement an event called *the exhibition*. The exhibition is “an extended, collaborative inquiry project [students carry out in the last year of the Primary Years Programme] under the guidance of their teachers” (International Baccalaureate® Organization, 2008). At our school, students were connected with staff and community members who shared the same interests or concerns and were willing to mentor a student with the project. Non-IB schools could also implement an exhibition-type project and follow through by connecting students with mentors.

Point-of-passion experiences often occur during the pre-school years, and if fostered by others, may last until adulthood.

All of the students in the study described a point-of-passion experience, a particular event they remember that ignited an interest they later pursued. Most of the students (six of the nine) described having this experience at the age

of four or five. A majority of the students also indicated support from others, generally an adult relative, for pursuing the interest. While the research on the long-lasting effects of interests cultivated in childhood is inconclusive, anecdotal evidence (Birney, 2008; Fulton, 1993) points to the possibility that point-of-passion experiences fostered by others may last until adulthood and, in fact, may affect a child's decisions for life. Combine this with the presence of the anchor relationship (a person who may or may not have been the one who supported them after the point-of-passion experience) in the lives of the informants, and the data seem to indicate the importance of an influential person(s) who fosters intrinsic motivation for information seeking in the life of a young child.

A recommendation based on the point-of-passion experience finding is to purposefully provide opportunities and instruction for young children in information seeking. Some library media specialists have made a foray into providing research experiences for the very young (see, for example, Christian, 2004; Fisher, Heath & Price, 2004). Heath describes a project involving kindergarten students that she implemented in collaboration with teachers. The project began with a mini-lesson about curiosity and how our inner questions can be answered through information seeking (primarily through gaining information through pictures). The library media specialist then proceeded to meet with each individual student for three lessons about information seeking based on a topic chosen by the student. The lessons were low-key, low-pressure sessions differentiated to meet students' individual skills and abilities. Students spent about a total of an hour in the library with the library media specialist, and the projects were spread out over the course of a year with the library media specialist meeting with each kindergartener for three sessions, then moving on to the next student until they all had a turn. Heath found that the project was met with enthusiasm by both students and teachers, and that students continued to use the skills they developed during the project over the ensuing years.

Interacting with others is often a component of intrinsically motivating information seeking episodes, especially for children of collectivist cultures.

"Working in a group" was second only to "relevance/interest in the topic" as a reason given by students for choosing their "favorite" information seeking episodes. Group-related information seeking episodes provided opportunities for students to meet their need for relatedness. By using learning environments that are designed with this strategy in mind, library media specialists can aid in fostering intrinsic motivation for information seeking.

Types of teaching methodologies that promote relatedness are *problem-based learning* (Barrows & Tamblyn, 1980), *intentional learning environments* (Resnick, 1989), and *cognitive apprenticeships* (Collins, Brown, & Newman, 1989). All of these instructional methods incorporate elements of collaboration, which could serve to meet the need of relatedness for students. Another approach to learning that fosters intrinsic motivation is *inquiry*, a method that has been widely accepted in the school library field (e.g., Callison & Preddy, 2006; Kuhlthau, 2001; Kuhlthau, Maniotes, & Caspari, 2007; Robins, 2005). The inquiry approach encourages students to ask questions, investigate, explore, search, quest, and study. It can be used as a strategy for individuals, or it can be implemented as a collaborative strategy (Kuhlthau, Maniotes, & Caspari, 2007). The option of implementing inquiry strategies in individual or group settings enables accommodation of the individual needs of autonomy or relatedness,

which are influenced by an individual's culture (as suggested by the current study and others, e.g., Chirkov & Ryan, 2001). The conclusion is that allowing for student choice with regard to working with others or working individually fosters intrinsic motivation for information seeking for more students, regardless of their ethnic and cultural backgrounds, allowing for differentiation according to their individual needs.

The role of the library media specialist in embedding information literacy skills into curriculum through collaboration with classroom/content teachers affords many opportunities to incorporate the teaching strategies and techniques described above. By looking for ways to teach and scaffold information literacy at the point of student need and interest, and by providing students situations in which to work with others (both peers and adults), library media specialists help students make real-life connections and build relevant relationships, and thus foster intrinsic motivation for information seeking in their young patrons.

Defining Our Mission

Library media specialists, for the most part, have long held the mission of helping students become lifelong learners (American Association of School Librarians & the Association for Educational Communications and Technology, 1998). Not only do many of us possess the "inner calling" of this mission, but we as professionals are directed to enable students to use skills and resources for a lifetime of information seeking. The AASL *Standards for the 21st-Century Learner* state that in order "to become independent learners, students must gain not only the skills but also the disposition to use those skills, along with an understanding of their own responsibilities and self-assessment strategies" (p.2). The disposition to use information seeking skills on a personal level is made plain in the fourth standard, *Pursue personal and aesthetic growth*, particularly in indicator 4.2.2, which states that students should "demonstrate motivation by seeking information to answer personal questions and interests, trying a variety of formats and genres, and displaying a willingness to go beyond academic requirements" (p. 7). This indicator describes intrinsic motivation for information seeking and implies the importance of this trait to the student's life outside of school both now and in the future. Thus, fostering intrinsic motivation for information seeking is a part of our mission as a profession and should be an integral part of our practice as library media specialists.

Based on the descriptions of the informants from the current study, children who are intrinsically motivated for information seeking do not see searching for information as a chore, but rather as an enjoyable and fun pursuit. It is as much a part of their daily lives as eating and sleeping. They do not limit their information seeking to class assignments, but extend it to include their passions, interests, and activities. For these children, information seeking is not only a means of enrichment and entertainment, it is also a means of meeting their needs both in and out of school. We would wish these to be characteristics evident in every child we help launch into adulthood.

The data collected in this study seem to indicate that children who are intrinsically motivated to seek information show an affinity for play, have supportive anchor relationships, have had a point-of-passion experience, and have benefited from relational aspects of information seeking episodes. However, the research also shows that they may or may not come from affluent homes and that they may or may not show competencies typical of the

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academically successful child. Since children who are intrinsically motivated to seek information do not appear to fit any single outward profile, they may well be “hiding” in our schools. Therefore, we cannot operate on a one-size-fits-all attitude in our approach to library service, but instead should strive to provide each child with an individualized opportunity that will be most effective in helping him or her develop the internal desire to seek information. Fostering the intrinsic motivation for information seeking should not only be a part of our practice and a part of our mission, it should also be a part of our mindset in our daily interaction with children.

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Appendix

Information Seeking Self-Regulation Questionnaire (SRQ-IS)

Why I Look for Information

Name: _____ Age: _____

Grade: _____ Boy () or Girl () Teacher: _____

A. Why do I look for information for a project or assignment?

- | | | | | | |
|----|---|-----------|--------------|---------------|-----------------|
| 1. | Because I want to learn new things. | Very true | Sort of true | Not very true | Not at all true |
| 2. | Because I want my teacher to think I'm a good student. | Very true | Sort of true | Not very true | Not at all true |
| 3. | So that the adults won't yell at me. | Very true | Sort of true | Not very true | Not at all true |
| 4. | Because I'll be ashamed of myself if it didn't get done. | Very true | Sort of true | Not very true | Not at all true |
| 5. | Because it's fun. | Very true | Sort of true | Not very true | Not at all true |
| 6. | Because that's the rule. | Very true | Sort of true | Not very true | Not at all true |
| 7. | Because I enjoy looking for information for projects and assignments. | Very true | Sort of true | Not very true | Not at all true |

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8. Because it's important to me to look for information for projects and assignments.

Very true Sort of true Not very true Not at all true

B. When I look for information about a new topic it is usually. . .

9. Because I want adults to think I'm a good student.

Very true Sort of true Not very true Not at all true

10. Because I'll get in trouble if I don't.

Very true Sort of true Not very true Not at all true

11. Because it's fun.

Very true Sort of true Not very true Not at all true

12. Because I will feel bad about myself if I don't do it.

Very true Sort of true Not very true Not at all true

13. Because I want to understand the subject.

Very true Sort of true Not very true Not at all true

14. Because that's what I'm supposed to do.

Very true Sort of true Not very true Not at all true

15. Because I enjoy looking for information on new topics.

Very true Sort of true Not very true Not at all true

16. Because it's important to me to look for information about new topics.

Very true Sort of true Not very true Not at all true

C. Why do I look for information in books?

17. To find out if I'm right or wrong.

Very true Sort of true Not very true Not at all true

18. Because I want the adults to say nice things about me.

Very true Sort of true Not very true Not at all true

19. Because it's fun.

Very true Sort of true Not very true Not at all true

20. Because I want the other students to think I'm smart.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
21. Because I enjoy looking for information in books.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
22. Because it's important to me to look for information in books.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
23. Because that's what I'm supposed to do.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
24. Because I feel really proud of myself when I find information.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|

D. Why do I look for information in magazines?

25. Because it's fun.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
26. Because I enjoy looking for information in magazines.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
27. To find out if I'm right or wrong.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
28. Because that's what I'm supposed to do.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
29. Because I want the adults to say nice things about me.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|

30. Because I feel really proud of myself when I find information.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
31. Because I want the other students to think I'm smart.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
32. Because it's important to me to look for information in magazines.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|

E. Why do I look for information on the Internet?

33. Because it's important to me to look for information on the Internet.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
34. Because I want the other students to think I'm smart.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
35. Because I feel really proud of myself when I find information.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
36. Because I want the adults to say nice things about me.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
37. Because that's what I'm supposed to do.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
38. To find out if I'm right or wrong.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
39. Because I enjoy looking for information on the Internet.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|
40. Because it's fun.
- | | | | |
|-----------|--------------|---------------|-----------------|
| Very true | Sort of true | Not very true | Not at all true |
|-----------|--------------|---------------|-----------------|