December 15, 2008

Perspectives in Theory:

Anthology of Theorists affecting the Educational World

Editors: Misty M. Bicking, Brian Collins,

Laura Fernett, Barbara Taylor, Kathleen Sutton

Shepherd University

Table Of Contents

Abstract

A compilation of research papers on theorists that affect the educational world are collected in this anthology. Twenty-one students, through the course of their education class, Social and Psychological Conditions of Learning—EDUC 320, researched and applied their knowledge in the elementary and secondary school environments. A website was also created to display this anthology— www.frontiernet.net/~nbicking .

Alfred Adler

Melissa Bartlett

Shepherd University

Abstract

This in depth research paper examines Alfred Adler and his contribution to education and

psychology. The main goal was to understand his work, his theories and his influence on today's

society. His three main theories were inferiority v. superiority, social interest and birth order.

People that were born with an organ deficiency had a harder time in life and often had to develop

an inferiority or superiority complex. Alfred Adler thought people could change their core

personality and this paper investigates that theory on social interest. He greatly impacted the way

educators and psychologists view children and students. His theory on birth order is very

important for educators to understand their current students. Alfred Adler was a brilliant

psychologist with many important contributions to society.

Alfred Adler

Biographical

Alfred Adler was born on February 7, 1870 in Vienna. His father was a Jewish grain merchant and he was the third of six children (Fisher, 2001). He did not walk until age four because he suffered from Ricketts (Fisher, 2001). Ricketts is a disorder caused by a lack of Vitamin D which may cause softening and weakening of the bones (Van Vorhees, 2006). At age five he got pneumonia and after he recovered, decided then, that he wanted to be a doctor. "It was not so much my childhood experiences in themselves that were important; rather the manner in which I judged and assimilated them" (Adler, 1923).

In 1895, he received his medical degree from the University of Vienna (Boeree, 2006). It was there that he met his Russian wife named Raissa Timofeyeona Epstein who was a social activist studying in Vienna. They later had four children together over a period of years (Fisher, 2001).

Adler began his career as an ophthalmologist but then switch careers to general practice in the suburbs of Vienna. Most of his patients were circus performers, he studied their unusual strengths and weaknesses and came up with his theory on organ inferiority. Organ inferiority means an organ does not grow or develop as it should and therefore is susceptible to disease. These inferior organs may include the sense organs, the digestive apparatus, the respiratory tracts, the genitor-urinary apparatus, the circulatory organs and the nervous system (Ansbacher, 1956).

In 1902, Adler was invited to join Freud's inner circle, a group of psychologists who discussed psychology. Adler had written a book earlier on treating the patient as a whole person so he did not agree entirely with Freud's views. In 1911, he left Freud's circle and started his own called Society for Free Psychoanalytic Research, which was later, changed to Individual Psychology. At the time of this separation it appeared that the similarities between Freud and

Adler were greater than their differences; the two used similar methods, described and interpreted much of the same phenomena, and often did so in parallel terms (Ansbacher, 1956).

<div align="center">Contextual</div>

Many outside influences shaped the forming psychiatrist Alfred Adler. When World War I started in 1914, Adler served two years at the front of the war as a medical doctor where he had many opportunities to observe the effects of shell shock (Hirsch, 2005). Later in the war, he was moved to a children's hospital (Boeree, 2006). After the war, he returned home to Vienna, where he was a consultant for many mental hospitals including the Psychiatric Ward of the Mariahilfer (Hirsch, 2005). Adler saw first hand the devastation that war can bring and the effects it causes (Boeree, 2006). He closely watched how uncured neurosis could become wholly disabling, whereas, through treatment of neurosis, some men could be helped to recover from trauma (Hirsch, 2005). This is when he began studying people's illnesses, deficiencies, and handicaps to see how they affected every day life.

<div align="center">Theoretical</div>

Adler's group Individual Psychology believed it was possible to change people's core personality. "The term Individual Psychology stems from Adler's stress on the uniqueness of the individual and his creation of his own 'Life Style' " (Adler, 1963). The heart of Adler's Individual Psychology was his belief that everyone can change, not just changing or modifying, but a transformation of the core personality (Stein, 2008). The challenging form of Adlerian psychotherapy is that it sees the therapist as an artist, not just a technician (Adler Institute, 2008). Three of the main theories that Adler addressed were inferiority v. superiority, social interest, and birth order. I will give detailed descriptions of each.

The first theory from Adler was his views on organ deficiencies. He saw firsthand that people that were born without a necessary organ had a more difficult time in life. Inferiority is an

overwhelming matter that when you, as in individual, are doing well, you can help others succeed. If you are struggling in everyday matters, you tend to stay focused on yourself (Boeree, 2006). Your body demands a lot of itself and another term that Adler used was compensation, or that lacking deficiency.   You might have to compensate within the organ, through a second organ, or through psychological overcompensation (Ansbacher, 1956). Adler felt that your personality can be accounted for by the ways we use compensation for those thing we are lacking (Boeree, 2006). Another term that Adler used, and another theory, was superiority, which meant striving for perfection and self-enhancement (Ansbacher, 1956). He felt that all people were pushed from a young age to want more, do better and achieve more and therefore become a better individual. Sometimes a superiority complex will show itself in one's own drive for achievement. Some examples of this behavior are: disdain, vanity, exaggerated masculine conduct in front of women, snobbishness, boastfulness, and the misuse of ideas to depreciate others (Ansbacher, 1956). "Anyone striving for perfection can hardly do so without considering his or her social environment" (Boeree, 2006).

Adler stressed that individuals must be seen and must see themselves as a larger whole, to see the entire social situation (Ansbacher, 1956). His application of social interest is about active participation in life and the success of life's tasks (Bitter, 2007). His main idea was that the more you have vested in your community the more you gave to those around you, the more you would receive. It would seem a simple mantra, live as you would want those around you to live. A balance in your community and your life would lead to a more balanced mental health (Bitter, 2007).

Adler also meant for people not only to use this behavior to help themselves, but to change the sense of caring for family, society and for humanity (Boeree, 2006). If people were more caring for others around them, they would better take care of themselves and create a better

environment all around. This directly translates to the classroom for educators. All teachers must be aware of the lives and society from which their students come. Basic understanding of this, and what makes each student who they are, is going to help the teacher create a more just community inside the classroom. Cooperation with people boasts a feeling of belonging and participation with others for the good of the common goal (Adler, 1963). A simple way to look more closely at each student would be to look at their birth order.

The next of Adler's theories is birth order, or the placement of brother and sisters. He is one for the first theorists not only to include mother and father's influence on the child, but also that of siblings (Boeree, 2006). Adler first presented his views on the importance of birth order in 1918 (Ansbacher, 1956). He considered it useful in understanding the child but also stressed not to have birth order be taken too seriously (Boeree, 2006).   The first born is thought to get all the attention and become spoiled (Ansbacher, 1956). It is generally thought that the first born seems to be the alpha-character, dominant, and an extrovert. While this is not true in all cases, most first born children tend to take care of others, be organized and have a desire to protect others in a sometimes exaggerated case (Ansbacher, 1956). Since this child is used to getting all the attention it is sometimes very difficult when a sibling is born.

The life of the second child is very different from that of the first born.   From the beginning, that child is used to sharing the attention with his older brother or sister and sometimes competing for it. The second child often feels the need to exert himself in a race to play catch up with an older sibling and continually tries to surpass them (Ansbacher, 1956). He or she is usually the "pace-setter" and always in a competition of some sort (Boeree, 2006). It is truly amazing to watch these second children attempt to keep up with their older counterparts all the while far exceeding parents' standards.

The youngest child often thought of as the baby, is often the most pampered (Boeree, 2006). Since the youngest child is the most stimulated it has many chances for competition and can sometimes develop in extraordinary ways (Ansbacher, 1956). "The position of the youngest child has not changed in human history; the oldest stories of mankind tell how the youngest child excelled his brothers and sisters" (Ansbacher, 1956). The youngest children are only second to the oldest in being the problem children (Boeree, 2006). Since they have been pampered for so long, they tend to have more feelings of superiority and therefore cause more trouble.

The last view to be discussed is that of the only child. They have problems all their own. These children tend to have a 'mother-complex' afraid that they would have to share their mother's love and attention while also having a fear of another sibling taking away the attention (Ansbacher, 1956).   Sometimes these children are born into a timid environment (Ansbacher, 1956) as the parents want to make sure they are doing the right thing with their one and only child. This can often be detrimental to that child because they are being raised in an anxiety filled home (Ansbacher, 1956). Only children tend to miss out on special sibling relationships that other children in families with brothers and sisters develop on their own. It is such a winning combination of love and respect when children have support from other siblings.

<p style="text-align:center">Developmental</p>

Adler had some unique views on treatment. He believed in keeping things equal and honest with his patients. He had a three point system: (1) understanding the life-style of the patient, (2) explaining the patient to himself, and (3) strengthening social interest in that patient (Ansbacher, 1956). A basic way of explaining this would be to get the patient to open up about themselves, explain it back to them and give them guidance and support to get passed their issue. Individual Psychology uses the persons own understanding of themselves, and an intense examination as a requirement (Ansbacher, 1956). To get patients to open up about themselves and explain their

point of view, Adler used five methods for extracting information: (1) earliest childhood memories, (2) birth order, (3) childhood disorders, (4) dreams, and (5) the nature of the illness (Ansbacher, 1956). All of these must clearly be presented so the patient is wholly understood.

The second part of treatment was the re-explanation back to the patient. The individual patient must clearly recognize and understand the self-centered lifestyle (Boeree, 2006). The simplest and most direct method often works the best. The patient should listen to the re-explanation which influences their desire to understand and therefore change (Ansbacher, 1956). By continuing to talk to the patient about what was brought up, the patient may reach an understanding on their own.

The last step in treatment is getting the patient to take an interest in their community. Adler once said "we remain convinced that the cure of all mental disorder lies in the simpler, if more laborious, process of making the patient understand his own mistakes" (Ansbacher, 1956). This is a very clear way of understanding his entire theory of treatment. Treat the patient as a whole, understand them and their life-style, get them to directly understand their issue, and make a conscious effort to change. It might not be simple for each case, but this provided a stepping stone for each patient and a way to begin the treatment. "By developing a genuine human relationship with the patient, the therapist provides the basic form of social interest, which the patient can then transform to others" (Boeree, 2006). The ultimate goal is to have the patient start giving back to their community in a positive manner.

<div align="center">Reflection</div>

There are many important aspects of writing this theorist research paper. It is important for future educators to be able to do research and to provide a solid basis for teaching. The first important aspect is being able to research effectively. This paper taught me valuable lessons on how to research, where to go to find the information I needed and what to do with it. As future

educators, this becomes very important for us to do. Teachers don't always know the correct answer, but we should be able to find the correct answer quickly and efficiently.

The second aspect I found important in writing this research paper was the solid basis for our teaching. I feel that learning about the research psychiatrists and psychologists did, it help us make a better impact on today's youth. There is a lot to be said for the past and what was taught, learned and the manner it was delivered. This helps us in the future by learning that wisdom and also what worked and what needed improvement.

Alfred Adler taught me to look beyond the student and see what impacts his/her daily life. Just by going that extra mile, caring, and showing encouragement it will greatly impact those students. Adler taught that you can learn a lot about patients, in my case- students, by asking questions and getting them to talk about themselves. This will help me as an educator understand that student and where I can help them.

Alfred Adler	
ATTRIBUTES	DESCRIPTIVE DETAILS
PHYSICAL	People born with an organ deficiency have a harder time in life
EMOTIONAL	Superiority- striving for perfection and self-enhancement
SOCIAL	See yourself as a larger whole, active participation in life and success of life's tasks
MENTAL	His views on treatment were to keep things equal and honest with his patients, he had a five point system for extracting info: 1. earliest childhood memories 2. birth order 3. childhood disorders 4. dreams 5. nature of the illness
MORAL	The more caring you are towards yourself, your family and society, you can become well adjusted in your community

BIRTH ORDER THEORY

STAGES	DESCRIPTION
Stage 1: FIRST BORN	Gets all the attention, spoiled, seems to be alpha-character, dominant, extrovert, and tends to take care of others in an organized way
Stage 2: SECOND CHILD	From the beginning this child is used to sharing attention with older sibling, usually the pace-setter and always in competition
Stage 3: YOUNGEST	Often thought of as baby, can develop extraordinary ways because they are so stimulated, tend to have feelings of superiority and can cause trouble
Stage 4: ONLY CHILD	This child tends to have mother-complex, often afraid they will have to share their mother's attention with other siblings, sometimes born into timid environment because parent's 'baby' their only child

References

Adler, A. (1923). *The Practice and theory of Individual Psychology*. London: Lund Humpries.

Adler, A. (1963). *The Problem Child*. New York: Capricorn Books.

Alfred Adler Institute (n.d.). *Classical Adlerian depth psychotherapy*. Retrieved August 28, 2008,
from https://ourworld.compuserve.com/homepages/hstein/#110.

Alfred Adler's "Individual Psychology" (n.d.). Retrieved August 28, 2008, from
https://www.sonoma.edu/users/a/daniels/Adler.html.

Ansbacher, G & Ansbacher, R . (1956). *The individual psychology of Alfred Adler, a systematic
presentation in selections from his writings.* New York: Basic Books.

Bitter, J. (2007). Am I Adlerian? *Journal of Individual Psychology*. Vol 63, 3-31.

Boeree, C. (2006). *Alfred Adler*. Retrieved September 11, 2008, from
www.webspace.ship.edu/cgboer.adler

Fisher, M. (2001). Alfred Adler. Retrieved August 20, 2008, from
https://muskingum.edu/~psych/psycweb/history/adler.

Gershwin, G. & Gershwin, I. (1994). Pardon my english, Freud & Jung & Adler. Track 8,
Downloaded September 2, 2008, from www.amazon.com

Hirsch, P. (2005). Apostle of freedom: Alfred Alder and his British disciples. *History of
Education.* V34 n5, 473-481.

Savage, A. (2001). Pastoral theology/practice and Alfred Adler's Individual Psychology.
Quodlibet Online Journal of Christian Theology and Philosophy. Retrieved August 26,
2008, from https://www.quodlibet.net/savage-adler.shtml

Stein, H. (2008). Adler's legacy: past, present and future. *Journal of Individual Psychology.* Vol

64, 4-20.

Van Vorhees, B. (2006). *Medical Encyclopedia: Ricketts*. Retrieved September 16, 2008, from

http://www.nlm.nih.gov/medlineplus/ency/article/000344.htm

Watts, R. (1996). Social interest and the core conditions: could it be that Adler influenced Rogers?

Journal of Humanistic Education and Development. V34 n4, 165-170

Mary Ainsworth

Misty Bicking

Shepherd University

Abstract

Mary Ainsworth, 1913-1999, is best known for her work with *The Strange Situation* experiments (Bretherton, 2003). These experiments are based on the attachment theory developed by Dr. John Bowlby (Bretherton, 2003). As a result of the experiments and the work in the areas of attachment, Dr. Ainsworth was able to further the work of Dr. Bowlby and identify three attachment styles—Secure Attachment, Anxious-Ambivalent Insecure Attachment, and Anxious-Avoidant Insecure Attachment (Duate). The work of Dr. Ainsworth has applications in the classroom, in that, the teacher must be able to extrapolate student personalities and work with those personalities to cause the best possible learning experience for the student.

Mary Ainsworth

Biography

Mary D. Salter Ainsworth (1913-1999) was born in Glendale, Ohio and raised in Toronto, Canada (Bretherton, 2003, p. 318). The daughter of Charles and Mary Salter, she was able to read by age 3 and attended the University of Toronto at age 16 (Bretherton, 2003, p. 318). While in college, much of her undergraduate work focused on the "security theory" of Dr. William Emet Blatz, who also became her doctoral mentor (Bretherton, 2003, 318). Later, Dr. Ainsworth worked on a research team headed by Dr. Blatz on the "aspects of adult security" (Bretherton, 2003, p. 319).

While her parents did not support her academic pursuits beyond the Baccalaureate, Dr. Ainsworth continued and sought her Doctorate in Psychology (Bretherton, 2003, p. 319). After Dr. Ainsworth's graduation from the doctoral program in 1940, she remained at the University of Toronto for two years as a lecturer (Bretherton, 2003, p. 319). Then, her interests took her to join the Canadian Women's Army Corps where her experience with officer selection garnered further interest in assessment and instruction (Bretherton, 2003, p. 319).

Once Dr. Ainsworth returned to the University of Toronto, she met and married Leonard Ainsworth, veteran and graduate student at the university (Bretherton, 2003, p. 319). The conflict of interest of having a student and professor married couple forced them to move to London, England where Leonard began to pursue his doctorate (Bretherton, 2003, p. 319). While in London, Dr. Ainsworth found employment with Dr. John Bowlby at the Tavistock Clinic working with children in hospitals based on the precept of observing childhood security (Bretherton, 2003, p. 319). Dr. Ainsworth's husband had taken a position in Uganda after his graduation in 1950;

and, Dr. Ainsworth, herself, was able to continue her work on attachment (Bretherton, 2003, p. 319). Again, in 1955, Leonard accepted another position and the two moved to Baltimore, Maryland where Leonard accepted a position as a forensic psychologist (Bretherton, 2003, p. 319). The move to Baltimore made way for Dr. Ainsworth's work at John's Hopkins University in the Department of Psychology (Bretherton, 2003, p. 319). The marriage, however, ended five years later.

Dr. Ainsworth's retirement was nothing of the sort. In 1984, she retired as a Professor Emerita at the age of 70 (Bretherton, 1998). Her retirement from the classroom and department did not mean that the vital woman of 70 went away quietly. She remained active in her professional pursuits, working with children and with other psychologists on the achievements that she had cultivated during her career (Bretherton, 2003, p. 319). Dr. Ainsworth died in March 1999 at the age of 83 (*The Archives of the History of American Psychology*). While she never had her own children, she referred to her students as her "academic family" (Bretherton, 2003, p. 328).

<center>Contextual Influences</center>

To place Dr. Ainsworth's work into perspective, an accounting of contextual influences needs to be taken. By looking at the era that influenced her and the theorists who shaped her, a comprehensive image of her theories can be seen. First, the historical event that had a direct impact on the development of her theories and career is foremost World War II. The ravages of war left London torn with many orphans and children separated from their families. During the wars, those who did not have country homes would hope to find people to take their children out of London until the war was over and it was safe for the children's return. The severing of maternal bonds with these children and those who were orphaned left many children institutionalized. Later these children would become delinquents or adults who were emotionally

underdeveloped (WHO, 1962). As such, there presented itself a foundation from study in the effects of broken attachments.

A second major factor affecting Dr. Ainsworth during the 1950's and 1960's were the developments being made within the field of psychology. Fascism and communism threatened the free world into a frenzy of competition between the eastern block and the free world, thus the Cold War began. The developments of German and Russian humanist psychologists competed with the developments of European and American behavioral psychologists created flourishing advances in understanding the human mind (Burke, personal communication, September 2008).

The psychologists who influenced Dr. Ainsworth's work had similar genres, per se, of development within the context of infancy and young childhood (Arcus). Dr. Blatz, who was her advisor while she pursued her doctoral degree, focused on the "security theory" (Bretherton, 2003, p. 319). Security theory is idea that infants and toddlers need to have a strong foundation in their relationships with their parents before they can create new experiences and relationships with others (Bretherton, 1992). While Dr. Ainsworth was already in the developmental psychology direction of security and attachment of children to their parents, Dr. John Bowlby was also developing his own ideas independent of Dr. Ainsworth (Bretherton, 1992). Dr. Bowlby was a psychologist who worked with children in the aftermath of World War II (WHO, 1962). As such, he drew ideas that the separation from the children's parents before the age of three, left serious psychological flaws in their character (WHO, 1962). Dr. Ainsworth's work in maternal attachment stemmed from two major influences—Dr. Blatz and Dr. Bowlby.

<div align="center">Theory</div>

Dr. Ainsworth's observational work began in the Tavistock Clinic in London where, under the employment of Dr. Bowlby, she and her co-workers observed behaviors of institutionalized children with regard to maternal deprivation (Even Toddlers Need Fathers, 2007). The WHO

asked Dr. Bowlby to address maternal deprivation in homeless children from war torn London due to World War II (Even Toddlers Need Fathers, 2007). Dr. Bowlby believed that the deprivation of the maternal caregiver from the infant has a detrimental effect on the infant (Fraley, 2004). Dr. Ainsworth believed that in reference to Dr. Bowlby's Attachment Theory, children need a secure base from which they can wander and explore their world (Bretherton, 1992).

<div align="center">Experiment</div>

Dr. Ainsworth continued her observations of infant and maternal behavior in Uganda. Uganda served as an initial study site (Ainsworth, 1978, viii) for her strange situation experiment. In the villages of Uganda, twenty-eight infants were observed; however, these results could not be analyzed until Dr. Ainsworth was able to address the results of the formal study in Baltimore (Ainsworth, 1978, viii). The actual strange situation experiment was devised in 1964, utilizing a dual purpose (Ainsworth, 1978, viii). First, the strange situation was initially created to develop the maternal bond; and, second, the strange situation experiment was analyzing the effects on the child (Ainsworth, 1978, viii).
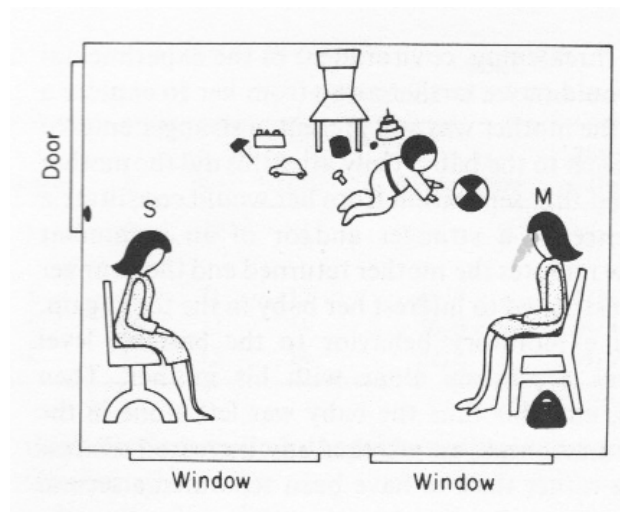
The physical environment consisted of a two-way mirror, minimal furnishings, an area consisting of a child's chair and toys, and chairs for the mother and the stranger (Ainsworth, 1978,

p. 36). Dr. Ainsworth's book, *Patterns of Attachment*, provides an illustration (see figure 2) of the physical convention of the room (Ainsworth, 1978, p. 34).

The strange situation procedure was consistent for all subjects in the study (Ainsworth, 1978, 31). Each infant experienced eight episodes in specific order under controlled circumstances, where the focus of the observers was the reaction of the infant (Ainsworth, 1978, p. 38-41). Table 1 depicts the steps of "The Strange Situation" (Ainsworth, 1978, p. 36).

Results

Dr. Ainsworth and her group of researchers were able to conduct the experiment in a proper setting in Baltimore, Maryland and classify their results into three major categories, each containing subsets that described variances in the categories (Fraley, 2004, par. 4). Of the three categories, a classification nomenclature arises—(a) Secure Attachment, (b) Anxious-Ambivalent Insecure Attachment, and (c) Anxious-Avoidant Insecure Attachment (Duate). Secure Attachment describes infants who were stressed upon the departure of their mother and were calmed when the mother returned (Fraley, 2004, par. 5). Anxious-Ambivalent Insecure Attachment denotes the infants who became very upset when their mothers exited the room (Fraley, 2004, par.5). They had a difficult time being soothed and were angry with their mothers for leaving (Fraley, 2004, par. 5). Finally, Anxious-Avoidant Insecure Attachment defines the infants who did not want to be in proximity of the mother upon her return (Fraley, 2004, par.5). These infants also did not exhibit distress when the mother left the room (Fraley, 2004, par.5). Dr. Ainsworth's detailed findings are compiled in Table 2 (Ainsworth, 1978, p. 59-63).

<div align="center">Developmental</div>

Dr. Ainsworth's work on the Strange Situation experiments and attachment theory has enabled the field of developmental psychology to grow. Table 3 and Table 4 describe the developmental attributes and developmental stages derived Dr. Ainsworth's work.

Application

Education is a process in which the relationship between the teacher and the student dictates the effectiveness of the student learning. Similar to the maternal-infant attachment, the teacher is responsible for creating a bond with the student. The classroom becomes a secure base from which to begin and venture into new experiences and ideas. Teachers must be able to detect and acknowledge those students who are having difficulty in exploring their education due to attachment issues. Unaccompanied children, as defined by Boothby, et al, demonstrate behavior problems that could manifest themselves in the classroom (1988). A successful teacher should be able to delve into a student's life and realize the problem at hand. Once a teacher has enough information regarding the student's history, a teacher should be able to adjust their approach and educate accordingly. Approach changes may include smaller groups, curriculum accommodations, and setting changes to allow for the student's comfort and security.

Reflection

In particular, the classroom in which I observe, the personal relationships established by the students translate into the classroom and my pedagogical outlook. I noticed in the classroom environment this semester that several students were having personal issues that affected their ability to actively participate in their own education. The educator in the classroom had the wisdom to know when to push students in their education and when to allow them some leniency. By having this wisdom in the middle school setting, the social development of the students is just as important as the academic development. By making accommodations for the students needs, a secure base is created. These accommodations allow for the student to grow and develop into an emotionally secure student. My focus in the classroom is foremost the student. Without that focus, I feel that an educator is not as effective, just as a mother is less effective when she is not bonded with her infant.

Table 1.

The "Strange Situation" Experiment Episodes

Episode	Action
1	The infant is observed in the new environment with no further stress placed on him.
2	The researcher allows the infant to explore the room and engage in play with the mother present.
3	The stranger is then queued to enter the room and sit quietly. After one minute, the stranger begins to speak to the mother. (The mother is instructed not to respond to the stranger until after the stranger has begun interacting with the infant.)
4	The mother leaves the room and the stranger interacts with the infant with interest in the infant's behavior and reactions to being approached by the stranger.
5	Begins when the mother returns to the door of the room and speaks to the infant through the door. Once the mother enters the room and greets the baby, she is instructed to place the infant on the floor and sit quietly for a few minutes. The stranger leaves the room while the mother is soothing the baby.
6	The mother quietly leaves the room, leaving the infant alone. The infant is observed while he explores the room or cries due to being left alone.
7	The stranger is told to speak to the baby from outside the door, just as the mother had done in episode five. The stranger repeats the actions of the mother in episode five. (If the infant cannot be soothed, the mother will calm the child down.)
8	The mother returns to the room and allows the infant to greet her before she picks the infant up and the stranger leaves the room.

Table 2.

The "Strange Situation" Experiment Results

Group	Findings
A	Group A demonstrated little separation anxiety. The infants in this classification were not bothered by the departure of the mother nor the interaction with the stranger.
A_1	Infants demonstrated an avoidance of the mother upon her return.
A_2	Infants demonstrated "proximity seeking" and "proximity avoiding" of the mother. The infant approaches the mother to be cuddled and immediately tried to get away.
B	Infant sought out the reuniting with their mother. The infant displayed clinginess toward the mother while allowing the stranger to soothe him until the mother's return.
B_1	Infants were satisfied with the interaction of the mother upon her return at a distance and are not in need of physical contact.
B_2	Infants desired the physical contact with their mothers upon the mother's return.
B_3	Infants showed even more need to be close to the mother upon her return and refused to allow the mother to release them.
B_4	The infants showed "clinginess" to the mother upon her return and cried during the experiment.
C	Infants showed a "maladaptive" behavior during the experiment.
C_1	Infants demonstrated a "mixture of seeking and yet resisting contact" and more likely to be angry and resistant in behavior toward the stranger.
C_2	Infants tended to be passive and "lacking in active initiative."

Table 3.

Developmental Grid Depicting Developmental Attributes and Descriptive Details

Attributes	Descriptive Details		
PHYSICAL	Infant Childhood	Adulthood	
VERBAL	Intonation Vocalization	Inflection Combinations	Nonverbal
EMOTIONAL	Feelings Adjustment issues	Responses Emotive spectrum	
SOCIAL	Cultural influences Action	Reaction Acclimation	Interaction Assimilation
MENTAL	Comprehension Sensory application Articulation	Classification Integration Conceptualization	Analysis Evaluation
MORAL	Self interest Conscience	Obedience Responsibility	Expectations

Table 4.

Developmental Grid Depicting Applications of the "Strange Situation" Experiment

Stages	Description
Maternal-Infant Attachment	The bond between the primary caregiver and the infant will determine whether the infant will be able to form bonds later in life in meaningful relationships.
Secure Attachment	If the infant has the proper background of secure attachment to the primary caregiver, then the infant feels secure enough to venture out on their own and build experiences of the real world, knowing that they can return to the safety of the primary-caregiver.
Maternal-Infant Deprivation	Without the secure attachment with the primary-caregiver, infants experience social and emotional developmental problems.
Anxious-Ambivalent Insecure Attachment	The infant will be scared to make new experiences with strange people or events in the infant's life and will not feel relief when reunited with the primary caregiver.
Anxious-Avoidant Insecure Attachment	The infant will be anxious and unwilling to make new experiences with strange people or events in the infant's life. When the primary-caregiver reunited with the infant, the infant is avoidant of the primary-caregiver.

References

Ainsworth, M., Blehar, M., Wall, S., & Waters, E. (1978). *Patterns of Attachment: A Psychological Study of the Strange Situation*. Mahwah, NJ: Lawrence Erlbaum.

Arcus, D. (n.d.). *Ainsworth, Mary (1913-) Encyclopedia of Childhood and Adolescence. Find Articles at BNET*. Retrieved September 4, 2008, from http://findarticles.com/p/articles/mi_g2602/is_0000/ai_2602000016.

Boothby, N., Ressler, E., & Steinbock, D. (1988). *Unaccompanied Children: Care and Protection in Wars, Natural Disasters, and Refugee Movements*. New York: Oxford University Press, USA.

Bretherton, I. (1998). Attachment And Psychoanalysis: A Reunion In Progress: Commentary. *Social Development*, *7*(1), 132-136. Retrieved September 4, 2008, doi:10.1111/1467-9507.00056

Bretherton, I., Kimble, Gregory A., & Michael Wertheimer (Eds.). (2003). Mary Ainsworth: Insightful Observer and Courageous Theoretician. *Portraits of Pioneers in Psychology* (Vol. 5). Mahwah, NJ: Lawrence Erlbaum Associates, 317-331.

Bretherton, I. (1992). The Origins Of Attachment Theory: John Bowlby And Mary Ainsworth. *Developmental Psychology 28*. 795-777. Retrieved September 18, 2008, from http://www.psychology.sunysb.edu/attachment/online/inge_origins.pdf.

Duate, V., Mendoza, J., & Edwards, C. (n.d.). *Mary Ainsworth and Attachment Theory*. Retrieved Sep. 26, 2008, from Department of Psychology, College of Saint Elizabeth http://psychology.cse.edu/DuarteEdwardsMendoza%20AinsworthAttachment%202006/three_types_of_responses_to_the.htm.

Even Toddlers Need Fathers. (Producer). (2007, September 23). The 'Strange Situation' procedure and Separation Anxiety. You Tube. Podcast retrieved from http://www.youtube.com.

Fraley, R. (n.d.). *A Brief Overview of Adult Attachment Theory and Research | R. Chris Fraley*.

Retrieved September 4, 2008, from http://www.psych.uiuc.edu/~rcfraley/attachment.htm.

The Archives of the History of American Psychology. (n.d.). Retrieved November 8, 2008, from

http://www3.uakron.edu/ahap/ainsworth_m.htm.

World Health Organization. (1962). *Deprivation Of Maternal Care: A Reassessment Of Its Effects*

(Public Health Papers;No.14). Geneva: Author.

Running head: ALOIS ALZHEIMER

Alois Alzheimer

Maura Bird

Shepherd University

Abstract

This paper chronicles the life and work of the German Psychiatrist Dr. Alois Alzheimer. Initial topics being discussed include biographical information and historical events that were an integral component in Dr. Alzheimer's development. Other topics discussed include Alzheimer's professional development, experiments he conducted, and work he is accredited with. In summation, the importance of Dr. Alzheimer's work and how his theories can be put to work in today's classrooms will be explained.

Alois Alzheimer

Biographical

Alois Alzheimer was born on June 14, 1864 in the town of Markbreit in Bavaria, Southern Germany (Alois, 2008, p. 1). He received his degree in medicine from Aschaffenburg Tubingen and Wurzburg in Berlin in 1887 (Alois, 2008, p. 1). After his graduation, he began to work at the state asylum in Frankfurt am Main. It was during this period of time that Alzheimer developed strong interest in the cortex of the human brain and began doing research on it (Maurer, 2002, pg. 23). In 1894 Alois married Cacilla Geisenheimer who was the widow of a banker (Maurer 2002, pg. 27). In 1885 Alzheimer would be appointed as the director of the Frankfurt Asylum am Main (Maurer, 2002, pg. 32).

Tragically in 1901 his wife passed away only seven years in to her marriage (Maurer, 2002, pg. 16). After the death of his wife Alzheimer began looking for a new job, he wanted to find a position that would allow him to merge his passion for research with his fervor for clinical practice (Maurer, 2002, pg. 35).   Alzheimer took a position as a research assistant to Emil Kraepelin in 1903 at the Munich medical school (Holstein, 1997, p.2). During his time there he created a new laboratory for brain research; he had several papers published on the diseases and conditions of the human brain (Maurer 2002, pg. 38). Some of his work includes 'Histologic and Histopathologic Studies of the Cerebral Cortex', which was published between the years of 1907 and 1918, and was a six volume study (Alois 2008, p.1).

In 1913 Alois Alzheimer was appointed as the chair of the Psychology Department at Friedrich-Wilhelm University (Maurer, 2002, pg. 18). During his transit to his new post he contracted a severe cold which would later become accompanied by endocarditis (Maurer, 2002, pg. 18).   Alzheimer never recovered from this illness and passed away on December 19 1915 at the age of 51 (Maurer 2002, pg. 18). He was buried next to his wife in Frankfurt am Main (Alois,

2008, p. 1). He was survived by three children, two daughters Gertrud and Maria, and a son Hans (Maurer 2002, pg. 19).

<div align="center">Contextual</div>

When Alois Alzheimer was born in 1864, it was during a time of great change in Germany. The Prussians became more lenient regarding Bavaria following their victory in the Prussian-Austrian War in 1866 (Bavaria, 2008). Bavaria joined Prussia in the Franco-German war of 1870 to secure their place in the new German establishment (Bavaria, 2008). With all of this in motion Alois was a happy child in Markbreit without a care in the world (Maurer, 2002, p.29). Germany adopted a new constitution in 1871 in correspondence with the founding of the German empire under William I (Bavaria, 2008). In this new constitution Bavaria received more independence than the other states of the empire (Bavaria, 2008). This was a time of great social change in Germany; the country's landscape had been forever changed. Slowly but surely, Germany began the process of industrialization (German, 2008).

The years of 1872 to 1880, were a difficult time for Catholic families in Bavaria, Reich Chancellor Bismarck launches the "Kulturkampf" or cultural struggle against the Catholic church (Milestones, 2008). During this time, Alzheimer and his family as well as all other catholic families were pressured to leave the area because they were not accepted very well by the community (Maurer, 2002, p. 29). By 1874, Alois' parents' had decided that it would be best if Alois was educated somewhere other than Markbreit (Maurer, 2002, p. 29). Alois' father did not feel that the schools in Markbreit would be adequate for his son (Maurer, 2002, p.30). His father and uncle made the decision for Alois to attend the prestigious Royal Humanistic Gymnasium.

Arrangements needed to be made because this school was in a different town. Alois, who was ten at the time, was placed in a guest house where he would attend school (Maurer, 2002, p. 30). Even though Alois was on his own, he thrived in this environment, developed a very strong

work ethic and received high marks in his studies (Maurer, 2002, p. 30). In 1878 the rest of his family finally moves to Aschaffenberg (Maurer, 2002, p. 30)   He graduated from the gymnasium in 1883.

It had been Alois' passion since he was a child to have a career in the sciences (Maurer, 2002, p. 32). At the time Berlin was a budding metropolis in the field of science (Maurer, 2002, p. 33). Alzheimer was particularly inspired by two scientists working in Berlin at the time, Rudolph Virchow, with his work in cellular pathology and oncology, and Robert Koch, for his discovery of the bacteria that causes Tuberculosis (Maurer, 2002, p. 34). Virchow's believed that society as a whole should "think in terms of practical outcomes and to place science in the service of such goals" (Maurer, 2002, p. 34). This is strikingly similar to the philosophy Alzheimer will later develop as he works with his patients in the Frankfurt Asylum am Main.

After only one semester, Alzheimer decided Berlin was not the city for him (Maurer, 2002, p.32). He went on to study at Wurzburg for three semesters he then transferred to Tubingen to study medicine (Maurer, 2002, p.39). Alzheimer returned to Wurzburg to complete his doctoral thesis on the ear wax glands. On May 12, 1888 Alzheimer passed his state medical exam and received his medical license on June 4, 1888 (Maurer, 2002, p.43). Alzheimer decided to continue his education and spent the semester following his graduation studying at the Anatomical Institute (Maurer, 2002, p.35). It was during this time that he developed his skills and passion for microscopic analysis (Maurer, 2002, p.35).

The 1890's proved to be a prosperous time for Germany, the social upheaval and discord had ceased (Bavaria, 2008). Germany began to establish itself as a major economic and political power in the world; this growth would continue until the onset of World War I (German, 2008). It was during this time that Alzheimer worked at the Asylum am Main and did much to improve the quality of patient treatment as well as the conditions of the facility as a whole (Maurer, 2002,

p.53). During this period Alois worked alongside Franz Nissl from the Munich Medical School, the two became lifelong friends (Maurer, 2002, p.51).

Alzheimer continued to pursue his exploration of microscopic examination; learning new techniques for attaining an optimal slide (Maurer, 2002, p.51). Through his work at the Munich medical school Alois Alzheimer discovered neurofibrillary tangles in the brains of patients who had experienced premature dementia and experienced loss of cognitive function, this condition would later become known as Alzheimer's disease and would change the face of psychology forever (Maurer, 2002, p.88). The tumultuous social and political climate in Germany during Alois' formative years certainly impacted his life. It is quite impressive that despite these factors, Alois Alzheimer was able to obtain a world class education and become a successful psychiatrist. Alois was influenced by many people along his journey, each of those people left an indelible mark on his character that helped lead to his eventual success.

Experimental

Alois Alzheimer made several very important contributions to the field of Psychiatry during his career. While working in the asylum at Frankfurt am Main not only did Alzheimer and his colleagues change the design of the actual asylum itself; they completely revolutionized the treatments offered within (Maurer, 2002, p.48). Alzheimer implemented duration bath therapy, which is a treatment in which "unruly patients could lie for hours, often for days in a bathtub" (Maurer, 2002 p.58). Studies conducted by Alzheimer at this time indicate dramatic results when using this therapy on patients with manic episodes or "paralytic states of excitation" (Maurer, 2002 p.58).

In 1891, Alzheimer published a case of a thirty three year old male patient who was admitted for the beginning stages of mental illness compounded with muscular atrophy of his left hand (Maurer, 2002 p.59). The man spoke in continuous rapid ramblings that made little to no

sense, and experienced rapid tremors throughout his entire body (Maurer, 2002, p.59). Alzheimer diagnosed the man as having "progressive weakening of the muscles and emaciation caused by degeneration of the spinal marrow and the long bones, along with diffuse disease of the nerve cells of the medulla oblongata" (Maurer, 2002, p.59). After the patient died Alzheimer and Nissl performed an autopsy which confirmed this diagnosis. Alzheimer concluded that he had established a neuroanatomic origin of a mental illness.

Another achievement of Alzheimer during his time in Frankfurt was the creation of what is referred to as the "modern histopathology of the cerebral cortex" (Maurer, 2002 p.61). That is the visual depiction of the microscopic structure of diseased or abnormal tissues in the cerebral cortex. Alzheimer used a machine called a camera lucida to draw these slides. A camera lucida projects an image from what is seen through a microscope onto a drawing surface through the use of a prism (Maurer, 2002, p.61). Alzheimer would then trace the image with a pencil and color it in (Maurer, 2002, p.61). These drawing were revered by the scientific community for their detail and artistic value (Maurer, 2002, p.61).

Alzheimer decided that his next project would involve the topic he was most passionately interested in, arteriosclerosis of the brain (Holstein, 1997, p.3). Arteriosclerosis are degenerative changes in the arteries, characterized by thickening of the vessel walls and accumulation of calcium with consequent loss of elasticity and lessened blood flow (Holstein, 1997, p.4). Alzheimer believed that by showing the anatomical differences in patients' brains' that we could understand more about the cause of mental disorders. Alzheimer was one of the first to undoubtedly link damages or defects in the human brain to mental illness (Maurer, 2002, p.116). It was this very idea that was the topic of Alzheimer's *Habilitation* or doctoral dissertation (Maurer, 2002, p.117). Alzheimer said of his *Habilitation,* "the results of these investigations will be a gauge of the extent to which pathological histology can prove itself to be of use for clinical

psychiatry" (Maurer, 2002 p.119).   He chose twenty six patients who were diagnosed with general *paresis* which is a disorder characterized by progressive dementia and paralysis. In the dissertation he included detailed case histories, and patient interviews. Through his research, Alzheimer was able to create a detailed list of symptoms for general *paresis*, a milestone at the time. The diagnosis of *paresis* could no longer be questioned (Maurer, 2002 p.121). Alzheimer published his findings in 1904; in March of 1905, a German zoologist discovered that the cause of paresis was in fact untreated syphilis (Maurer, 2002 p.122).

Alzheimer is best known for is his work with a patient named Auguste Deter. Auguste was a patient of Alzheimer's at the asylum at Frankfurt am Main. She was admitted with dementia in 1901.Her symptoms included memory loss, disorientation, and hallucinations (Alois, 2008, p.1). This puzzled Alzheimer as the woman was only in her early fifties, quite early for the onset of dementia (Alois, 2008, p.1). Alzheimer described Deter as having an "unusual disease of the cerebral cortex" (Alois, 2008, p.1). Upon her death at fifty five, her family had her brain sent to Alzheimer for examination (Holstein, 1997, p.1). Alzheimer discover that Auguste had various abnormalities of the brain including thinning of the cerebral cortex, senile plaque, and neurofibrillary tangles which had never been previously described (Holstein, 1997, p.1). Alzheimer went on to present these findings to his colleagues in 1906 in a lecture (Alois, 2008, p.1). This new condition which was similar to dementia except for its earlier onset was well received by the medical community. And the disease known as *Alzheimer 's disease* went down in history (Small, 2006, p.1).Kraeplin named the disease after Alzheimer, much to everyone's surprise (MC, 2006, p.3) We still continue to learn much about this disease every year and further research will give us more insight. Right now there is no cure for Alzheimer's; however doctors are making great strides in the form of treatments for patients with the disorder (What, 2008 p.1).

Theoretical

Alois Alzheimer forever changed the field of Psychiatry by changing the way mental illnesses are diagnosed and treated to this day (Engstrom, 2007, p.1). Early in his career Alzheimer was responsible for introducing a new progressive treatment program which eventually eliminated the need for restraint and coercion of his mental patients (Maurer, 2002, p.54). Alzheimer believed that patients would respond better to treatments if they were more comfortable and at ease (Maurer, 2002, p.55). This goal was much easier reached through the aid of Alzheimer and his colleagues "non-restraint" therapies (Maurer, 2002, p.55). The idea behind non-restraint therapy is introducing all stimuli in the most tender and cautious manner so as to keep the patients stress and nervousness to a minimum (Maurer, 2002, p.57). Another crucial component to the non-restraint theory is conversation therapy, or a physician's conversations with patients (Maurer, 2002, p.58). The physicians' must establish trust, engage in dialogue, and listen unwearyingly to their patients (Maurer, 2002, p.59).

After leaving Frankfurt, Alzheimer began work on his doctoral thesis on the cause of paresis (Maurer, 2002, p. 28). While he was unable to discover a direct cause for the affliction, he was able to link the disorder to changes in the brain (Maurer, 2002, p.60). He was able to link mental illness to changes in the brain; which at the time was a huge discovery in the area of mental illness (Maurer, 2002, p.59). Alzheimer knew there was much more work to be done. He viewed his work as "building blocks in hand to which many others need to contribute to construct a building" (Maurer, 2002, p.77).

Perhaps the theory Alzheimer is best known for is the discovery of the disease which bears his name. Alzheimer extensively studied patients who had been diagnosed with dementia, especially those patients who had symptom onset much earlier than had come to be expected (Holstein, 1997, p.4). Alzheimer noted the rapid decline of cognitive functioning in the patient as well as rapid decrease in social skills (Holstein, 1997, p.4). Alzheimer described what he found as

"In the centre of an otherwise almost normal cell there stands out one or several fibrils due to their characteristic thickness and peculiar impregnability. Numerous small miliary foci [amyloid plaques] are found in the superior layers. They are determined by the storage of a peculiar material in the cortex. All in all we have to face a peculiar disease process [which has] been verified recently in large numbers" (MC, 2006, p.2). This disease became known as Alzheimer's disease, scientists continue to learn more about the disease each year.

Reflection

Alois Alzheimer joined the field of psychiatry during its preliminary stages. It was still a field of medicine that was still relatively unexplored. The theories and practice created by Dr. Alzheimer had a profound effect on not only the field of psychiatry but also on the field of medicine as a whole. Alzheimer's work "led to a reinterpretation of the relationship between neuropathology and behavior; in turn, this view dissolved therapeutic nihilism and encouraged thoughts about prevention" (Holstein, 1997, p. 2).

Alzheimer's approach to mental illness was quite radical for the time. He practiced new therapy on his patients that were unlike anything being used in the medical community at the time (Maurer, 2002, p. 54). The idea of open treatment and practicing non-restraint with the patients was quite revolutionary (Maurer 2002, p. 54). Alzheimer believed that many of the afflictions of his patients could be overcome with therapy (Maurer 2002, p. 53).   Dementia became known as a regular part of growing old, it was almost expected. Doctors of the time saw no reason to improve the quality of life during old age (Holstein, 1997, p. 2). Alzheimer believed that improved therapy practices would be beneficial to all patients (Maurer, 2002, p. 38).

I believe that the work of Alzheimer gives us great insight in to the developing minds of students in the classroom. Certainly measures that have shown to improve the mental function in adults could be adapted to children as well. Alzheimer demonstrated that keeping a patient as

calm as possible, without the use of physical restraint improved their disposition in addition to increased response to therapy (Maurer 2002, p. 56).

The idea of this is evident in the classroom that I am observing on a daily basis. There are several measures taken to ensure that the students are comfortable. The room is a comfortable temperature, and the teacher has hung colorful materials on the wall to make the room brighter. The students are seated in pairs allowing them to socialize with their peer, which provides comfort to most students in Middle School. Another measure taken to help the students feel comfortable is the level of freedom they are given. The students are allowed to discuss their class work with their neighbors. The students have the option to move around the room to work on class work. These practices are quite a departure from traditional teaching methods, similar to Alzheimer's ideas of therapy and his departure from the popular ideas of the time.

Alzheimer pioneered research in the connection between slight anatomical differences in the brain and individual disease processes (Maurer, 2002, p. 116). In doing this psychiatry, became equally relevant to other fields of medicine in terms of research and results (Maurer 2002, p. 116). During his relatively brief career he was able to make enormous contributions that are still very much respected and utilized to this day.

<div align="center">Application</div>

The work of Alois Alzheimer has many practical applications in today's classrooms. Alzheimer found that giving his patients physical freedom as well as emotional comfort improved their mood and they appeared more relaxed than had previously had been observed (Maurer 2002, p.57). The same idea should hold true for students in a classroom. The more comfortable and content they are the more amenable they will be to learning new material. Teacher's should do all they can to make their classroom's bright, colorful, and inviting to their students. Alzheimer also

found that over time the patients; as a result of increased freedoms had a lower instance of

behavior disturbances (Maurer 2002, p. 55).

Another vital component to Alzheimer's very progressive theory of open therapy was the

practice of conversation therapy (Maurer 2002, p.59). Dr. Alzheimer would have long detailed

conversations with his patients transcribed; which he would include in the patients' file (Maurer

2002, p.5). The patients felt connected and comfortable with Alzheimer allowing them to open up

which increased reaction to administered therapies (Maurer 2002, p.58). This same model is very

functional in the classroom. Students will respond more to a teacher that they believes cares about

their well being than one who does not.

In the study of the life and work of Alois Alzheimer one learns many things. Alzheimer

literally illustrated the minute structures of the brain which are responsible for mental illness; thus

propelling the field of psychiatry forward as a valid branch of medicine (Maurer 2002, p.76). His

work ethic illustrates the importance of teamwork and continued learning to achieve success

(Maurer 2002, p.77); these attributes' are very important in a classroom setting. Students' need to

understand how important it is to work in collaboration with their peers, working in groups helps

students generate new ideas as well as stimulate discussion. Alzheimer's work with Franz Nissl is

an excellent example of the positive effects of peer collaboration. Alois Alzheimer very much

understood his place in the field of psychiatry; he knew it was his duty to build the foundation of

knowledge of the brain (Maurer 2002, p.80). This would allow those that follow him in psychiatry

to build off his work and make vast advancements in the field (Maurer 2002, p.81). It is important

for students to learn this very idea. Learning is a building process as well; the material students'

learn gets built upon with each passing grade. It is crucial for students to comprehend the

connection between different lessons taught in the classroom.

Even though Alzheimer did not write his own direct theory on education he still is able to contribute much to the field. Learning the way the brain works and how to optimize performance are crucial issues associated with education. Using the resources of additional fields to optimize results is the epitome of what Alzheimer believed. He was a strong believer in the marriage of research and practice (Maurer, 2002, p.38). The brain is a fantastic body that amalgamates input from emotional, physical, and environmental experiences to dictate behavior. Theories that have been proven effective in preventing the deterioration of brain function in adults should be used to foster development and cultivation of intelligence in students by teachers in the schools. This very idea is an excellent example of the marriage of research and practice in the classroom.

Developmental Grid Table

ALOIS ALZHEIMER	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL	Adulthood Impaired swallowing Late Adulthood Abnormal reflexes Sleep disturbances Rigid muscles Compulsive, repetitive behaviors Difficulty walking and sitting Incontinence
VERBAL	Aphasia
EMOTIONAL	Withdraw from society Delusions Subdued personality Significant personality changes Suspiciousness Disorientation Fear
SOCIAL	Progressive decrease in knowledge of current events Inability to remember names Inability to recognize faces
MENTAL	Decreasing ability to perform arithmetic Difficulty thinking Retain very little knowledge Loss of memory (progressive) Trouble thinking and reasoning
MORAL	Detachment from long held moral beliefs as cognitive functioning decreases

THEORY	
STAGES	**DESCRIPTION**
Stage 1: No Impairment	Individuals experience no memory problems. No problems are evident during medical interview by a health care professional.
Stage 2: Very Mild Cognitive Decline	Individuals begin to notice memory lapses, especially in forgetting locations of everyday objects. However these problems are not evident during a medical interview by a health care professional.
Stage 3: Mild Cognitive Decline	Individuals with these symptoms can be diagnosed with early stage Alzheimer's in some, but not all cases. Friends and family begin to notice mental deficiencies. Difficulty with memory and concentration may be evident during a medical interview by a health care professional.
Stage 4: Moderate cognitive decline	During this stage careful medical interview will detect significant deficiencies across the physical, mental, verbal, social, and emotional spectrum.
Stage 5: Moderately Severe Cognitive Decline	Major gaps in memory and deficits in cognitive function emerge. Some assistance with day to day activities in necessary.
Stage 6: Severe Cognitive Decline	Memory difficulties continue to worsen, significant personality changes may emerge. Individuals need extensive help with daily activities.
Stage 7: Very Severe Cognitive Decline	Individuals lose ability to respond to their environment. In addition, individuals are also unable to move as well as speak.

References

"Alois Alzheimer." Retrieved August 25, 2008, from http://www.alz.co.uk.alzheimers/aa.html

"Bavaria." 2008. In Encyclopedia Britannica online. 12 Sept. 2008. Retrieved September 12,

      2008, from search.eb.com/eb/article-9013830

Engstrom, E. (2007, September). Researching Dementia in Imperial Germany: Alois Alzheimer

      and the Economics of Psychiatric Practice. *Culture, Medicine, & Psychiatry*, 31(3), 405-

      413. Retrieved August 25, 2008, doi: 10.1007/s11013-007-9060-4

"German History Timeline" Retrieved September 12, 2008, from, http://www.smart-travel-

      germany.com/german-history-timeline.html

Holstein, M. (1997, Spring 97). Alzheimer's disease and Senile Dementia, 1885-1920: A *Journal*

      of Aging Studies, 11(1). Retrieved August 25, 2008, from Academic Search Premier

      Database.

Maurer, K., & Maurer, U. (2003). Alzheimer: the life of a physician and the career of a disease.

      New York: Columbia University Press.

MC. (November 3, 2006). "100 years of Alzheimer's Disease". Retrieved August 25, 2008,

      from http://neurophilosophy.wordpress.com/2006/11/03/100-years-of-alzheimers

"Milestones in German History" Retrieved September 12, 2008, from,

      www.germany.info/relaunch/culture/history/milestones.html#1701

Small, D., & Cappai, R. (2006, November). Alois Alzheimer and Alzheimer's disease: a

      centennial perspective. *Journal of Neurochemistry*, 99(3), 708-710. Retrieved August

      20, 2008, doi: 10.1111/j. 1471-4159.2006.04212.x

"What is Alzheimer's" (2008). Retrieved August 25, 2008, from

      http://www.alz.org/alzheimers_disease_what_is_alzheimers.asp.

Running head: ALBERT BANDURA

Albert Bandura

Lauren Boyer

Shepherd University

Abstract

Albert Bandura was born on December 4, 1925 in Canada where he learned to appreciate his education and the values his parents taught him. Bandura continued his education first at the University of British Columbia where he realized his passion for psychology. Bandura then went on to the University of Iowa to pursue his graduate studies in psychology. After graduating with a Ph.D. in 1952, Bandura joined the faculty at Stanford University, developed his social cognitive theory, and wrote several books on his theory. Bandura became well-known for his social cognitive theory which simply states that individuals learn particular behaviors by observing a model and imitating the observed behaviors without reinforcement. Bandura also states in his theory that individuals can only learn these behaviors through the processes of attention, retention, production, and motivation, also known as self-efficacy. Bandura's theory can be particularly helpful in the classroom and his ideas can be applied to further expand teachers' understanding of their students' level of education.

Albert Bandura- Biographical

Albert Bandura has accomplished many things in his life and among those accomplishments is his social cognitive theory. Bandura's life of accomplishments began the day he was born December 4, 1925 in Mundare, in northern Alberta, Canada. Bandura's family was of Eastern European descent for his father emigrated to Canada from Krakow, Poland and his mother from the Ukraine. Neither one had a formal education but they established a high value on the education of their six children of whom Albert was the youngest as well as the only boy among them. Bandura grew up with the influence of his father which helped him to succeed in his academics especially since the resources provided from the school were inadequate but ended up "serving him well rather than being an insurmountable handicap" (Information on Self-Efficacy, 2008).

While in high school, Bandura's parents encouraged him to experience things outside of their small hamlet during his summer vacations. One summer he worked in a furniture manufacturing plant in Edmonton which gave him the carpentry skills he needed to support himself through college while working with a woodworking plant part-time. Another summer Bandura worked at Whitehorse in the Yukon filling holes on the Alaska Highway. It was this job that sparked Bandura's interest and "appreciation for the psychopathology of everyday life" (Information on Self-Efficacy, 2008).

Bandura decided to attend college at the University of British Columbia and major in one of the biological sciences but he ended up taking an introductory psychology course which impressed him so much that he decided to concentrate on it. After three years, he graduated with the Bolocan Award in psychology and went on to the University of Iowa where he would pursue his graduate studies in psychology at the "theoretical epicenter for graduate study" (Gold Medal Award for Life Achievement in the Science of Psychology, 2006). Before leaving the University

of British Columbia, Bandura was informed by his advisor about the rigorous doctoral program, and how some applicants found it to be a "taxing experience" (Information on Self-Efficacy, 2008).

In the 1930s, the social learning theory was introduced at the Yale Institute of Human Relations which sought to provide explanations to key areas of personality and social development. One of the key collaborators in this research was Clark Hull whom Bandura tended to disagree with in terms of this emphasis on trial-and-error learning. He believed that knowledge and competencies were obtained through experiences, which coincides with John Dollard and Neal Miller's studies of modeling and imitation which later leads Bandura to his social cognitive learning theory.

During his studies at the University of Iowa, Bandura found the Department of Psychology to be a very challenging but highly supportive environment. Even though he found the department to be challenging, Bandura still didn't find it to be as tough as his undergraduate advisor had made it out to be. It was during his studies here that Bandura met Virginia Varns who was on the teaching staff of the College of Nursing and would later become his wife and the mother to his two daughters, Mary and Carol. By 1951, Bandura received his Masters degree and in 1952 his Ph. D. degree in clinical psychology from the University of Iowa. In 1953, Bandura took a position at Stanford University where he has remained to this day.

After joining the faculty at Stanford University, Bandura went on to achieve many accomplishments such as his social cognitive theory, theory of self-efficacy and the publication of several books and in turn received numerous awards for his accomplishments. By 1964, Bandura became a full professor at the university and later served as the chairman of the Department of Psychology during 1976-1977. Albert Bandura is recognized for these accomplishments but he is

best known for his social cognitive theory which becomes one of the few "grand theories" that influenced psychology and still manages to contribute to the science of psychology.

Contextual

It was during Bandura's time at the University of Iowa that he was influenced the most in psychology. Bandura studied the ideas of Clark Hull, a prominent psychologist of the time at Yale University, along with his students Kenneth Spence and Robert Sears (Nordby/Hall, 1974). "Bandura was not attracted to Hullian theory because of its emphasis on tedious trial and error learning" but he did agree with the studies conducted by Neal Miller and John Dollard (Information on Self-Efficacy, 2008). Miller and Dollard believed humans acquired their knowledge and capabilities through modeling and imitation which later leads Bandura to his theories of social cognitive learning and self-efficacy.

Experimental

Albert Bandura has conducted various studies and experiments over the course of his career in psychology but his best known were the bobo doll studies (Boeree, 1998). This was Bandura's initial experiment and it was conducted to test his theory of social learning or humans learning through modeling and imitation, especially in the case of children imitating aggression (Bandura's Social Cognitive Theory: An Introduction, 2008). For this study, Bandura filmed a student beating up a bobo doll by punching it, kicking it, sitting on it as well as hitting it with a hammer, and while doing so she would shout out "various aggressive phrases" (Boeree, 1998). Once the film was complete, Bandura showed it to a group of kindergarteners who enjoyed watching it. They were later let out to play in a room where observers were sitting to record their behaviors. Just as Bandura predicted, a lot of the children began beating the bobo doll while shouting just as the young woman had done in the film that was shown to them earlier.   Bandura

did a large number of variations for this study such as rewarding or punishing the model in various ways and rewarding the kids for their imitations, but this study was highly criticized because many said the outcome was due to the fact that bobo dolls are supposed to be hit. In response to this criticism, Bandura recreated the study but used a live clown in its place and the same outcome was repeated by the children.

In 1961, Bandura and A. C. Huston found in a study that "children tended to imitate certain aspects of an experimenter's behavior even when those aspects were irrelevant to the task of the experiment" (Baller & Charles, 1968). They realized the imitation was stronger when an adult was more "warm and rewarding" toward the children during an earlier interaction compared to an adult who was more "aloof and cold" (Baller & Charles, 1968). However, they found that an aggressive behavior was imitated regardless of the previous interaction between the children and adults, therefore concluding that aggression seems to be an easily acquired behavior.

By 1963, Bandura and Richard Walters found that grade-school boys showed more aggressive behaviors if their father demonstrated aggressiveness compared to boys with less aggressive fathers (Baller & Charles, 1968).   Along with this, they discovered that the more aggressive boys "adopted dissocial values to a greater extent" compared to the withdrawn boys (Baller & Charles, 1968).   Bandura and Walters concluded from this study that boys are more likely than girls to imitate these behaviors, especially from male models, and the same could be said about girls imitating the behaviors modeled by females. Through these various experiments and studies, Bandura was able to compile the information he needed for his social cognitive theory and all of its aspects.

<div align="center">Theoretical</div>

Bandura gave his theory the label "social cognitive" to "distance it from prevalent social learning theories of the day and to emphasize that cognition plays a critical role in people's

capability to construct reality, self-regulate, encode information, and perform behaviors" (Information on Self-Efficacy, 2008). The major concepts of Bandura's social cognitive theory are observational learning, the capability to symbolize, forethought, learning through vicarious experience, self-efficacy, self-regulation and self-reflection. With these concepts and capabilities, individuals acquire what they need to function as human beings in society.

Bandura believed that people learn particular behaviors by observing a model and imitating the observed behaviors, even without reward or punishment. Although reinforcement is not required to attain observable behaviors, it can have an influence (Nordby & Hall, 1974). With reinforcement, people can acquire, or in some cases not acquire, observed behaviors without experiencing it themselves because they can observe the outcomes of those situations and whether or not the model was rewarded or punished for his/her acts. This experience is known as vicarious learning which occurs when people experience the same feelings or emotions that another person is displaying (Nordby & Hall, 1974). The behavior of the observer can then be "modified on account of the reinforcement administered to a model" (Bandura & Walter, 1963). Individuals can then learn a new behavior without "undergoing the trial and error process of performing it" (Information on Self-Efficacy, 2008). These observable behaviors, however, can only be learned through the processes of attention, retention, production, and motivation.

Attention is an individual's ability to selectively observe the actions of a model. In order for these observations to be reproduced, they must be retained in the memory which is made possible by extracting meaning from the environment, also known as symbolizing. Once the behavior is observed, the individual must engage in the observed behavior which is referred to as production. Once the individual has been engaged in the behavior and whether or not it produces valued results and expectations, he or she may be motivated to adopt the behavior and imitate it in the future.

Bandura says "self-efficacy is the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations" (Information on Self-Efficacy, 2008). These beliefs lay the foundation for human motivation, well-being, and personal accomplishment. Unless individuals believe their actions will produce a desired outcome, they will have little incentive or motivation to act and persevere during difficult tasks. Self-efficacy beliefs also influence the choices people make and the courses of action they take. Individuals will tend to select tasks and activities in which they feel confident and will try to avoid the ones in which they lack this confidence. Self-efficacy also determines the effort, perseverance and resilience people have in the face of difficult tasks and situations because the higher the sense of efficacy, the greater the effort, persistence, and resilience (Information on Self-Efficacy, 2008). Individuals form their self-efficacy beliefs by getting their information from four primary sources: mastery experience, or one's previous performance, vicarious experience, social persuasions received from others, and somatic and emotional states such as anxiety, stress, arousal, and mood states. Self-efficacy beliefs are also a very critical determinant of self-regulation.

Self-regulation influences one's motivation, thought processes, and emotional states and patterns of behavior. The degree to which people self-regulate their actions and behaviors involves the accuracy and consistency of their self-observation and self-monitoring, the judgments they make regarding their actions, choices, and attributions, and their evaluative reactions to their own behavior through this process. Within Bandura's social cognitive theory is the capability of self-reflection which happens to be the prominent feature of the theory. Through self-reflection, people are able to "make sense of their previous experiences, explore their own cognitions and self-beliefs, engage in self-evaluation, and alter their thinking and behavior accordingly" (Information on Self-Efficacy, 2008).

Reflection

By understanding Bandura's social cognitive theory, one can apply it to necessary situations. Completing this research on Albert Bandura has taught me how I can apply his social cognitive theory in the classroom and better understand the best methods and strategies to ensure my students can receive the best education I can provide them. Doing this research is an important step to my goal as an educator for it has allowed me to understand the important psychologists and their theories which have set forth a new wave of educating students in any classroom.

Many people do not understand how they have grown to be the person they are, but with the theories of many well-known psychologists and Bandura's social cognitive theory, individuals can comprehend all of the stages and phases they had to complete to become who they are now. Bandura focuses on the concept that humans learn by observing models and do so through various human capabilities. These observed behaviors will then influence the behavior of the observer. In order for any educator to fully understand how to educate their students, they must know the students behaviors and what influences them. Educators can then ensure that certain behaviors are being expressed towards certain topics in order to reinforce their students' learning. Bandura's theory also discusses the importance of self-efficacy beliefs in order to accomplish any tasks. It is important that teachers display their own self-efficacy beliefs in the classroom and encourage students so they too believe in their capabilities.

Within the first grade class I have been observing, the students are beginning to read. For the students to properly learn to read, they need to be able to do it independently at some point or another. In order for the teacher to ensure this, she set up a process the students must go through before asking for her help. First they try to figure a difficult word out on their own by trying to sound it out. If they still can't figure it out, they must ask one of their fellow classmates. Finally, if the students still haven't figured it out without the teacher's assistance, they receive assistance

from the teacher. With this process, students are encouraged to set standards for themselves instead of relying on others to complete any tasks they find difficult.

Once individuals comprehend the concepts of Bandura's theory, they can begin to adapt their understanding in a way that will benefit others around them.   This idea is particularly important for any educator who wishes to provide their students with an education that challenges the students to their full capacity yet the students still continue to succeed and keep the eagerness to learn. Teachers who know the important developmental theories can apply them in their classrooms to ensure this overall goal can be achieved. By researching these theorists and their theories, everyone can learn the importance of the theories' application to our own growth and development as well as the application it has to education.

Application

Albert Bandura's social cognitive theory has a lot of applications toward education and how children learn certain behaviors. One concept of his theory that is important for student achievement is self-efficacy beliefs. These beliefs are also important for any educators because it allows them to "influence student engagement and learning, even among those students who may be difficult or unmotivated" (Hoy, 2003-2004). Teachers with a high sense of self-efficacy tend to be "more willing to experiment with new methods to better meet the needs of their students, and they are more committed to teaching" (Hoy, 2003-2004). Bandura's theory can also provide teachers with a better understanding about their students' behaviors.

"In Bandura's theory, an individual's beliefs about him-or herself are a strong influence on behavior" (McCabe, 2006). When a student does not participate in a particular task, it may mean that student believes he or she doesn't have the skills to complete the task. "A self-efficacy belief is task specific, exists prior to attempting a task, predicts how well a person thinks he or she will do, and may vary within the same individual according to the task" (McCabe, 2006). Once

teachers are able to identify this, they can begin to plan a course of action as to how to solve this problem and enhance the student's belief in his or her capabilities. In order to overcome this issue, teachers can provide feedback which can affect a student's self-efficacy. "Verbal feedback from the teacher is especially critical and needs to be crafted to convince the learner that he or she possesses the ability to complete a given task" (McCabe, 2006). Teachers can also influence student learning by becoming their model.

Bandura's theory is very well known for its idea of learning through observation which is also called vicarious experiences. Teachers can apply this concept by modeling to students what is expected from a task and with a little practice and repetition; students will learn to perform the observed behavior themselves. Teacher may also do this by having students observe one another. Within my field experience, I have noticed the teacher applies Bandura's theory by asking students to observe another student who is doing his or her work correctly, that way they are learning how to complete the task and learning the proper way to behave in class. Students who observe other students with higher efficacy are also more likely to be more productive in their classroom tasks which will also influence their roles outside of the classroom and their conduct later on in life (Bandura, Caprara, Barbaranelli, Gerbino &Pastorelli, 2003). Bandura has led a very accomplished life and his contributions to psychology have been astounding. His well accomplished theory has allowed us to understand the cognition behind our behaviors so that we may begin to understand how to shape those behaviors towards more productive and successful ones leading us to a future of understanding.

Developmental Grid Table

Albert Bandura	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL	
VERBAL	Vocabulary development
EMOTIONAL	Responses Imagination Aggression Neoteny (adolescent characteristics transfers into adulthood)
SOCIAL	Cultural influences Action Maneuverability Reaction Acclimation Interaction Assimilation
MENTAL	
MORAL	Self interest (egocentrism) Obedience Responsibility Sense of fairness Expectations

THEORY- Social Cognitive	
HUMAN CAPABILITIES	**DESCRIPTION**
Stage 1: Symbolize	By using symbolic capabilities, people can extract meaning from their environment, construct guides for action, solve problems cognitively, support forethoughtful courses of action, gain new knowledge through reflective thought, and communicate with others.
Stage 2: Forethought	People plan courses of action, anticipate the likely consequences of these actions and set goals and challenges for them to motivate, guide and regulate their activities.
Stage 3: Vicarious Learning	Allows individuals to learn behaviors without undergoing the trial and error process of performing it by observing others perform the behaviors and the reinforcement they receive for it.
Stage 4: Self-Efficacy	An Individuals belief of their capabilities to organize and execute courses of action required to attain designated types of performances.
Stage 5: Self-Regulation	Involves the accuracy and consistency of their self-observation and self-monitoring, the judgments they make regarding their actions, choices and attributions, and finally, the evaluative and tangible reactions they make to their own behavior through the self-regulatory process.
Stage 6: Self-Reflection	Making sense of one's experiences, exploring one's own cognitions and self-beliefs, engaging in self evaluation, and altering one's thinking and behavior accordingly.

References

Baller, Warren R.& Don C. Charles. (1968). *The Psychology of Human Growth and*

   Development 2nd Edition. New York: Holt, Rinehart, and Winston, Inc.

Bandura, Albert & Walters, Richard H. (1963). *Social Learning and Personality Development.*

   New York: Holt, Rinehart, and Winston, Inc.

Bandura, Albert, Caprara, Gian Vittorio, Barbaranelli, Claudio, Gerbino, Maria & Pastorelli,

   Concetta. (2003, May/Jun). Role of affective self-regulatory efficacy in diverse spheres of

   psychosocial functioning. *Child Development,* 74 (3), 769-782.

Bandura's Social Cognitive Theory: An Introduction [Video File]. (2008, January 22). Video

   posted to http://video.google.com/videoplay?docid=-

   2495668177794126779&ei=SPXOSOH0GoeuiALB1KDBAg&q=Bandura%27s+Social+

   Cognitive+Theory%3A+An+Introduction&vt=lf&hl=en

Boeree, Dr. C. George. (1998). *Personality Theories: Albert Bandura.* Retrieved September 2,

   2008 from http://webspace.ship.edu/cgboer/bandura.html

Gold Medal Award for Life Achievement in the Science of Psychology. *American Psychologist.*

   (2006, Jul/Aug). 61 (5), 405-407.

Hoy, Anita Woolfolk. (2003-2004). *Self-Efficacy in College Teaching*. Essays on Teaching

   Excellence: Toward the Best in the Academy, 15 (7). Retrieved September 2, 2008, from

   http://gozips.uakron.edu/~mcgurk/number7.htm

Information of Self-Efficacy. (updated 2008, August 21). Retrieved September 2, 2008 from

   http://des.emory.edu/mfp/self-efficacy.html

McCabe, Patrick P. (2006, Jul/Aug). Convincing Students They Can Learn to Read. *Clearing*

   House, 79 (6), 252-257.

Nordby, Vernon J. and Calvin S. Hall. (1974). *The Guide to Psychologists and Their Concepts*.

New York: W.H. Freeman and Company

James A. Banks

Adel D. Broadwater

Shepherd University

Abstract

This research study gives an overview of James A. Banks' multicultural education curriculum. In addition, the paper discusses biographical information as well as historical factors that lead to Banks' interest in multicultural education. Banks reviewed several studies involving the implementation of multicultural curriculum in classrooms and in turn, developed his theory based upon these findings. The theory Banks developed includes twelve principles, which are categorized into groups. The groups include teacher learning, student learning, intergroup relations, school governance, and equity, and finally assessment. All of the aforementioned principles play a crucial role in incorporating multicultural curriculum in the classroom. In order for multicultural education to be incorporated, teachers need to be knowledgeable on the characteristics of different cultures. Furthermore, schools as well as teachers should strive to ensure student learning by providing high expectations for all students and creating opportunities in which students can learn skills and knowledge from other cultures while establishing healthy relationships.

James A. Banks

Biography

James Albert Banks is a specialist in multicultural education, a curriculum which seeks to develop appreciation and "skills in teachers and students for living in a culturally diverse world"(Mysore, 2007). Growing up as an African-American youth, in the south, during this time period allowed Banks to become committed to social justice and pursue a career in multicultural education. "Banks' formal education began at the McCullough Union School. During his second year of schooling, rural schools integrated and he rode a bus to Newsome Training School in Aubrey where he attended the remaining of his primary years from 1948-1957. Banks graduated from Robert Russa Moton High School in 1960 in Marianna."(Mysore, 2007)

After graduating, Banks attended Chicago City Junior College where he obtained his associates degree in 1963. In 1964, he received his bachelor's degree in elementary education and social sciences from Chicago State University. Finally, between 1966 and 1969, he obtained his master's and PhD degrees in the aforementioned fields from Michigan State University. Upon completion, between 1965 and 1966, he taught at Forrest Park School and Francis W. Parker School, both in Chicago. Banks began teaching at the University of Washington where he became the first black professor in the College of Education at the University of Washington in Seattle. James Banks married Cherry A. McGee in 1969. She is also a college professor and author. James and Cherry Banks have written several books and articles together, including the *Handbook of Research on Multicultural Education*.

Contextual

There are several historical events occurring during Bank's childhood is the main influential cause for why he decided to pursue a career in multicultural education. Banks was born in 1941 and attending school during the height of the Black Power Movement. "As a child

growing up, he remembers the strong contradiction between textbooks and reality, which in turn became social justice questions" (Mysore, 2007). After recognizing these contradictions Banks searched for ways to incorporate multicultural education in the classroom (Mysore, 2007).

In the mid-1950's, there were several movements that took place that influenced Banks. While Banks was in middle school in 1954, Brown vs. Board of Education passed which stated that segregation between whites and blacks in the public school was unconstitutional. Even though this law was passed, Banks expresses through writings the lingering prejudice that remained and how it affected his educational experience.

In addition to all events going on around him, Banks was able to identify issues of contradiction between whites and blacks in his social studies textbooks, which would ultimately influence his desire to design a multicultural curriculum. In an article from the Encyclopedia of Arkansas, Mysore states, "During his childhood, Banks felt that the images of happy slaves in his social studies textbooks were a contradiction to the stark reality of racial segregation that he and his community experienced, and he began asking who created the images of happy slaves, and who develops curriculum" (2007). In addition, later on in his life between the 1960's and 1970's, another important movement took place known as the ethnic studies movement. "During this period, African Americans were frustrated due to shattered dreams. They demanded control of schools and wanted black history incorporated into the curriculum. As a result of African Americans taking a stand to incorporate curriculum changes other cultures such as: Mexican Americans, Puerto Ricans, and Indians felt left out and later developed similar programs" (Banks, 1995).

Furthermore, the birth of multicultural education occurred shortly after the aforementioned ethnic groups took a stand on curriculum changes. It was in the early 1970's that Banks and other scholars worked together to research and develop the idea of multicultural education. In the

Handbook of Research on Multicultural Education edited by James and Cherry Banks, James Banks discussed the evolution of multicultural education. He states, "Baker (1977), J.A Banks (1973), Gay (1971), and Grant (1973, 1978) have each played significant roles in the formulation and development of multicultural education in the United States. Each of these scholars was heavily influenced by early work of African American scholars and the African American ethnic studies movement" (Banks, 1995). Multicultural education became a reality when these scholars realized that is was necessary to bring about school reform to meet the needs of unique ethnic groups while allowing them to develop democratic views and respect. This idea began to flourish when Banks and other scholars worked together to construct a curriculum that would promote equality in the educational environment.

<div align="center">Experimental</div>

Even though James Banks has not conducted any experiments of his own, he has analyzed numerous studies where multicultural curriculum has been incorporated into classrooms. He has analyzed and researched several areas which he discusses in his book *Handbook of Research on Multicultural Education.* The studies he discusses include all of the following: "the role of multicultural content in curriculum, modification of students' racial attitudes, and racial modification studies since the 1960's" (Banks, 1995) In addition to those studies, he has also analyzed several theories which he discusses in a document resume entitled, *Reducing Prejudice in Students: Theory, Research, and Strategies*, at one point he states, "Personality theories of prejudice consider personality as the most important variable in the formation of bigotry" (Banks, 1982) He also mentions the importance of incorporating multicultural education into curriculum by stating a statistic, "The changing demographics of the U.S society and the world one out of three people in the United States will be a member of an ethnic minority by 2000" (Commission on Minority Participation in Education and American Life, 1988).

First of all, in *The Handbook of Research on Multicultural Education*, Banks reviewed studies based on the "modification of students' racial attitudes" (Banks, 1995). He comes to the conclusion that,

"They reveal that students' racial attitudes can be affected by curriculum intervention, but that the results of such interventions are inconsistent, complex and probably influenced by many different factors, including the nature and structure of the intervention, its duration, student characteristics, characteristics of the school environment, and characteristics of the community which the school is located" (Banks, 1995).

Another analysis he conducted was on "racial modification studies since the 1960's," (Banks, 1995). In this section, he states, "During the 1960's and 1970's, renewed attention was given to race relations research and children's racial attitudes. These studies can be grouped into four categories: (a) curriculum units and courses, (b) curriculum materials, (c) reinforcement studies, and (d) teaching methods"(Banks, 1995). In each one of these categories, Banks goes into detail on various research findings. In the curriculum unit and courses category, a study was conducted on incorporating African American history into a school. He states, "African American history course in a freedom school had a positive effect on African American students' attitudes and beliefs. The students became more convinced that African Americans and Whites were equal" (Banks, 1995). In the curriculum materials category, Banks discusses a particular study done on American Indians and literature. Banks states, "The groups in the study were a: reading-only group, a group that read and discussed the stories, and a control group that had no exposure to the stories. Both reading the stories only and reading and discussing them resulted in more positive attitudes toward American Indians." (Banks, 1995). In the third category, reinforcement studies, Banks discusses a particular study in which reinforcement was used. Banks states, "Yancey developed a curriculum based on the Williams reinforcement techniques to help White first-

graders develop less bias toward the colored white and towards Whites. The curriculum

intervention lasted 30 minutes each day and was conducted for 30 consecutive school days. The

curriculum included stories and filmstrips that depicted African Americans positively and a game

designed to develop positive associations with a black box. The investigator was also the teacher.

After the curriculum intervention, the students expressed more positive racial attitudes" (Banks,

2005). In the last category, teaching methods, "The effects of two different ways of teaching a

semester unit on Africa on students' attitudes toward African Americans and Africa were

examined. The students who participated in the study ranged from 8-11. The control group studied

the unit in a traditional way, while the experimental group studied the unit by participating in

firsthand experiences. The experimental-group students developed more positive attitudes toward

African Americans and Africa"(Banks, 1995). Overall, Banks found that, "The studies reviewed

above indicate that curriculum intervention can help students to develop more positive racial

attitudes, but that the effects of such interventions are likely not to be consistent" (Banks, 1995).

Lastly, it was the aforementioned experiments and theories that moved Banks in the

direction of developing a multicultural curriculum. He states, "An important implication of this

research review is that teachers must be provided with training and opportunities that will enable

them to examine their feelings, attitudes and values, and helped to develop attitudes consistent

with a democratic society" (Banks, 1995). He also goes on to say, "Multicultural education is a

road rarely taken. If taken properly, it might make a major difference. More carefully designed

research is needed to help provide the direction. In the meantime, we should use the guidelines

derived from research reviewed to help create a more caring and humane society" (Banks, 1995).

<center>Theoretical</center>

Banks' theory consists of twelve principles which were developed to create awareness in

teachers and in turn improve intergroup relations within the classroom. Banks' principles can be

separated into five categories, "1) teacher learning; 2) student learning; 3) intergroup relations; 4) school governance, organization, and equality; and 5) assessment" (Banks, 2001). Upon reviewing Banks' theory, I found the five categories and principles crucial in teaching multicultural education. Furthermore, upon reviewing I have been able to develop my own ideas for applying these principles into the classroom to create a more democratic learning environment for students.

First of all, Banks' first principle is teacher learning. This principle was designed as Banks states, "Help teachers understand the complex characteristics of ethnic groups within the U.S society and the ways in which race, ethnicity, language, and social class interact to influence student behavior" (Banks, 2001). As a future teacher I feel as though it is very important to be informed about students differing cultures in order to teach effectively. Teachers need to be able to recognize the characteristics mentioned in principle one in order to help positively influence student behavior and how they interact with people of differing cultures. Secondly, principle two, three and four focus on student learning. Principle two states, "Schools should ensure that all students have equitable opportunities to learn and meet high standards" (Banks, 2001). Principle three states, "The curriculum should help students understand that knowledge is socially constructed and reflects researchers' personal experiences as well as the social, political, and economic contexts in which they live and work." (Banks, 2001). The last principle in the student learning category states, "Schools should provide all students with opportunities to participate in extracurricular and co-curricular activities that develop knowledge, and skills, that increase academic achievement and foster positive interracial relationships" (Banks, 2001). As a teacher, once could apply these principles for student learning by giving all students equal opportunities to achieve by holding high expectations for all students regardless of race or social class. One should

also encourage academic and sporting activities where students would have the ability to develop skills and relationships with peers of different origins.

Thirdly, is the intergroup relation category, this group consists of principles five through nine. Principle five states, "Schools should create or make cross-cutting groups in order to improve intergroup relations" (Banks, 2001). Principle six states, "Students should learn about stereotyping and other related biases that have negative effects on racial and ethnic relations" (Banks, 2001). Principle seven states, "Students should learn about the values shared by virtually all cultural groups" (Banks, 2001). Principle eight states, "Teachers should help students acquire the social skills needed to interact effectively with students from other racial, ethnic, cultural, and language groups" (Banks, 2001). Lastly, principle nine states, "Schools should provide opportunities for students from different racial, ethnic, cultural, and language groups to interact socially under conditions designed to reduce fear and anxiety" (Banks, 2001). Upon reviewing these principles I feel as though the teacher could impact students more in this group, than in the aforementioned groups in this theory. As a teacher, one should discuss bullying and stereotypes that negatively impact different cultures and races. He or she should also discuss values such as: justice, equality, and freedom which are shared by most cultures. Furthermore, one should provide activities for students to participate in that will reduce anxiety and fear of differences within cultures. These activities can include things such as allowing each student to develop a presentation on their origin discussing customs, foods etc. As a teacher, one should strive to discuss the differences as well as the things shared by all cultures.

In addition, Banks' includes the school governance, organization, and equality group. This group consists of principles ten and eleven. Principle ten states, "A school's organization strategies should ensure that decision making is widely shared and that members of the social school community learn collaborative skills in order to create a caring learning environment for

students" (Banks, 2001). Principle eleven states, "Leaders should ensure that all public schools, regardless of their locations, are funded equitably. Equity in school funding is a critical condition for creating just multicultural schools" (Banks, 2001). As a teacher, it is important for teachers to work together to improve the "total school system" (Banks, 1995). As an administrator, one should work toward creating a school which is funded equitably. Schools which are not create an unjust learning environment because students do not receive the same opportunities. More importantly, is the last principle, which is based on assessment. Principle twelve states, "Teachers should use multiple culturally sensitive techniques to assess complex cognitive and social skills. Evaluating progress of students from diverse racial and ethnic groups and social class is complicated by differences in language, learning styles, and cultures" (Banks, 2001). As a teacher it is important that one uses caution when assessing students. A teacher should try different assessment techniques to accommodate differing learning styles. Furthermore, one's should use caution when writing tests and should reevaluate their choice if words if need be.

Reflection & Application

Overall, after reviewing Banks' theory I feel as though all of the aforementioned principles play a crucial role in incorporating multicultural curriculum in the classroom. In order for multicultural education to be incorporated, teachers need to be knowledgeable on the characteristics of different cultures. Furthermore, schools as well as teachers should strive to ensure student learning by providing high expectations for all students and creating opportunities in which students can learn skills and knowledge from other cultures while establishing healthy relationships. More importantly, as a teacher one should discuss the seriousness of bullying and stereotyping which occurs between different cultures. Lastly, a teacher should use caution when creating tests and should assess students in a way that is appropriate for all learning styles. If all of the aforementioned principles are taken into account when teaching, students will have the

opportunity to learn in an environment that is democratic while developing an appreciation for all people.

Developmental Grid Table

James A. Banks		
ATTRIBUTES	**DESCRIPTIVE DETAILS**	
PHYSICAL	Fine motor	Infant
	Gross motor	Childhood
	Preadolescence	Adolescence
	Adulthood	
VERBAL	Intonation	Vocalization
	Inflection	Vocabulary development
	Combinations	Fluency
EMOTIONAL	Feelings	Adjustment issues
	Responses	Emotive spectrum
	Aggression	Imagination
	Neoteny (adolescent characteristics transfers into adulthood)	
SOCIAL	Cultural influences	Action
	Maneuverability	Reaction
	Acclimation	Interaction
	Assimilation	
MENTAL	Comprehension	Sensory application
	Articulation	Conceptualization
	Classification	Integration
	Seriation	Analysis
	Logic	Evaluation
MORAL	Self interest (egocentrism)	Conscience (sense of ethics, scruples, etc.)
	Obedience	Responsibility
	Sense of fairness	Expectations

Theory	
Principles	**DESCRIPTION**
Teacher Learning Principle 1:	Professional development programs should help teachers understand the complex characteristics of ethnic groups within U.S society and the ways in which race, ethnicity, language, and social class interact to influence student behavior.
Student Learning Principle 2:	Schools should ensure that all students have equitable opportunities to learn and to meet high standards.
Principle 3:	The curriculum should help students understand that knowledge is socially constructed and reflects researchers' personal experiences as well as the social, political, and economic contexts in which they live and work.
Principle 4:	Schools should provide all students with opportunities to participate in extracurricular and co- curricular activities that develop knowledge, skills, that increase academic achievement and foster positive interracial relationships.
Intergroup Relations Principle 5:	Schools should create or make super ordinate or cross-cutting groups in order to improve intergroup relations. Creating super ordinate groups – groups with which members of other groups in a given situation identify – improves intergroup relations.
Principle 6:	Students should learn about stereotyping and other related biases that have negative effects on racial and ethnic relations.
Principle 7:	Students should learn about the values shared by virtually all cultural groups (e.g., justice, equality, freedom, peace, compassion, and charity).
Principle 8:	Teachers should help students acquire the social skills needed to interact effectively with students from other racial, ethnic, cultural, and language groups.
Principle 9:	Schools should provide opportunities for students from different racial, ethnic, cultural, and language groups to interact socially under conditions designed to reduce fear and anxiety.
School Governance, Organization, and Equity Principle 10:	A school's organization strategies should ensure that decision making is widely shared and that members of the social school community learn collaborative skills and dispositions in order to create a caring learning environment for students.
Principle 11:	Leaders should ensure that all public schools, regardless of their locations, are funded equitably. Equity in school funding is a critical condition for creating just multicultural schools.
Assessment Principle 12:	Teachers should use multiple culturally sensitive techniques to assess complex cognitive and social skills. Evaluating progress of students from diverse racial and ethnic groups and social classes is complicated by differences in language, learning styles, and cultures.

References

Banks, J. A., & Clegg, A. A. (Eds). (1973). *Teaching Strategies for the Social Studies.*

Massachusetts: Addison-Wesley.

Banks, J., Cookson, P., Gay, G., Hawley, W., Irvine, J., Nieto, S., et al. (2001). Diversity within

Unity: Essential Principles for Teaching and Learning in a Multicultural Society. *Phi Delta

Kappa*, *83*(3), 196. (ERIC Document Reproduction Service No. EJ637044) Retrieved

August 29, 2008, from ERIC database.

Banks, J. A., & McGee, C.A. (Eds). (1995). *Handbook of Research on Multicultural Education.*

New York: Simon & Schuster McMillan.

Banks, J. A., & McGee, C.A. (Eds). (2005). *Improving Multicultural Education.* New York:

Teachers College Press.

Banks, J. (1982). *Reducing Prejudice in Students: Theory, Research,   and Strategies*. ERIC

Document Retrieved August 29, 2008, from ERIC database.

Banks, J. (1976, November 1). *Multiethnic Education: A Vehicle for Educational Reform.* ERIC

Document Retrieved August 29, 2008, from ERIC database.

Mysore, A.R. (2007). James Albert Banks (1941-). *University of Arkansas Libraries*, Retrieved

August 29, 2008, from http://encyclopediaofarkansas.net/encyclopedia/entry-

detail.aspx?entryID=4682

"Professor James A. Banks." University of Washington, Seattle.

 Retrieved August 18, 2008, from http://faculty.washington.edu/jbanks

Running head: VLADIMIR BEKHTEREV

Vladimir Bekhterev

Thomas Cochrane

Shepherd University

Abstract

Vladimir Bekhterev is a name many do not know, but his research and theories have impacted us in many ways. He was a well educated man at a young age. His research lead to the discovery of many areas of the brain, reflexes, and diseases. His main research was in the field of psychology. Bekhterev studied the brain and how the body reacts. These are known as reflexes. He named three that we know today as conditioned, association, and collective reflexes. His first reflex is conditioned reflexes. This is the brains' reaction to a negative or positive stimulus and how the body responds. Association reflexes deal with an internal and external stimuli and how the brain and body react. These are such reactions as hunger, thirst, etc. Lastly, we have collective reflexology. The collective reflex deals with how we as people react to certain daily interactions. Positive and negative interactions play a big part in this reflex and how the environment around us can affect our choices. This reflex uses the universal laws of science to explain social interactions. Weather you know it or not, Bekhterev has played a big part in how we live our daily lives and the choices we make. He examined how the brain reacts in certain situations and how we react to the problems life presents us on a daily basis.

Vladimir Bekhterev

Biographical

Vladimir Mikhailovitsj Bekhterev had an eventful life, but there is little information about his early life. He was born on January 20, 1857 in the village of Sorali in the forests of Viatka. It is a territory between the Volga River and the Ural Mountains. His father was a low ranking government official. There is little to no information available about his mother (Enersen, 2008).

At the age of 16, he graduated from the Vyatskaya Gymnasium, which can be equated to high school. He decided to further his education and enrolled at the Military Medical and Surgical Academy in St. Petersburg in 1873 when he was 16. He graduated from the academy at age 21 in 1878 with a degree that is comparable to a Bachelor of Medicine. Then he held a position at the psychiatric clinic in St. Petersburg (Enersen, 2008).

In 1881, he did his doctorate dissertation relating the body temperature and some types of mental illnesses. In his early 20's he was one of the best in his field and was invited to lecture in neurology and psychiatry. Soon after, he was offered the position of associate professor in neurology and psychiatry at the academy in St. Petersburg. He was offered a fellowship to study abroad and worked with physiologist and psychologist Wilhelm Wunt and psychiatrist/neurologist Paul Emil Flechsig. After working with and learning from some of the best in the field, Bekhterev returned to Russia in 1885 to become a professor of psychiatric diseases at The University of Kazan. There he established the very first laboratory for the study of anatomy and physiology of the nervous system (Kazdin, 2000).

In 1893, he became a professor and the department head of the nervous and psychic diseases at the school from which he graduated, the Military Medical Academy in St. Petersburg. He took over for his mentor and the head of the department, I.P. Merzheevsky. In 1896, he

founded the scientific journal called The *Nevrologichesky Vestnick*. This journal was about

nervous diseases and was the first of its kind (Adams, 2003).

Bekhterev and his wife had three children. Bekhterev died on December 24, 1927 after

being murdered by Joseph Stalin, Stalin had killed him as an act of revenge. Bekhterev was

invited to see Stalin and diagnosed him as being paranoid. Stalin was upset with this diagnosis

and Bekhterev died of apparent poisoning the next day. Bekhterev's son, Pyotr, found out that

Stalin listed the cause of death as heart paralysis, which he did not believe to be true. Pyotr, a

chief engineer in a weapons factory, was sentenced to ten years in prison without the right to talk

to anyone. Stalin later had him executed by a firing squad. Bekhterev had a granddaughter named

Natalya who founded the *Human Brain Institute* in Leningrad, therefore keeping her grandfather's

work going (Vladimir Bekhterev).

Bekhterev was forgotten by the 1950's, when Stalin claimed Pavlov as the hero of Soviet

psychology. However, Bekhterev's list of accomplishments are great. He authored over 1,000

speeches and articles/books. Bekhterev discovered areas of the brain and reflexes which bear his

name to this day. He also discovered diseases, learned and used hypnosis, and researched brain

structures and illnesses related to the nervous system (Enersen, 2008). When looking through all

of the literature that is available, it is obvious that Bekhterev is not a forgotten man.

<center>Contextual</center>

Vladimir Bekhterev became famous for his work and studies of the human brain. He

studied the anatomy and the physiology of the brain and came up with the term he called

reflexology in 1917. Reflexology is the study that looks at the responses of internal and external

stimuli on the brain and how the body reacts (Neznanov and Akimenko, 2006, p. 4). He is best

known for his discovering Bekhterev's Disease or what is known today as Ankylosing Spondylits.

This is an autoimmune disease and a form of arthritis that affects the sacroiliac joints, hips, and

heels (Enerson, 1994-2008). Bekhterev discovered and named many unknown structures in the

brain. One such structure was called the Bekhterev Nucleus. The Bekhterev Nucleus is the

superior nucleus of the vestibular nerve. This nerve helps to control the balance of the body

(Adams, 2003, p.84). He also named several reflexes that occur in the body in response to

stimulation. Bekhterev gained an interest in mental disorders and the functions of the nervous

system after being hospitalized for a mental break down. Following his work with Charcot, he

took a special interest in hysteria and felt that it has something to do with the nervous system

being weak. He linked many mental illnesses to problems with the nerves (Pear, p. 87).

In 1927, he came up with a plan that involved collecting and dissecting the brains of

Russia's smartest men. The point of this was to see what makes someone a genius. This was

called *The Pantheon of Brains."* This collection included the brains of some of Russia's greatest

psychologists and neuroscientists. This collection includes Vladimir Bekhterev's brain, which

was added soon after his death. This is where maps of the brain started (Vaughan, 2008). As one

of the top brain scientists, he was able to treat high-ranking government officials in Russia. Two

of the biggest were Lenin and Stalin.

Bekhterev had the brains of prominent Russian neuroscientists catalogued by weight. His

was added after his death and weighed 1,720 grams. This is approximately 3.7 pounds. Pavlov's

weighed 1,517 grams, and A.D. Sakharov's brain weighed 1,440 grams. Sakharov was the 1975

Nobel Peace Prize winner who was a Russian nuclear physicist. The average weight of the human

brain is 1,300-1,400 grams (Vaughan, 2008).

After Bekhterev's death, Stalin had his name and all his work removed from the textbooks

and any scientific literature. It was as if Bekhterev's work never existed. That was due to the fact

that Pavlov got all the credit that Bekhterev deserved. The question is how can I do a report on

Bekhterev if there is no information about him? Vygotsky felt that Bekhterev and his ideas were

worth remembering. Vygotsky's students took the initiative to preserve as much of his work as

they could. After Stalin's reign was over Bekhterev's work was brought back (Bakhurst, 2001).

Bekhterev's first influence was Jean-Martin Charcot. He studied joint diseases and

researched rheumatoid arthritis (Jean-Martin Charcot, 2008). He would observe patients with

conditions, which were unknown that affected the patient's nervous systems while they were still

living. After they died, Charcot autopsied their brains to find out what was causing the symptoms.

He discovered many diseases associated with the nerves such as amyotrophic lateral sclerosis also

known as Lou Gehrig's disease, multiple sclerosis, and Charcot's Disease (Jean-Martin Charcot,

2008). Charcot's Disease is a progressive degeneration of the muscles in the leg and foot, and arm

and hand (Jean-Martin Charcot, 2008). One can see how Bekhterev's research regarding, the

brain, the body, and the nerves was influenced by Charcot.

The next person who influenced Bekhterev was Paul Emil Flechsig of Germany. His main

interest was neurological disorders. He is remembered for his study and research regarding

myelogenesis. This is the study of brains from late term fetuses and newborns to find myelin. He

found that most of the cerebral cortex becomes myelinated between two months before and after

birth (Paul Emil Flechsig, 2008). Myelin is like insulation covering the nerves. This is necessary

for messages to be transmitted successfully to the muscles. In the process of mapping, he made

many errors, but this did not stop others from continuing the research he started (Paul Emil

Flechsig, 2008). Bekhterev was influenced by Flechsig's work because it focused on the body's

reaction to messages it received from the brain.

The third influential scientist was Emil du Bois-Reymond of Germany. His is known as

the father of electrophysiology, which is the study of electrical properties of biological cells and

tissues (Emil du Bois-Reymond, 2008). When studying he would

Look at the tissue, or muscle as being made up of a number of electric molecules. The behavior of the muscles was due to the movement of electric molecules (Emil du Bois-Reymond, 2008). It appears his work with muscle behavior could have stimulated Bekhterev's research with the reflexes since the reflex is movement of the muscles in response to stimulation.

Bekhterev's greatest influence was Wilhelm Wundt who is considered the father of psychology. He founded the first laboratory in the world that studied experimental psychology. Before Wundt, psychology was philosophical in nature and looked at in terms of a person's mind, spirit, and soul, philosophy. Following Wundt's study of the brain and central nervous system, psychology was viewed as more of a physiological response to external stimuli; the ability to see a response from the brain to some sort of stimuli to one or more of sensory organs (Plucker, 2003). However, the mind was also important in terms of the feelings that went along with the reaction. Wundt had a "tridimensional theory of feeling: feelings were classified as pleasant or unpleasant, tense or relaxed, excited or depressed" (Plucker, 2003). Wundt in his thesis looked at a baby as having a body, a brain, and a nervous system (Loren, 2008). He felt that the only way for the body to learn to react and respond was to stimulate the nervous system by exposing it to different stimuli. With trial and error, a person would eventually figure out the right way to respond. This theory laid the groundwork for both Pavlov and Bekhterev and their principals of conditioning (Loren, 2008).

Bekhterev was interested in studying the motor conditioning response, which he equated to conditioning of the muscles. He felt that the reactions he observed were not due to any thought processes but were purely reflexive in nature, an involuntary reaction to a stimulus (Loren, 2008). Unlike Wundt who took a subjective approach to psychology, Bekhterev was more objective. He placed more emphasis on what happened outside of the mind and what was measurable. He did

not feel that Pavlov's work was measurable because salivation is not a motor response. He felt that a motor response would be more objective (Singh, 1991, p.194).

<div align="center">Experimental</div>

Bekhterev was interested in exploring responses in a different way than Pavlov. Bekhterev wanted to study motor responses to stimuli and did not feel that the response Pavlov got was comparable as it was a glandular rather than a muscular response (Singh, 1991, p.194).

Bekhterev studied several association reflexes relating to animals and humans. He discovered that certain sex reflexes in dogs could be stopped if the area of the cerebral cortex were removed. He also found that other reflexes would remain if areas of the cerebral cortex remained or would disappear if the area were removed. Again, he said that the reflexes are associated with a particular stimulus and that they occur because of the cerebral cortex (Bekhterev, 1973, p.196-197). He also discovered many skeletal reflexes including ones named after him. It is called Bekhterev's reflex, which involves the face, eye, and abdominal muscles. In the face, the muscles contract when the inside of the nose is simulated. In the eye, the pupil dilates when exposed to light. The abdominal muscles contract when the inner surface of the thigh is brushed. Through his research, he also discovered many illnesses and neurological diseases including the autoimmune disease, Bekhterev's disease. An autoimmune disease is where the body attacks itself when it perceives something going wrong. Bekhterev's disease is characterized by inflammation of sacroiliac joints or other joints. The body responds by laying down bone as a response and then the joint becomes fused. The hip and spine may also become involved (Enerson, 1994-2008).

Bekhterev's best-known experiment is his development of a theory of conditioned reflexes. It involves a conditioned and unconditioned stimulus and a conditioned and unconditioned response like Pavlov except Bekhterev called his an association reflex. This was because unlike Pavlov's experiment, which elicited a glandular response, Bekhterev was looking for a motor

response. He "applied a shock to the paw of a dog or goat or hand of the person following some neutral stimulus such as a bell or a buzzer" (Singh, 1991, p.4). The response was withdrawal. He eventually withdrew the shock and was able to elicit withdrawal by using a bell or buzzer by itself. Therefore, following several trials, an animal or person was able to make an association between a stimulus and a necessary response even when the negative response was removed. When a human subject was asked why he withdrew his finger when only the bell or buzzer was presented; his response was that he actually felt the pain as if the shock was being presented (Bekhterev, 1973, p.417).

<div align="center">Theoretical</div>

Bekhterev expanded on Pavlov's theory of conditioned responses by looking for a muscular rather than a glandular response. His first theory was conditioned reflexes. These were responses to internal and external stimuli, he coined the term reflexology in the process, and this was the study of the responses (Leaner, V and Witztum, E., 2005).

With this new information, he pioneered changes in the field of psychology taking an objective or a measurable approach rather than a subjective approach. "He replaced old terms of psychology (e.g., memory, attention, emotions, and will) with new terms (reproductive reflexes)" (Nezhanov, N.G and Akimenko, M.A, page 7). All human responses are reflexes.

From here, he went on to coin the term association reflexes. These are responses to some sort of stimuli. These reflexes occur in the cerebral cortex of the brain. There are both external and internal association reflexes. The external occur on the outside of the body and involve the senses and proprioception and the inside surfaces of the bodies that are covered with nerve endings. These include the defense reflexes such as blinking when a hand quickly comes towards a person's face and the protective reflexes, which allow a person to catch himself from falling with lose of balance. The internal occur inside the organs. An example of this would be gastric juices

being released in response to feelings of hunger (Human Reflexology). These reactions sustain an individual's life. Bekhterev expanded his theory to include the relationship of an individual to a group. He called this collective reflexology and used it to explain social interactions. He used the universal laws of science to explain social interaction as he feels that reflexes are nothing more than an energy exchange. He uses the law of conservation of energy to explain how the "result of an action is manifested in a certain direction and is equal to all efforts made by separate individuals participating in a given collective work" (Benjafield 2002). He also uses the law of inertia to explain how something gets started once an idea develops. He uses the laws of gravity to explain why people of similar backgrounds, race, and, socioeconomic status tend to stick together. He uses the idea of equal and opposite reactions to explain why ideas in a society are supported by some and rejected by others. All ideas will meet with opposition. Bekhterev's theories show that the behavior of people can be explained by patterns of reflexes that are produced by the environment and are processed by a person's nervous system (Dobreva-Martinova 2005).

<div align="center">Reflection</div>

While in the process of doing this paper, I found out a lot of interesting information about Bekhterev's disease. I also discovered that my mom is suffering from the arthritis due to the disease. The theories that Vladimir Bekhterev came up with fit into the educational scene and his research shows how we as people learn. He also looked at how people learn with disabilities, or diseases, to the brain and how they function. Doing this paper has made me understand the pain my mom goes through and how it has stopped her from riding her bike and running.

<div align="center">Application</div>

Vladimir Bekhterev's theories can apply to student learning, or learning in general by examining the ways in which we as people learn. Bekhterev looked at how we as humans interact

in an everyday situation and how certain parts of the brain affect our everyday choices. He

showed how people learn by the environments we are presented with. I have seen in the

classroom that when the teacher creates a positive environment, the students respond to that

environment. Bekhterev studied psychology while studying the parts of the brain. The reason

why he studied the two at the same time is that he saw that the brain responds to certain actions.

In classroom, when a positive environment is present, the brain is more open to learning. In a

negative or stressful environment, the brain is not focused on the teacher and the material

presented.

Developmental Grid Table

Vladimir Bekhterev	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL	Infant Gross motor Childhood Preadolescence Adolescence Adulthood
VERBAL	Nonverbal. This involves the use of the hands, arms or full body including head, face, and eye movements. This is the brains way of making the body react to a cretin stimulus.
EMOTIONAL	Feelings Adjustment issues Responses Emotive spectrum Aggression
SOCIAL	Cultural influences Action Maneuverability Reaction Acclimation Interaction Assimilation
MENTAL	Comprehension Sensory application Conceptualization Analysis Integration Evaluation Seriation Logic
MORAL	Conscience (sense of ethics, scruples, etc.) Obedience Expectations Responsibility

THEORY	
REFLEX	**DESCRIPTION**
Conditioned Reflex	When a neutral stimulus is presented following a positive/ negative stimulus over several trials and then the positive/ negative stimulus is removed, the neutral stimulus alone will produce the same response.
Association Reflex	The body's reaction to either an internal or an external stimuli. These are the life sustaining reactions pertaining to hunger, thirst, protection, and reproduction.
Collective Reflexology	Patterns of reflexes put together to respond to everyday life. Deals with interactions between groups of people in an environment. Uses universal laws of science to explain social interactions.

References

Akimenko, M.A. and Nezhanov, N.G. (2006) *Development of a Bio-psychosocial, Concept of Disease at the V.M. Bekhterev Institute in the 20th Century. International Journal of Mental Health*, 34(4), 6-10. Retrieved August 25, 2008 from ERIC Digest database.

Adams, Bruce F. ed. (2003). The *Supplement to the Modern Encyclopedia of Russian, Soviet and Eurasian History*. Vol. 4. (pp.84-85). Academic International Press. Gulf Breeze, Florida.

Bakhurst, David. (2001, November). [*Review Of The Book Suggestion And Its Role In Social Life*]. Canadian Psychology. Retrieved September 24, 2008, from http://findarticles.com/p/articles/mi

Behaviorism: Antecedent Influences. Retrieved September 1st, 2008, from www.moyax.com/marina/ch9%20behaviorism.ppt

Bekhterev, Vladimir M. (1932). *General Principals of Human Reflexology* 1973 Arno press: New York.

Benjafield, John. *Collective Rexlexology: The Complete Edition Journal of Canadian Psychology.* February 2002.

Dobreva-Martinova, Tzvetanlca. (2005). *Bekhterev's Theory of Reflex, Energy Transformation And Collective Behavior. Mind, Culture, and Activity*. 12(3 & 4), 271-274. Retrieved August 25 from ERIC Digest database.

Emil Du Bois-Reymond. *Wikipedia, the free encyclopedia*. Retrieved September 15, 2008, from http://en.wikipedia.org/wiki/Emil_du_Bois-Reymond

Enersen, Ole Daniel (1994). Vladimir Mikhailovich Bekhterev. Retrieved August 24, 2008, from http://www.whonamedit.com/doctor.cfm/905.html

Learner, M.D., PhD., Vladimir, & Witzum, M.D., Eliezer. (2005). Images in Psychiatry. Vladimir
Bekhterev, 1857-1927. The American Journal of Psychiatry, 162(1506). Retrieved August
24, 2008 from Google.com

Loren, Karl. *The Destruction of American Morality—Leading the Corruption of Today.* Retrieved
September 15, 2008, from http://www.happinessonline.org/moraldrift/mechanistic/p3.htm

NetIndustries, LLC. *Jean-Martin Charcot Biography (1825-1893).* Retrieved September 15, 2008,
from http://www.faqs.org/health/bios/69/Jean_Martin_Charcot.html

Paul Flechsig. *Wikipedia, The Free Encyclopedia*. Retrieved September 15, 2008, from
http://en.wikipedia.org/wiki/Paul_Flechsig

Pear, Joseph J. (2007). *A Historical and Contemporary Look At Psychological Systems.* (pp.87-
88). Mahwah, New Jersey. Lawrence Erlbaum Associates, Inc.

Plucker, J.A. (Ed.). (2003). *Human Intelligence: Historical Influences, Current Controversies,
Teaching Resources.* Retrieved September 15, 2008, from http://www.indiana.edu/-intell

Singh, PhD, Aran Numar. *The Comprehensive History of Psychology* 1991 Hotilal Banarsidass
Publishers Delhi, India.

Strickland, Lloyd, ed. Lockwood, Alisa and Eugenia, translators. *Collective Reflexology: the
complete edition*/ V.M. Bekhterev 2001 Transaction Publishers, New Brunswick, New
Jersey

Vaughan. (2008, May 23). *The Brains of Dead Russian Geniuses*. Retrieved August 28, 2008,
from http://www.mindhacks.com/blog/2008/05/the_brains_of_dead_r.html

Vladimir Bekhterev. *Wikipedia, the free encyclopedia*. Retrieved August 14, 2008, from
http://en.wikipedia.org/wiki/Vladimir_Bekhterev

Benjamin Bloom

Brian Collins

Shepherd University

Abstract

Benjamin Bloom is the educational psychologist who, along with co-workers, developed Bloom's Taxonomy. This taxonomy is used in public schools all around the United States. While at the University of Chicago, Bloom worked on a study known as *Developing Talent in Young People.* Along with this study, Bloom was the author of several books, was involved in many associations and organizations, and was even the president of one particular association.

Benjamin Bloom

Biographical

Benjamin Samuel Bloom was born in Lansford, Pennsylvania on February 21, 1913. He

married a lady by the name of Sophie, they had two boys David and Jonathan. Bloom spent much

of his youth in Pennsylvania, where he would eventually receive his Bachelors and Masters

degrees from Pennsylvania State University in 1935. He might have been short in stature at only 5

feet 5 inches tall, but that did not hold people back from noticing his rich intelligence (Ohles &

Ohles, 1997).

In 1942 Bloom attended the University of Chicago in Illinois where he would earn his

Ph.D. in psychology. The following year he began his long career at the university. From 1943 to

1970 he worked at the University of Chicago as a researcher, examiner, instructor, and a

distinguished professor. Bloom moved to Northwestern University, which is located just outside

of Chicago, where he was the professor of education from 1983 until 1989. He would die on

September 13, 1999 in his home in Chicago at the age of 86 (Ohles & Ohles, 1997).

Bloom founded and was a part of many associations as well as organizations. He was a

researcher for the Pennsylvania Youth Commission, the American Youth Commission, which is

located in Washington D.C., and the Cooperative Study in General Education. He was also a

founding constituent of the International Association for the Evaluation of Educational

Achievement, the International Curriculum Association, and he was the president of the

American Educational Research Association. To top it all off the American Psychology

Association (APA) would hire a task force, in which Bloom was the leader, to create a taxonomy

which would later become known as Bloom's Taxonomy (Ohles & Ohles, 1997).

Bloom was a writer as well. Finding his name in any educational psychology book would

be far from an accident. Some of his works include Taxonomy of

Educational Objectives: The Classification of Educational Goals, Handbook I: Cognitive

Domain, Taxonomy of Education Objections, Volume II: The Affective Domain, Stability and

Change in Human Characteristics, All Our Children Learning, and Developing Talent in Young

People. He was more than an author; however, in many of his books he was involved in case

studies to help find research in which the books could be based on. One of his works that

involved both writing and research was Developing Talent in Young People, which was

published in 1985 (Bloom, 1999). Bloom obviously loved kids and he was an asset to the

development of education in our society.

Contextual

Benjamin Bloom was born during a time of great change. His birth in 1913 was during

World War I, and he lived during World War II and the Vietnam War. Bloom was able to

experience the roaring twenties as a young boy; he was not too young to remember the changes

that were beginning to take place in the United States. In the 1920s an average annual teacher's

salary only consisted of $970.00, compared to about thirty times that now. Along with the roaring

twenties, The Great Depression, yet unfortunate, was also an important time of change in our

nation. With the men off to war, women started to become influential factors in the work place

(Bradly, 1998).

Bloom did a lot of research during the Civil Rights Movement. In 1954, Brown v. the

Board of Education in Topeka, Kansas stated that the so called equal facilities for black were not

constitutional. Integration would soon begin causing a lot of controversy and turmoil in our nation

(Bradly, 1998). This was another point in which our lives and our country were rapidly changing.

Bloom's Taxonomy was a working progress thought the 1950s, and it finally was fully

developed by 1956. In this same year President Dwight D. Eisenhower signs The Federal

Highway Act which, would mark the beginning of the work on our highway system in the United States. The highways were first integrated for military purposes, but now we use them for everyday use. Bloom lived in a period of change in our nation, and these factors of change, more than likely, had an influence on his research in education. He was focusing on change for the better (Bradly, 1998).

<div align="center">Experimental</div>

Benjamin Bloom and his research team from the University of Chicago did a study on *Developing Talent in Young People*, which would inevitably become published as a book including the team's findings. They developed research in many fields including: music, art, athletics, mathematics, and science. The talent development process and the role of the parents and teachers was the main focus of the study (Bloom, 1985). They wanted to find out why these particular children were successful.

The process of selecting the individuals for experimentation was important. The team had to make sure that the people involved "met the criteria of talent development as well as national recognition by experts in the field" (Bloom, 1985). For example, some of the athletes were from the Olympic swimming team. All of those involved were from the United States (Bloom, 1985).

After finding these "world class" individuals, the research team interviewed in hopes to "understand the developmental and educational processes that were important in enabling them to reach these high levels of competence in their fields" (Bloom, 1985). In each research study the field was identified, family background was given, and then an analysis of the early, middle, and late years going into adulthood were given. "The results of the study indicated that talent development requires a minimum of a dozen years of commitment to learning. Central to this process is the amount and quality of support and instruction that children receive from their parents and teachers" (Bloom, 1985).

Bloom believed in a concept known to him and others as mastery learning. In this process, it is essential for the teacher to instill variation in his or her teaching methods because, according to Bloom, all students can be helped "if both the instructional methods and time are varied to better match students' individual learning needs" (Guskey, 2007). Bloom makes the notion that he does not intend on making children the same. He simply feels that mastery learning is a useful method in helping children to excel in specific areas of learning, because all children are different when it comes to their preferred instructional method and time needed for completing assignments (Guskey, 2007). Bloom's research and studies have been of much assistance to him, and with the assistance of many co-workers and mentor, Ralph W. Tyler, they were able to develop a cognitive hierarchy, later know as Bloom's Taxonomy (Eisner, 2000).

<div align="center">Theoretical</div>

Bloom's Taxonomy started formulating in 1948 when Benjamin Bloom and his team of co-workers began there work. This taxonomy is a hierarchy of educational objectives that include six different stages of cognitive representation (Carneson & Masters, 1996). The stages of his taxonomy include: knowledge, comprehension, application, analysis, synthesis, and evaluation. Bloom's taxonomy was an educational breakthrough. It allowed "educators to evaluate the learning of students systematically, and the need for fundamental planning was filled in education (Anderson & Sosniak, 1994).

Blooms most basic stage in his educational hierarchy is knowledge. Knowledge is simply having the ability to remember information from past educational experiences. An example of knowledge would be that the Declaration of Independence was signed in 1776. Basic knowledge is at the "lowest level of the cognitive domain", meaning that it does not involve a lot of thinking (Carneson & Masters, 1996).

As a person builds knowledge he or she begins to work his or her way up Bloom's Taxonomy to the next level, which is comprehension. Comprehension is not only remembering the material learned during previous experiences, but it is also having the ability to understand the meaning of the information. An example of comprehension would be proving the understanding that the word, one, and the number, 1, are the same thing.

After the ability to comprehend has been accomplished the next level of application is used. Application is being able to utilize the learned information in different situation (Carneson & Masters, 1996). An example of application would comprise of having the ability to calculate the sum of a group of numbers after having learned each number. Application requires a larger degree of understanding compared to comprehension.

The next level of Bloom's Taxonomy is known as analysis. "Analysis refers to the ability to breakdown material into its component parts so that its organizational structure may be understood" (Carneson & Masters, 1996). An example of analysis might involve differentiating the terms hot and cold. Analysis yet involves greater understanding than both application and comprehension.

Synthesis is having the ability to take action in understanding and to make something new out of what was learned. Student directed knowledge is the main focus under the level of synthesis (Manton & Turner, 2004). An example of synthesis would be designing a lesson plan using Bloom's Taxonomy as the foundation. Synthesis demands an abundance of thinking as it is near the peak of Bloom's educational hierarchy.

The final phase of Bloom's Taxonomy is evaluation, and evaluation is having the ability to critique the learned material. During the evaluation stage students are given the opportunity to give their personal opinion of the information. An example of evaluation would give the student the choice to choose a side and argue why it is right or wrong. Evaluation includes pieces of all of

the other stages of Bloom's Taxonomy making it the most cognitively complex of all six stages

(Manton & Turner, 2004).

Lorin Anderson, a former student of Bloom's, has recently developed a "New Bloom's

Taxonomy" (Mann, n.d.). Anderson's work is very similar to Bloom's, and it still serves the same

purpose. She uses verbs in place of the nouns that Bloom used in his Taxonomy. Her "New"

taxonomy includes: remembering, understanding, applying,

analyzing, evaluating, and creating (Mann, n.d.). The biggest difference from them is that the top

two levels are switched. Evaluation is no longer at the peak of the educational hierarchy according

to Anderson's model.

Whether discussing Bloom's Taxonomy or the "New Bloom's Taxonomy," cognitive

application is being used in each aspect. Bloom's Taxonomy is something that is used today in

classrooms to assist educators in their educational processes, and it is also studied in depth in

virtually every institution of higher education in the world. Benjamin Bloom's developmental

break through is a great tool in education that is widely used, and that will probably always be

used in academic programs.

<div align="center">Reflection</div>

Benjamin Bloom's Taxonomy is something that is used in many schools in the United

States today, especially in elementary schools. His taxonomy consisted of six stages of cognitive

development that included knowledge, comprehension, application, analysis, synthesis, and

evaluation. These levels of thinking are observed in classrooms, and the teaching style should

possibly be altered to help fill all of the learner's needs for cognitive development.

When in the field of education, it is extremely likely that the classroom in which you are

teaching will consist of students that are gifted and that are more cognitively developed as well as

children who struggle with even the lowest level which is knowledge. As a teacher it is important to recognize each of these students and to assist or even challenge them accordingly.

Benjamin Bloom is one of the most important theorists involved with education, and he may perhaps be the most important. The studies that Bloom has done with children including, *Developing Talent in Young People* proves his goal of trying to better education. Based on research I believe that Bloom has done wonders for education in our country.

Application

Applying Bloom's Taxonomy into guiding principles for student learning is essential when it comes to assessing the cognitive development of children. As a teacher it is important to know where all of your students fall on Bloom's hierarchy of educational development, but not only is it key to know where each student is categorized, the teacher needs to know how to adjust their lesson plans accordingly. This is necessary because of the fact that in the classroom there will be students that fall under all six levels of Bloom's Taxonomy.

In a classroom of about twenty five to thirty, it is not easy to teach to every child's needs, but it is still possible and obligatory. When assessing each student to find out his or her level of cognitive development, a log will be constructed for each student, the teacher will insert information that may lead to determining the student's location on Bloom's Taxonomy. After concluding where each students level of cognitive development appears, the teacher will then work to meet each of his or her student's needs. For example if a student is thinking at an evaluation level, which is the deepest stage thinking, it is the teacher's duty to challenge the student. If a child is thinking at the knowledge level, which is the most basic level, it is the teacher's job to influence development in the student's cognitive abilities.

Developmental Grid Table

ATTRIBUTES	DESCRIPTIVE DETAILS
PHYSICAL	Perception: Sensory indications to direct motor skills Guided Responses: Early method of trial and error Mechanism: Middle stage of learning with proficiency Adaptation: Using the learned skills and applying them in different situations
EMOTIONAL	Selective hearing Willingness to respond Attachment Organization
MENTAL	Knowledge Comprehension Application Analysis Synthesis Evaluation

Taxonomy

STAGES	DESCRIPTION
Knowledge	Having the ability to bring to mind facts and information. Most basic level of Bloom's Taxonomy.
Comprehension	Having the ability to comprehend, translate, and interpret problems.
Application	Having the ability to use a main concept and apply it to new things.
Analysis	Having the ability to divide a main concept into parts by forming a configuration that is simplified.
Synthesis	Having the ability to create a new concept from the previous learned material.
Evaluation	Having the ability to give a personal opinion or to critique ideas.

References

Anderson, L., & L. (1994). *Bloom's Taxonomy A Forty-year Retrospective*. Chicago: The National

Society For the Study of Education.

Bloom, B. (1985). *Developing Talent in Young People*. New York: Ballantine Books.

Bloom, B. (1976). *Human Characteristics and School Learning*. New York: McGraw-Hill Book

Company.

Bloom Influential Education. (1999). Retrieved September 3, 2008, from The University of

Chicago Chronicle http:chronicle.uchicago.edu/990923/bloom.shtml

Bradly, B. (1998). *American Cultural History*. Retrieved September 17, 2008, from Lone Star

College http://kclibrary.lonestar.edu/decade

Carneson, J., & Masters, K. (1996). *Designing and Managing Multiple Choice Questions*.

Retrieved September 3, 2008, from

http//www.uct.ac.zalprojects/cbe/mcqman/mcqappc.html

Eisner, E. (2000). *Benjamin Bloom*. Retrieved September 3, 2008, from

http://www.ibe.unesco.org/publications/ThinkersPdf/bloom.pdf

Guskey, T. (2007, January 1). Closing Achievement Gaps: Revisiting Benjamin S. Bloom's

Learning for Mastery. *Journal of Advanced Academics*, 19(1),8.(ERIC Document

Reproduction Service No. EJ786608)

Mann, B. Welcome Back! PowerPoint presentation from Purdue University, West Lafayette, IN.

Retrieved from web.ics.purdue.edu/~rlmann/bloom+revised.ppt

Manton, E., & Turner, C. (2004, June 22). Testing the Level of Student Knowledge. *Education*,

124(4),(ERIC Document Reproduction Service No. EJ705774)

Ohles, F., & Ohles, S. (1997). *Biographical Dictionary of Modern American Educators*. West

Port, CT: Greenwood Press.

Rule, A., & Lord, L. (2003, January 1). Activities for Differentiated Instruction Addressing All

    Levels of Bloom's Taxonomy and Eight Multiple Intelligences. (ERIC Document

    Reproduction Service No. ED475517)

John Bowlby and Attachment Theory

Colin Curry

Shepherd University

ABSTRACT

John Bowlby is one of the most underappreciated psychologists and theorists of all time. His work on attachment theory has led to sweeping changes in our hospitals, schools, and overall understanding of the human mind and child development. Understanding attachment theory and the role proper development has on an individual is paramount to creating a successful awareness of our students inside and outside the classroom. The following article is a synthesis of biographical, contextual, experimental, theoretical, and developmental aspects of John Bowlby's career, which leads to the development and comprehension of his attachment theory. The conclusion of this paper serves as a reflection of the process and intent of writing this article and as an application for translating Bowlby's developmental theory into guiding principles for student learning.

BIOGRAPHICAL

John Bowlby is an accomplished psychologist best known for his theories concerning a child's relationship with his or her mother and the importance this relationship possesses for later development. Bowlby was influenced by the education he received and the social and environmental experiences that he witnessed. Controversy was often widespread regarding the proclamations Bowlby asserted, but he was simply ahead of his time. It is important to understand what led Bowlby to develop his attachment theory, and in order to do so, his biographical, contextual, and experimental backgrounds must be examined.

Edward John Mostyn Bowlby was born in London, England on February 26, 1907 (Kazdin, 2000, p. 445). He was the son of Sir Anthony Bowlby, distinguished surgeon, and Maria, a grand-daughter of Lord Mostyn (Alsop-Shields, Mohay, 2001). Growing up, his father often promoted the studying of medicine. When Bowlby entered Cambridge University medicine was his area of concentration. Prior to graduating from medical school, he began professional training as a child psychiatrist at the British Psychoanalytical Institute (Hazen, 2008). This marked the beginning of his studies in developmental psychology and child development. Bowlby went anywhere he could to find work in psychology. He volunteered at two progressive schools, found work in a child guidance clinic, and from 1940-1946 worked as an army psychiatrist. Following his discharge he began work at the Tavistock Clinic in London where he spent the plurality of his remaining career (Kazdin, 2000, p 445-446).

CONTEXTUAL

Many influential factors promoted the career path Bowlby was about to take. Two children particularly influenced Bowlby's career while he was volunteering at a "small analytically- oriented residential institution" (Garelli, 2004). One child was quiet and reserved, often seeming aloof to members and volunteers at the institute. He had already been expelled by a

previous institute for stealing and had no stable parental influence in his life. The second child

was active and extroverted, attempting to participate in everything he could. Following these

observations, Bowlby spent time with another volunteer, John Alford, postulating that a lack of

close personal bonds during infancy and toddler years could have an effect on the development of

character (Garelli, 2004).

Between World War I and World War II, a rivalry was occurring in Britain concerning

psychoanalysis. Many followed the ideas of Sigmund Freud while others followed Melanie Klein.

While training at the British Psychoanalytic Institute, Bowlby learned under the tutelage of Klein.

He was introduced to ideas, which argued that internal conflicts inhibited healthy development

(Hazen, 2008). Bowlby disagreed with Klein and her approaches towards development because

they did not take into account the relationship between a child and mother. He tended to adhere to

the theories of Freud who proposed that a child's relationship with his or her family was important

to subsequent development or lack there of (Alsop-Shields, Mohay, 2001). To his credit, Bowlby

expanded on Freudian ideas and proposed that a greater significance needed to be placed on early

attention and bonding with a child to understand and promote healthy child development.

Nevertheless, Freud had a large influence on Bowlby and his career.

EXPERIMENTAL

Ideas and theories were not the only area in which Bowlby had differing views from those

of Klein. He believed that strong scientific research was necessary to support psychoanalysis

(Alsop-Shields, Mohay, 2001). Overall, Bowlby utilized three techniques with regularity in the

development of his attachment theory. Direct observation was the most important of these

techniques to Bowlby. Along with observation, he investigated the histories of those who lacked

psychological development or were facing psychological illnesses, and he would do follow up

studies on children who "suffered depravation in early years," allowing him to view their

development (Bowlby, 1953, p. 21).

In direct observation he would often study children away from their mothers, such as those

who resided in foster homes and hospitals. He believed in the importance of a child having ties to

his or her mother. Moreover, Bowlby incorporated what he viewed in nature when developing the

ideas he proposed. For example, in the first volume of his three volume series on attachment and

loss, Bowlby attempts to further this idea regarding the importance of a close mother and child

relationship based on what he had observed in nature. He writes, "In the countryside in springtime

there is no more familiar sight than mother animals with young… so familiar are these sights and

so much do we take for granted that lamb and ewe will remain together and that a flotilla of

ducklings will remain with mother duck" (Bowlby, 1969, p. 180). The underlying focus of this

observation is that the young will always cling to their mother until they develop. Therefore, if the

mother- child relationship were insignificant to development, then the ducks would separate and

the young would be ready to enter the wild on their own.   Bowlby paid close attention to the

natural aspect of life and took careful note that the ducks stayed with their mother, thus aiding in

his conclusion that a close mother relationship is necessary for healthy development.

As his knowledge on the subject grew, his experiments, studies, and observations

developed. In his first empirical study, he reviewed notes from the Tavistock Clinic (Bretherton,

1992). Many of the children at this clinic exhibited abnormal characteristics such as a lack of

interest in activities as well as awkward behaviors such as stealing. These behaviors and attitudes

could not help but remind Bowlby of the child he took close notice of when he was volunteering at

the residential institution years before. Following detailed examinations, Bowlby linked forty four

cases at the clinic to "histories of maternal deprivation and separation" (Bretherton, 1992). He

divided the children into six categories of personality based on previous analysis and observation

of their behaviors. Thirty two percent of those patients who had stolen were "characterized by lack of normal affection, shame or sense of responsibility" (Alsop-Shields, Mohay, 2001). While this number is not in itself overwhelming, zero members of the control group were classified in this manner. Even more staggering, Bowlby found that eighty six percent of those children who were classified as affectionless or introverted "had suffered long periods of separation from their primary care givers at an early age" (Alsop-Shields, Mohay, 2001). Bowlby concluded that a disrupted relationship with a primary care giver had led to unfulfilled or delayed development. Bowlby made several assumptions and conclusions from the data, but it did supply the groundwork for his theory on attachment.

Bowlby later turned to ethological philosophy in his studies of child development. (Miller, 2008). This opened up new possibilities in his research regarding the development of mother-offspring bonds and the impact of separation on the infant (MacDonald, 2001). Using the study of birds by Lorenz and monkeys by Harlow, he challenged the common acceptance that feeding was the foundation for the mother-child relationship. Observing that children become anxious when separated from their mothers and try to remain close when there is a perceived threat, he declared that the reasoning for a child staying close to his or her mother was to form a primary attachment relationship allowing for self development (Alsop-Shields, Mohay, 2001).

Bowlby was often criticized for inadequate research techniques and for doing little "systematic experimental testing" (Alsop-Shields, Mohay, 2001). However, when he used studies with matched controls, the results were very similar. At Tavistock in collaboration with Mary Ainsworth, Mary Boston, and Dina Rosenbluth, sixty children, who had previously been patients at the institute and were between the ages of 5 and 18 months, were followed until they reached twelve years of age (Alsop-Shields, Mohay, 2001). In this experiment, one hundred and eight children who had not been separated were randomly selected as the control group. Testing of

these patients consisted of analysis from professionals as well as intelligence exams. Patients who tended to be introverted, lack concentration, and prone to displays of temper were more common amongst those who had been separated from their mothers (Alsop-Shields, Mohay, 2001). Although Bowlby acknowledged this experiment, he did not determine that children who are separated from their mothers will undoubtedly develop more slowly than those who remain with their parents. Nevertheless, the experiment seems to indicate they will and does give rise for concern. His experiments gathered emotional data and traced the loss of a mother in early infancy to a lack of development in subsequent years, rather than tracing a lack of development to a clinical symptom, as was the current accepted causation at the time. Bowlby's basis started with a specific event, the loss of a mother, rather than a group of events and analyzed children in the real world as opposed to solely numerical, patient data (Bowlby, 1969, p. 4-6).

<div align="center">THEORETICAL</div>

Two people were influential in the development and emergence of attachment theory. Ainsworth collaborated with Bowlby in the development of attachment theory. Further, Bowlby collaborated with James Robertson to create a video entitled *A Two-Year-Old Goes to the Hospital.* The video observed hospitalized and institutionalized children who were separated from their parents. The video displays a clock in the background with a child in the foreground. Alone, the child is being neglected and ignored for hours; his cries, whimpers, and needs go unattended. The video was deeply moving to anyone who watched it and led to widespread changes in hospital and visiting privileges (Bretherton, 1992).

Attachment theory is based on the strong relationship between mother and child. This relationship is qualitatively different from other relationships a child will have (Miller, 2008). Bowlby stated that "successful attachment becomes organized into an array of complex social behaviors and, by extension, the capacity for successful relationships of all sorts" (Hoover, 2004).

Bowlby clearly announces the significance of proper mother- child attachment in *Attachment and Loss: Volume 1*. Bowlby states, "A young child's experience of an encouraging, supportive, and co- operative mother, and a little later, father, gives him a sense of worth, a belief in the helpfulness of others, and a favorable model on which to build future relationships… by enabling him to explore his environment with confidence and to deal with it effectively, such experiences also promote his sense of competence" (Bowlby, 1969, p 378). The "sensitive period," or first year of life is the most important for developing attachment relationships. Bowlby continued, "an extended separation from either parent is unwanted because it creates unhealthy, unsafe, and undesirable stress on a child" (Easterbrooks, Lerner, Mistry, 2003, p. 567-568). Not only has attachment theory brought infant relationships to the forefront, but it may also be used to explain intimate relationships across a person's lifetime. When proper cognitive development occurs, an individual will have a much greater ability to establish intimate relationships later in life (Ross, 2006).

<div align="center">DEVELOPMENTAL</div>

Reflection

This paper has developed and provided comprehension through synthesis so individuals may better understand attachment theory, which all educators will be able to utilize for strengthening teacher and student relations within our public schools. John Bowlby's biographical background and other influential factors played a role in the development of his attachment theory. Bowlby used many forms of experiments, observation, field trials, and other techniques in enhancing his understanding of development and the importance played by the mother figure in the developmental process. When Bowlby put these factors and circumstances together to form his theory he did so without the knowledge that he would become one of the most important and guiding theorists for future educators and generations to come.

While the core time frame for the most effective and successful attachment specifically relates to children under one year of age and the subsequent attention these children receive, it plays a role in any social or behavioral aspect of life, at any stage in life. Not just in teaching but in everyday social interaction, understanding attachment theory is vital to the growth of our perceptions of personality within children, students, and even peers. When a child does not possess the proper intimate relationship with a mother or mother substitute, as John Bowlby alludes to in his theory, the effects are detrimental for the social interaction, behavior, and ability of a child, as well as their personal achievement and potential throughout the entirety of their life.

I have seen this firsthand within in my field work. I have noticed a student that seems to be detached from the class and even the classroom. This student is bright and capable from a performance perspective, and thus, based on the work of John Bowlby and my understanding of his theory, I believe that this child was never able to fully attach to a mother or mother substitute. This analysis is further based on the student's inability and seemingly unwillingness to interact with others, even when others attempt to initiate interaction with the student. The student is far from cruel; therefore it is likely he never had the proper interaction in his infancy, and this has made it very difficult for him to associate with others at his current level of mental development. Understanding the work of John Bowlby has helped me as an observer understand students such as the aforementioned child. As a teacher, it will assist me in developing students mentally and enable me to work with my students in reaching their fullest potential.

Application

For these reasons, this project was very important to do because it will help me relate to students in the classroom. Even more important than knowledge of the material is the relationship the teacher has to the student. Studying psychologists and their theories allows teachers to better understand their students and classrooms. It will be important for me as a teacher to translate this

developmental theory into guiding principles for student learning. After doing this research, I have developed an improved understanding for how to relate to students in the classroom. Certain students may not reach their full learning potential by listening to lectures and doing book work because their attachment development may not have fully occurred. It may be important to institute group activities and class presentations to spark initiative and promote social development that may have been lacking within a student. Furthermore, it is important to understand that, from the child's perspective, it is innately more difficult for them to assert themselves, and I will need to generate enthusiasm within them.

Moreover, it will be beneficial for our schools and community to understand the behaviors and attitudes of the students. Rather than scolding a child for poor behavior at any level in the educational system, it will be important to understand that extenuating circumstances may be the true reason for why a student is not submissive to authority. Not until we are better able to understand the student are we able to help the student. By applying the developmental theory of John Bowlby, even at the secondary level of schooling, I will be able to understand the underlying psychological reasons for the students' negative actions or poor achievement levels. Making the assumption that the child is lazy or simply disobedient will not suffice. Thus, failing the child on an assignment or sentencing them to detention will not correct the problem. Using what I have learned from John Bowlby and his thoughts on attachment theory, I will be better able to understand the underlying issues and sources of the students' behavior.

DEVELOPMENTAL GRID TABLE
Attachment Theory

ATTRIBUTES	DESCRIPTIVE DETAILS			
PHYSICAL- Pertaining to the body	Following Sucking Pre-adolescence Weight Clinging	Infant Childhood Smiling Unhealthy	Fine motor not fully developed Gross motor not fully developed Adolescence Adulthood	
VERBAL- Pertaining to words	Vocalization Nonverbal Withdrawn	Vocabulary development Fluency Yelling	Crying Quiet Screaming	
EMOTIONAL- Involving feelings	Crying Responses Grief Detachment	Denial Feelings Anxiety Imagination	Mourning Attachment Aggression Neoteny	Adjustment issues Emotive spectrum
SOCIAL- Companionship or relations	Following Interaction Yearning Action	Reaction Assimilation Bargaining Maneuverability	Acclimation Protest Cultural influences Disorganization	Despair Acceptance
MENTAL- Pertaining to the mind	Comprehension Depression Classification Evaluation	Happiness Analysis Articulation Lonely Seriation	Sensory application Anger Integration Logic	Conceptualization
MORAL- Principles; distinction between right and wrong	Conscience Responsibility Trouble	Obedience Sense of fairness Confused	Egocentric Expectations Rebelling	

ATTACHMENT THEORY	
Basic Elements	**DESCRIPTION**
Theoretical perspectives	Building on concepts of ethology and developmental psychology (Garelli, 2004)
The nature of the child's tie to his mother	Through instincts, attachment behavior of infants and mothers has the function of binding the mother and her child. The behavior of infants becomes increasingly "integrated and focused," on the mother figure between the ages of 6-12 months. Previous to this, infant care is essential, but the child is more independently focused (Garelli, 2004).
Separation Anxiety	Occurs when a child is detached from an attachment figure (most commonly the mother) (Garelli, 2004).
Grief and mourning in infancy and early childhood	Attachment behaviors such as crying or smiling are activated but the attachment figure is unavailable. The child's cries for nurturing go unanswered (Garelli, 2004).
Adult Life	Infants and children who experience detachment from a mother or other attachment figure face four phases of grief in adult life: numbness, yearning and protest, disorganization and despair, and reorganization

References

Alsop- Shields, Linda, Heather Mohay. (July 2001). John bowlby and james Robertson: theorists,

scientists, and crusaders for improvements in the care of children in hospitals. *Journal of*

advanced nursing. 35. 1-6 Retrieved August 26, 2008 from EBSCOhost Journals

Database. Website:

http://web.ebscohost.com/ehost/detail?vid=5&hid=117&sid=aaf0065d-6835-4b4a-

99500c37018d187a%40sessionmgr108&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#d

b=aph&AN=4724013

Bowlby, John. 1953. *Child care and the growth of love*. Middlesex, England. Penguin Books.

Bowlby, John. 1969. *Attachment and loss, volume 1: attachment*. New York. Basic Books Inc.

Bretherton, Inge. 1992. The origins of attachment theory: john bowlby and mary ainsworth.

Retrieved August 25, 2008, from Developmental Psychology. Website:

http://www.psychology.sunysb.edu/attachment/online/inge_origins.pdf

Easterbrooks, M. Ann, Richard M. Lerner, Jayanthi Mistry. 2003. *Handbook of psychology.*

Volume 6: developmental psychology. Hoboken, NJ. John Wiley and Sons, Inc.

Garelli, Juan Carlos (2004). A brief sketch of john bowlby's biography. Retrieved August 25,

2008, from the Scientific Revolution of the 17th century. Website:

http://attachment.edu.ar/bio.html

Hazen, Nancy. (2008) John bowlby. Retrieved August 25, 2008 from Social Issues References.

Website: http://social.jrank.org/pages/103/Bowlby-John-1907-1990.html

Hoover, John H., (2004) John bowlby on human attachment. Retrieved August 25, 2008 from

CYC Online. Website: http://www.cyc-net.org/cyc-online/cycol-0304-bowlby.html

Kazdin, Alan E., 2000. *Encylopedia of psychology: volume 1.* Oxford. University Press.

MacDonald, Shelley G. (April-June 2001). The real and the researchable: A brief review of the

    contribution of john bowlby (1907-1990). *Perspectives in psychiatric care. 37,* 1-5.

    Retrieved August 29, 2008 from EBSCOhost Journals Database. Website:

    http://web.ebscohost.com/ehost/pdf?vid=6&hid=117&sid=aaf0065d-6835-4b4a-9950-

    0c37018d187a%40sessionmgr108

Miller, Kingsley. John Bowlby and Maternal Deprivation: Maternal Care and Mental Health. *You*

    tube video posted by evenToddlers. 2008, Youtube LLC. Retrieved August 25, 2008.

    Website: http://www.youtube.com/watch?v=Gx5kRNb5ILs

Ross, Lynda R. (May 2006). Talking theory and talking therapy. *Issues in mental health nursing.*

    27, 475-484. Retrieved August 29, 2008 from EBSCOhost Journals Database. Website:

    http://web.ebscohost.com/ehost/pdf?vid=4&hid=117&sid=aaf0065d-6835-4b4a-9950-

    0c37018d187a%40sessionmgr108

Louis Braille: Research

Justin Everhart

Shepherd University

Abstract

This is a critical research paper that covers the history of Louis Braille's life and his creation of making of the Braille System. The goal of this paper is to provide the reader with the many aspects of his life, experiments, and theory. This paper also draws upon multiple sources regarding Braille's system for his work on the Braille System. Braille was a young boy that loved life, until one day playing in his father's shop he cut his eye with an awl and became blind from the infection. After Braille became blind, he wanted more out of life and wanted more out of a life in which he used to love. He knew he could do something that would help to assist with him becoming blind. With this in mind he created a system that could be used to help individuals that were blind. The Braille system has been extremely helpful for millions of people throughout the years and is still helping people till this day. Without his hard work and determination, individuals that are blind would not be able experience the convenience of reading and writing on their own.

Biographical

Louis Braille was born in the small village of Coupvray, located just outside of Paris, on January 4, 1809. Louis's father was Simon Rene Braille, and his mother was Monique Braille. On January 5 of 1809, Louis was registered at the mayor's office and in the book of all residents he would now join his three other siblings. Louis had two sisters, one named Catherine, who was sixteen, and the other named Marie Celine, who was eleven. He also had a brother, who was sixteen and another brother Simon who was sixteen as well (Degering, 1962).

On January 8, 1809, Louis was baptized by Abbe Pillon. Louis's father was the village's main and best harness maker which provided the family with a substantial income, helping them evade poverty. Louis's family is what would be considered today to be a little higher than middle class. Louis's family had seven and a half acres of land in which they grew grapes for wine, wheat for bread and animals, and vegetables for themselves and the poorer neighbors. At the age of three, he did not have many chores to do around the house himself so he would help out his older siblings in their daily chores. In the book Seeing Fingers, which is a biography about his life, it talks about that every Thursday would be "Market Day" and every village around would come to sell, trade, or just to gather with their fellow man. This day was special for Louis while he was growing up, until he lost his eye sight at the age of three (Degering, 1962).

Even though Louis was blind he learned to adapt to things around him. At the age of six Louis became very good friends with a priest named Abbe Jacques Palluy who helped Louis to learn about nature and other surroundings in which he could not see. Louis began school at the age of seven and had a very helpful and caring teacher named Antoine Becheret, who was not discouraged about Louis being blind. Both Becheret and Palluy were influences in Louis's life. At the age of ten, Becheret and Palluy applied for Louis to attend a school for blind students called, the Royal Institution for Blind Children, and he began attending on February 15, 1819. At first

Louis was nervous with his new surroundings at the school, and learning itself was very slow and strenuous for him. While attending the school, Louis learned to play the piano very well and the piano gave him a special talent while being blind. When Louis was at the age of fifteen he created a code system off of the French Army, this code was easier to learn and easier to read by 1824 he completed his dot system.

The first book ever to be created in Braille was by Louis himself and it was called, "Method of Writing Words, Music, and Plain Songs by Means of Dots, for Use by the Blind and Arranged for Them", in 1827. Later in 1839, Louis published a book on the methods and communication with sighted people. After finishing out his years at the institute he decided to stay there and become a professor. Then in 1852 at the age of 43 Louis became stricken with tuberculosis and died. Then in 1858 the congress finally approved the system of Louis Braille and named it "Braille" and made it the main source of reading and writing for the blind. There are a few of events that accrued that influenced Louis Braille's life. These events will be explained in the contextual section of the research paper.

<div align="center">Contextual</div>

In Louis Braille's lifetime there were not many contextual or historical events that took place that had a big influence on his life. The one event that is not as noticeable, but still had an influence was his home and his surroundings. In 1814 he and his fellow villagers got the bad news that the French army was losing the war against combined forces of Austria, Russia, and Prussia. This made the French Army need supplies from the village of Coupvray. An example is, "On January 2, 1814, the army instructed Coupvray to provide 275 bushels of oats for the retreating Napoleonic troops. On January 23, they asked for 132 more bushels. On January 28 they ordered 1,200 bundles of hay and eight cows. On February 20, the army seized all the horses of the district

and then a dozen cows" (Birch, 1989). Thus, this explains to the reader that this event had a big affect on his village and their way of life during this period of time. (Birch, 1989).

In April of 1814, things only got worse when Napoleon was replaced by King Louis XVIII and the French were still losing the war. Now the French had even retreated more, leaving the Imperial Russian Army to enter the Village. This meant that there would be a big need for supplies. Birch states, "Later that month, soldiers of the Imperial Russian Army entered Coupvray, and a new series of demands began – food, horses, cows, hay, oats, and wagons for the occupation army" (Birch, 1989). Louis's father then had to start fixing all of the opposing army's harnesses and their house usually had an unfamiliar guest in it at most times. Birch explains this by stating "Over the two-year occupation, Louis' family had sixty-four different soldiers staying in their house" (Birch, 1989). In 1816 the soldiers had finally left and Louis' family could now go back to normal life. He was now seven and this rough time in his life helps to show us how determined he was (Birch, 1989).

Through Louis' lifetime there were many influential factors that helped him become the person that everyone remembers him by. This also helped him to carve the life in which he has helped many people to this day succeed. The biggest influential factor that has helped carve Braille's life is when he cut his eye with his father's awl, when he was just only three years old. This is the beginning factor because without this happening he would have never pushed so hard to achieve the goal of wanting to read; therefore, influencing his ideas to create Braille (Birch, 1989).

Another import model in Braille's life was his priest Jacques Palluy, who was the first person to realize that maybe he could teach Louis things about life in which he would not learn from just sitting at home. They met everyday at the church and Derering states, "It was there Louis learned the first facts of science, about the stars, the habits of animals, how plants grow. He

listened to stories of history, and other stories that in turn taught lessons of courage, kindness, and honesty – stories he would always remember" (Degering, 1962). This was Louis' first sign that there was hope for a blind boy of his age and he would not just be left behind. He would later suggest a school for blind children for Louis to go to (Degering, 1962).

Monsieur Becheret, Louis' school teacher was influential to him, by wanting him to learn and not holding back on him because of his disability. After a while in the classroom it was certain that Louis was gifted when, "After a few weeks he stood at the top of most of his classes" (Degering, 1962). He learned through doing math and other activities to help him learn, but even doing all of this he still could not read or write (Degering, 1962).

Louis was also influenced by the Royal Institution for Blind Youth in Paris. This institute would have books for Louis to learn to read and also books to read. After a while at the school Louis began to run out of things to read and do. This indeed spikes his interest in wanting more for a blind person. Degering states in his book, how Louis knew that there had to be a way to help them to read, but they just had to discover it, he uses this quote that expresses how Louis feels: "There must be some way, if only we could discover it," said Louis, "for us blind boys to write music, and figures, and even books" (Degering, 1962). This is the final factor to influence Louis to find a better way for blind people to be able to do the same things as people that can see (Degering, 1962).

<div align="center">Experimental</div>

Louis Braille learned by experimenting with Charles Barbier's system of dots and dashes, which he made for the army of soldiers to write back in and forth to during the night. Louis began to get very good at the system and found flaws in it, but he still would use it to write with it. (Birch, 1989)

Barbier would not let Louis change his system and so Louis gave up on trying to convince him and started to work on his own experiments. Birch says, "He would devise a system that could do everything writing and reading language should do, with all the flexibility of the regular alphabet."(Birch, 1989)

Louis would work in his spare time, all night and during the morning before his classes. He also would work on his work over the summer break, "… calculating, experimenting, revising, and working on and on" (Birch, 1989). His system consisted of, "… a code key of six embossed dots, three high and two wide" (Degering, 1962). (Birch, 1989).

Louis began by reducing the number of dots so they could be felt easier by the fingertip and he also removed the dashes so they would not confuse other dot arrangements. He began to teach other students how to use his system for algebra, grammar, and geography they were part of his experiment and showed him that it was working. By 1828, while copying music he decided to remove all dashes to make the system at its easiest to read. (Birch, 1989)

Louis wanted to make a way that both the visually active and visually impaired could communicate with each other. In 1839, he took letters, maps, geometric figures, and music and made them out of raised dots. This was called raphigraphy. (Birch, 1989)

Theoretical

Louis Braille's theoretical helped by showing the development of Braille and that it was based around his own experimentation with the use of the other senses without visual. These other types of senses we refer to as tactile and kinesthetic senses. Tactile is based on touch itself and kinesthetic is based on learning by doing (Wikipedia, 2008).

Braille believed that through the use of the other senses that people could learn to read and write with his system. Louis used the six dot system knowing that it would help people be able to touch the tactile bumps. He wanted to make it easy for people to learn and his kinesthetic way of

teaching people was with the easy six dot system. This helped the people, which he soon hoped would be learning his new found way of reading and writing with dots, which would not reach and lose the previous dots, "… he had used a code key of six embossed dots, three high and tow wide. He tested the key again to make sure his fingertip could easily span it without any up or down exploring" (Degering, 1962). The students at his school were part of his experiment and they showed him that his system could work, with each student's kinesthetic ability (Degering, 1962). This was a major verbal development for alternative circumstances that has helped many people and will continue to help many people in society.

Braille's stages started when he first learned about the system from Captain Barbier. The next stage of Louis's quest was that it was too difficult of a system to learn with and it was missing the key items such as an alphabet and being able to write and read. So, he experimented with Barbiers' system to make his six dot system. These were the stages of his development of the Braille system (Degering, 1962).

This is a Developmental Grid to help show some of the characteristics of Louis Braille and his theory.

Developmental Grid Table

Louis Braille	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL	Fine motor Gross motor Adolescence Adulthood
VERBAL	Intonation Vocalization Vocabulary development Combinations Fluency Echolalia Nonverbal (**hands, arms or full body including head, face, but excluding eye movement)**
EMOTIONAL	Feelings Adjustment issues Responses Emotive spectrum Aggression Imagination
SOCIAL	Action Reaction
MENTAL	Comprehension Sensory application Articulation Conceptualization Classification Integration Seriation Analysis Logic Evaluation
MORAL	Self interest (egocentrism) Obedience Responsibility Sense of fairness Expectations

Visual Learning and Tactile Learning	
Facts	**Visual Learning**
Fact: 1	Most visual learners, learn from seeing others doing it around them. Such as using hands, eyes, mouth and head.
Fact: 2	Most can write from being a visual learner, which gives them the capability to relearn what they have written down for better understanding. Most of visual learners learn to read so they can increase there since of knowledge through this skill.
Facts	**Tactile Learning**
Fact: 1	Most tactile learners, usually learn by using there senses like touch and seeing. Usually need more practice to achieve at the skill.
Fact: 2	The most tactile learners are people with blindness. They have to achieve all of the senses except for seeing. They have to become masters of hearing, feeling, touching, and taste.
Fact: 3	Just as Louis Braille did, most blind people do not like to feel as if they are worthless and this is why they become very good at achieving the goal of Braille. They do this so they can communicate and live in today's society.

Reflection

This paper was a reflection on the invention of Braille by Louis Braille. This was an important paper to do because of the many reasons in which Louis Braille has helped the visually impaired people to see. With this research paper it will help a person gain a better understanding of Louis Braille's life through the biographical part, and will also help explain what kind of things that happened around him to help influence his invention of Braille.

This paper will help future readers to gain a better understanding of his experiments that he went through to create Braille. This reflection shows that the hard work and dedications that Louis Braille went through when creating a system for visually impaired people. Through the theoretical part we can gain a better understanding of words such as visual learning and tactile learning. Both are sets of learning in which non- impaired people use, but the tactile can only be used by the visually impaired people. Thus, this can help give a better understanding to what these words mean to people and it is especially important for future teachers to understand.

I can not really relate the visually impaired to the classes that I have been observing, but I can reflect on my observation of the visual learning and tactile learning that has occurred. I have seen that when I work with the student and they see me do things such as swing the wiffle ball bat they often try to replicate how I swing. This can be related to modeling as referred to by Bandura and also how some others learn to play just by doing, which can be considered tactile learning. Students get better through experience or the mastery experience by just practicing like some of the students did when they wanted to do better when playing basketball.

This paper gives future readers a better insight to Louis Braille and his invention of the Braille system. The information in this paper is most helpful for the future education teachers to help them reflect on the different types of learners in which they may have in their classrooms.

Application

The application of Louis Braille's theory can be used for student's learning in many ways. The biggest principle that I can use out of the theory is that all students do not learn in the same way. Some students may learn by using visual learning and other students' may learn through tactile learning.

These two principles have to be part of the guiding principles that I will have to base my teaching off of. Now when I think of applying these principles to my teaching, I can't just think about a visual impaired child to a visual child. I have to think of the different ways that students may want to learn and the ways that they can learn the best.

The theory helps explain that I must be able to understand and assimilate the teaching techniques used in my classroom to cover each students learning ability. A lot of students today are becoming more visual and tactile learners. With me wanting to become a future Physical Education teacher I must know the setting and atmosphere of a gym or outside that a lot of my student's are going to want to be tactile learners.

With observation I have noticed that more and more students want to learn by doing which is tactile learning instead of watching the teacher. Braille has helped me to understand and will help others to understand how important it is to be versatile in the teaching methods. If teachers see these kinds of traits early, they can help their student's to become better at the activity or work that they are doing. Thus, making students and children happier and want more out of their education.

Louis Braille has brought to this society a great developmental theory to help teachers set guiding principles for their classrooms to help with student learning.

References

Birch, B. (1989). *LOUIS BRAILLE: The inventor of a way to read and write that has helped millions of blind people communicate with the world*. Milwaukee, WI: Gareth Stevens, Inc.

Correia, A., & Ward, V. (1999, March). A touching legacy Louis Braille (1809-1852). *WE Magazine*, *3*(2), 102. Retrieved August 29, 2008, from Academic Search Premier Database

Degering, E. (1962). *Seeing Fingers: the story of Louis Braille*. New York: David McKay Company, Inc.

Freedman, R. (1997). *Out of Darkness: The Story of Louis Braille*. New York: Books Productions, Inc.

Herlein, D. (1975, September). Music Reading for the Sightless—Braille Notation. *Music Educators Journal* (1964-2001). 62. Retrieved August 29, 2008, From Scarborough Library Microfilm

Kugelmass, A. (1951). *Louis Braille: Windows For The Blind*. New York: Julian Messner, INC...

Kushner, Sherrill. (2005, January). "The Story of Louis Braille". *Los Angeles Times.* Retrieved August 28, 2008, from http://uacoe.arizona.edu/viliteracy/Louis%20Braille.htm

Kuusisto, S. 1999, March. Lives; In the Dark. *New York Times Magazine*, p 96 Retrieved August 29, 2008, from Academic Search Premier.

Sullivan, Joseph. Ackley Appliance Service. (n.d). *Louis Braille*. Retrieved August 28, 2008, from http://www.braillerman.com/louis.htm

Wikipedia, the free encyclopedia, (n.d) *Louis Braille*. Retrieved August 28, 2008,

from http://en.wikipedia.org/wike/Louis_Braille

Running head: URIE BRONFENBRENNER

Urie Bronfenbrenner's Ecological Model

Kristin Ezzell

Shepherd University

Abstract

Urie Bronfenbrenner is an important developmental psychologist. His work revolutionized the world of developmental psychology. He dealt mainly with child development. He was born in Moscow in 1917 and moved to the states in 1923 when he was six years old. After high school he attended Cornell University. After completing a Ph.D. at Michigan he returned to Cornell where he did all of his most important work. He published his most important theory, his ecological model, in 1979. This theory covers the importance of a child's environment to their developmental health. It is divided up into five levels: Microsystems, Mesosystem, Exosystems, Macrosystem, and Chronosystems. Each level covers a different set of environments such as home, school, and the relations between them. This theory also addresses how as children grow and mature they redefine their environments and how these changes have an affect on them. The publication of this theory changed the way that developmental research is done. After Bronfenbrenner's discoveries, psychologists started taking the environment that the child was growing up in, into consideration when studying their development

Urie Bronfenbrenner's Ecological Model

Biography

Urie Bronfenbrenner was an accomplished developmental psychologist. He was born in Russia in 1917 ("Urie Bronfenbrenner"). At the age of 6 he relocated with his parents to the Unite States ("Urie Bronfenbrenner"). Once here in the United States he spent his adolescent years in New York. After graduating high school he completed his bachelors at Cornell before completing a masters degree in developmental psychology at Harvard (Urie Bronfenbrenner"). He finished his career as a student by receiving his Ph.D. from the University of Michigan ("Urie Bronfenbrenner"). After finishing his Ph.D. he was enlisted in the army where he served in several different positions and branches ("Urie Bronfenbrenner). After a few brief stays at other universities, Bronfenbrenner found his way back to Cornell where he remained for the rest of his career and did all of his most important work. Bronfenbrenner passed away in 2005; he died peacefully at his home of complications from his diabetes (Lang). During his life Bronfenbrenner made a huge impact on the world of developmental psychology and his influence will go on for many years.

Contextual

In 1979, when Bronfenbrenner was working on his ecological theory there was a lot going in the world. The Sino Vietnamese war started in January of 1979 ("1979," 2008). This war broke out when China invaded North Vietnam in retaliation for their taking over the city of Phnom Penh ("Major Events," 2000). Also in January of that year, after meeting Chinese requirements of cutting all ties with Taiwan, the United States began a complete diplomatic relationship with China ("Major Events," 2000).

There was also a lot going on in the Middle East during this time period. Russia invaded Afghanistan in an attempt to help the new leader of Afghanistan take control; however, they were

unsuccessful. This invasion has been nicknamed the "Soviet Vietnam" ("Major Events," 2000). Saddam Hussein also came to power in Iraq in 1979, where he would start a long period of political distress and unhappiness for the people of Iraq ("1979," 2008). Along with these other events, 15,000 Iranian women organized a march to protest the reinstatement of the chandor, as well as the other changes made by the new regime in power at the time ("1979," 2008).

Educational advances this year included the appointment of Shirley Huffstedler as the first secretary of education our country has seen ("Major Events," 2008). Along with this there were several technological and scientific advances. These include the invention of the floppy disk, and the first sighting of Jupiter's rings ("1979," 2008). Another technological advance of this time period was the first successful delivery of a baby conceived through invitro techniques ("Major Events," 2000).

Experimental

Urie Bronfenbrenner took a different approach to his research than other developmental psychologist of his time. Before Bronfenbrenner psychologists studied the child, and not his surroundings. They would also study the child in unfamiliar settings, with people the child was not accustomed to being around. Bronfenbrenner's research changed the way most researchers after him conducted their studies.

In Bronfenbrenner's theory, he believed that a child's environment affected how they acted (Bronfenbrenner, 1979). By studying the child in a strange environment, he did not think that you would get as accurate research as you would by studying them in an environment that they were comfortable in. One example he gives in his book *The Ecology of Human Development: Experiments by Nature and Design* is a study done in 1975; in this study the reactions of infants to being in a familiar and unfamiliar setting were compared (Bronfenbrenner, 1979). Bronfenbrenner refers to this study as the "Strange situation experiment" (Bronfenbrenner, 1979).

In this study, infants were left alone with an unfamiliar adult in both a laboratory setting and then in their homes. The findings were that while the infants were upset both times by being left alone with an unfamiliar adult, they cried three times as much during the laboratory testing (Bronfenbrenner, 1979). This is what gave Bronfenbrenner the idea of studying them in familiar settings, which he refers to as studying them in context (Schaffer, 2006).

Bronfenbrenner's theory also asserts that all the different environments that children are put into have an affect on them (Baucoum, Craig, 2002). He also acknowledges that children will act differently according to which environment they are in (Bronfenbrenner, 1979). One example of the behavioral changes he noticed was that preschool children have better conversational skills with their parents than they do with their teachers and other less familiar adults (Schaffer, 2006). To accommodate these behavioral changes for his studies, he took all the different environments children are put in into consideration. Some of these different environments could include home, school, or daycare. Also, for purposes of his theory not only was the child studied but the environment was studied as well (Bronfenbrenner, 1979).

<div align="center">Theoretical</div>

Bronfenbrenner's biggest contribution to the world of developmental psychology was his Ecological Theory of Development. It is comprised of five levels of environments. The beginning focus of this theory is on the immediate family; but as children grow and matures, they start to recreate their environments and the changes they make, in turn, influence them (Baucum, Craig). Not only does the environment affect them, but the relationships between the different environments and outside factors affect them as well (Baucum, Craig). This theory also focuses on historical context having a role in affecting development (Schaffer).

The first level of environments is made up of the Microsystems. Microsystems consist of immediate settings such as the home, school, childcare centers, and the child's interactions and

roles they play in these settings (Schaffer). The interactions between the child and these setting are called proximal processes (Schaffer). This level is the most studied level in the ecological model because it is the most influential to the child (Baucum, Craig). This level is so influential because the environments in this level are the ones that the children are in the most; therefore they have the biggest impact on them.

The second level is the Mesosystem. A Mesosystem is formed by relationships between microsystems (Baucum, Craig). An example of a Mesosystem could be the relationship between a student's parents and their teacher. A parent keeping close contact with the teacher could help promote better work in class and better study habits at home (Baucum, Craig). These relationships between Microsystems need to be taken into consideration because they can have an affect on the child's behavior in each environment (Schaffer). An example of this is that poor living conditions or problems in the home could have a negative affect on a student's behavior and work at school.

Exosystems are the third level in the ecological model. Social organizations and other settings the child interacts with are what make up the exosystems (Baucum, Craig). Such settings as the parent's place of employment, the homes of extended family members, the child's and parent's friend's home, any sports teams or other organizations the children may be involved in can be included in the exosystems. (Baucum, Craig). An example of an exosystem affecting a child could be the positive attributes such as team work and discipline that can be learned from participating in a sport, or taking part in organizations like girl or boy scouts.

The fourth level is the macrosystem. According to Bronfenbrenner, this is the most important level because it can have an impact on all other levels of the ecological model (Schaffer). The macrosystem does not pertain to a certain environment but rather to the laws, values, and customs of the culture that the child is growing up in (Baucum, Craig). All of these

affect the way that people conduct themselves and govern what behaviors are acceptable and unacceptable.

The final level in Bronfenbrenner's ecological model is the chronosystem. The chronosystem is made up of all levels (Baucum, Craig). It refers to the way that they all affect each other (Baucum, Craig). An event that occurs in one level influences him other and so on. The chronosystem also refers to the historical context of the time that the child is being brought up (Schaffer). Current events can also influence a child's development. Such events as new discoveries in technology that change the way people live, wars, or great economic trouble can all have an impact on a child's development (Schaffer)

Reflection

This theory is a very important contribution to the world of developmental psychology. It changed the way most developmental research is done. After the publication of Bronfenbrenner's theory, the child's environment began to be taken into consideration when studying development. It is important to take the environment as well as the relationships between the multiple environments that our children inhabit into consideration. Any experience that a child has can cause negative or positive repercussions to the child's development. If a child is not getting the attention it needs in the classroom or if the classroom does not offer enough stimulation, there could be a negative affect on the child's intellectual development. Being bullied and teased can affect a child's mental development by causing feelings of low self esteem, lowered self worth, or affect their sense of safety and security.

It is very important for teachers to take outside factors into consideration when it comes to student's behavior and classroom performance. Children's behavioral problems could be signs of anything from physical or sexual abuse to a lack of necessities such as food. One of the most important factors to consider is what type of home life the children come from. It is imperative to

understand that fact that not ever child comes from a "perfect" home environment. For example, if a child is always complaining of being hungry, it could be a sign that they are not getting enough to eat at home, and may need to be put on some type of meal plan through the school. If a child is having trouble meeting his basic needs at home, this can cause issues that will spill over into the classroom and other areas of their life. Another thing to consider is if a child is repeatedly failing to complete assignments or to have things they need for class is that it may not be the child's fault. There are several reasons why the child could be missing assignments or not have the proper supplies. These reasons range from not having anyone at home to motivate them to a lack of funds to buy the appropriate materials, or in extreme cases, the child could even be taking care of other siblings at home and not have time to do the assignments.

While in the field I have noticed examples of Bronfenbrenner's theory being played out in the classroom. Most of the things I observed where results of the macrosystems, mainly the relationships between school and home. One specific example is a child who was getting ready to move to a different state and would have to change schools. His last few days in class he seemed really anxious and nervous. The student did not seem to be able to pay attention as well and did not have as much interest in his work. His feelings of anxiety over moving and having to start all over again in a new place caused him to be less receptive and attentive to what was going on in class.

<div align="center">Application</div>

This theory is very important to incorporate into the framework of how a classroom is run. When I become a teacher I plan on incorporating this theory into my classroom in three ways. The first is to recognize that there are outside factors that have an affect on students. These need to be taken into account because they have an affect on classroom performance. If a student is having a lot of trouble making assignment deadlines and having the appropriate materials for class instead

of reprimanding right away I will talk to them and see if there is a specific reason. Also I will try

to get to know my students in order to know what their usual dispositions are. By doing this I will

be able to recognize any substantial changes in the way the students usually act and can detect any

problems quickly.

The second way I plan to utilize this theory is to always be aware that anything that

happens in the classroom or school environment can have permanent affects on a child. In my

classroom bullying or teasing will not be tolerated at all because of the psychological affects it can

cause. I will make sure that all students know that they are to regard one another with respect. I

also plan to make sure that I conduct myself in a professional manner, and treat the students with

respect the same way they will be expected to treat their fellow classmates. I will make sure that

my students feel that when they are in my classroom they are in a safe and nurturing environment.

The final way that I will use this theory regards to the macrosystems. I want to create good

relationships between the school and home environments. I believe that having a good relationship

with the parents of my students will help motivate their success. The parents of my students will

know that they are able to come to me with any questions about their student's behavior in class,

work, or anything else they may need help with. For example if a student is having a lot of

behavioral problems talking to the parents may help discover what is at the root of the problems.

Also if a student is struggling with the subject matter they may benefit from setting up a plan of

study that can be used at home with their parents.

Urie Bronfenbrenner's Ecological model has had a huge influence on the world of

developmental psychology. It has changed the way research in most developmental fields is done

and opened a lot of researcher's eyes to new ways of looking at things. This theory can also be

very useful in the classroom. This theory can help teachers to understand that outside factors can

play a major role in a child's success in the classroom. Not only does he Bronfenbrenner have a

great influence on the developmental world but the educational world as well.

Developmental Grid Table

Urie Bronfenbrenner	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL	Sports (Macrosystem): participating in a sport can help the child get exercise and stimulate their physical development by keeping them healthy.
EMOTIONAL	Home life (Microsystem): A nurturing and loving home environment can stimulate the child's emotional development by promoting feelings of safety, security and self worth. School, Child Care Centers (Macrosystem): Bullying or teasing can have a negative affect on emotional development. They can cause feelings of alienation, inadequacy, low self esteem, or diminish their sense of self worth.
SOCIAL	Public School, Child Care Centers (Microsystems): Expose children to others their age and older, and helps socialize them and teach them to be good members of society. Social Organizations, Sports (Macrosysem): Also help to socialize children as well as teach team work, responsibility, discipline, etc.
MENTAL	Anything that happens in any of the environments can have a positive or negative affect on the child's mental development.
MORAL	Laws, Values, Rules, Customs, Parental Expectations and beliefs (chronosystems): all of these things have an affect on a child's moral and ethical development.

Ecological Model	
Levels	*DESCRIPTION*
Level 1: Microsystem	Microsystems are comprised of immediate environments such as the home, school, childcare centers, and the child's roles and interactions in those environments. The child's interactions in these environments are called proximal processes. This level is studied the most because it has the greatest influence on the child.
Level 2: Mesosystem	The mesosytem is made up of the relationships between Microsystems. For example parent teacher relationships link school and home life. These relationships are important because they can have an affect on the child's behavior in each environment.
Level 3: Exosystem	Exosystems consist of the outside organizations and other settings child come into contact with. Examples of these other environments are the parents place of employment, homes of extended family members, friends homes, and any other sports teams or organizations the children are involved in.
Level 4: Macrosystem	The macrosystem does not pertain to any certain environment but rather to the laws, values, and customs of the culture that the child is being brought up in. According to Bronfenbrenner this is the most important level because it has an affect on all the other levels.
Level 5: Chronosystem	The Chronosystem is made up of all the other levels. It refers to the way the each level has an influence on the one before and after it in a back and forth motion. It also pertains to the historical context of the time the child is reared in. For example, a great technological discovery could change the way they live, a war, or times of great economic trouble can all have impact on the child's development.

References

Brendto, Larry K. (2006). The Vision of Urie Bronfenbrenner: Adults who are crazy about kids.
(Voices of pioneers). *Reclaiming Children and Youth*, 15.3 (Fall 2006), p. 162. Retrieved
on September 1, 2008, from Expanded Academic Database (A173514704).

Bronfenbrenner, Urie (1979). The Ecology of Human Development: Experiments by Nature and
design. Cambridge, Massachusetts, England: Harvard University Press.

Bronfenbrenner, Urie (1943). A Constant From of Reference for Sociometric Research.
Sociometry, Vol. 6, No. 4, pp 363-397. Retrieved September 1, 2008, from JSTOR
database.

Bronfenbrenner, Urie (2005). Thoughts on Teaching. *Human Ecology*, 33.3, p261. Retrieved
September 3, 2008, from Expanded Academic Database (A141477915).

Bronfenbrenner, Urie. Retrieved September 1, 2008, from
http://www.newworldencyclopedia.org/entry/Urie_Bronfenbrenner

Craig, Grace J., Baucum Don (2002). Human Development. New Jersey: Prentice Hall.

Lang, Susan S (2005). *Urie Bronfenbrenner, father of Head Start program and pre-eminent
'human ecologist,' dies at age 88*. Retrieved on September 3, 2008, from
http://www.news.cornell.edu/stories/Sept05/Bronfenbrenner.ssl.html

Lang, Susan S. (2004). *Urie Bronfenbrenner authors new work: 'Making Human Beings Human'*
Retrieved on September 4, 2008, from
http://www.news.cornell.edu/chronicle/04/9.23.04/Urie_Bronfenbrenner_book.html

Schaffer, Rudolph H. (2006). Key Concepts in Developmental Psychology. London: Sage
Publications.

"1979." Retrieved on September 1, 2008, from http://en.wikipedia.org/wiki/1979.

"Major Events of 1979." Retrieved on September 3, 2008, from

http://www.historycentral.com/20th/1979.html.

Jerome Bruner

Laura Beth Fernett

Shepherd University

Abstract

The cognitive theorist Jerome Bruner has been an important force in the shaping of modern education. His work in the field of cognitive development has introduced new theories into the world of teaching. The most popular of these theories deals with the three modes of learning that students use to internalize information: the enactive mode, the iconic mode, and the symbolic mode. Each mode of learning has its own characteristics and uses, and all three modes can occur throughout a learning experience. Bruner emphasizes the need to stimulate all three modes, and to involve students actively in the learning process. He also pioneered the idea of the spiral curriculum, which is the building of information to teach complex ideas to students.

Jerome Bruner

Biographical

Jerome Seymour Bruner was born October 1, 1915 in New York City to Herman and Rose Bruner. Bruner's father ran a watch-making firm while Mrs. Bruner attended to the raising of the couple's two children, Jerome and his older sister, Alice. Bruner described himself as a "shy, geeky boy" who had an inclination towards make-believe and a love of the sea, which remains with him to this day (Crace, 2007). Bruner suffers from poor eyesight as a result of having been born blind; he gained sight after receiving an operation at the age of two for removal of cataracts. Mr. Bruner died of liver cancer when Jerome was only twelve years old; leaving his family in a state of profound grief that prompted Mrs. Bruner to move the children around frequently. This had a great impact on Bruner, who later recognized that this difficult period of his life taught him important lessons in self-sufficiency and the importance of interaction (Crace, 2007).

Jerome attended public schools before enrolling at Duke University, then Harvard, where he studied psychology. After earning his Ph.D. he worked with the U.S. Army Intelligence Corps specializing in propaganda. He returned to Harvard to teach and gained recognition there for his work in cognitive studies. The American Psychological Association elected Bruner as president from 1964-1965, and he was director for the Center for Cognitive Studies from 1960-1972. He taught briefly at Oxford University before returning to America and taking the position that he currently holds as Professor of Psychology at New York University Law School (Hevern, 2004). Jerome Bruner has been married three times and has two children, and is still teaching at the age of ninety-three (Crace, 2007).

Contextual

Over the course of his life, Bruner witnessed many important cultural events that would have far-reaching effects on nearly every aspect of life in the civilized world. He was born during

the last years of World War I, and his early teen years and mid-adulthood was set against the

backdrop of the Great Depression. World War II broke out in 1939, and America entered the

conflict in 1941, the same year that Bruner earned his doctorate in psychology for his propaganda

centered thesis entitled *A Psychological Analysis of International Radio Broadcasts of Belligerent*

Nations (Hevern, 2004). Bruner entered the United States Army Intelligence Corps immediately

afterwards, where he used his research and knowledge of propaganda and public opinion to further

the war effort (Hevern, 2004). Years later, the radical social upheaval of the late 1960's would

inspire Bruner to rebel against the strict conservatism of Harvard University and travel to

England's Oxford University where he began one of the most prolific periods of his career (Crace,

2007).

Up until the 1950's, the realm of psychology had been dominated by behavioralism.

Theorists such as Ivan Pavlov and B. F. Skinner helped develop behavioralism, basing their

research and theories mainly on observable behavior in laboratory settings. Bruner came to view

this way of looking at psychology as " an extremely limited, atavistic model"(Crace, 2007).

Bruner was instrumental in what has been called the "cognitive revolution" in psychology,

changing the focus from measurable behaviors to mental processes. (Cognitive revolution, 2008).

Experimental

The majority of Bruner's experiments dealt with the effects of language and culture on the

processes by which children learn. These experiments were designed to illustrate possible

problems with certain methods of education and to prove that a student could learn any subject

matter at any age if properly instructed (Bruner, 1966). Bruner made extensive use of observation

and researched many famous experiments to further his theories. Observation was done both in the

field and the laboratory, on subjects of varying ages, ethnicities, and social statuses (Bruner,

1966).

One of Bruner's experiments was conducted in a laboratory on children between the ages of four and eleven. The children were first shown beakers of equal size that were filled with water. They were then asked to determine which beaker was fuller and which was emptier. This task proved simple for all of the test subjects, despite their age. Then, the children were shown beakers that were of unequal sizes with different amounts of water. The children now had a harder time answering the question. Many of the children made contradictory statements about the two beakers, saying that one was both fuller and emptier than the other (Bruner, 1966). Statements of this sort were more prevalent in the children between the ages of four and nine, and increased as age increased. Bruner records that the meaning of terms like full and empty were responsible for confusing the children. The children all defined fuller as having the larger volume of water, but the older children also took into account which beaker had the largest amount of unfilled space (Bruner, 1966). This experiment shows that children at different stages of development will have different ways of thinking about the physical world. Language is a tool that symbolizes the physical world, and over time, the understanding of language will become more complex (Bruner, 1966). Experiments such as this would be the basis for establishing Bruner's theory of cognitive development.

<div align="center">Theoretical</div>

Jerome Bruner's research and experimentation led him to theorize that there were three levels of understanding that he referred to as enactive, iconic, and symbolic (Bruner, 1966). The first mode, called enactive, is learning through action. This type of understanding requires the learner to act out or experience the lesson for himself and then to make the actions habitual. Bruner gives the example of learning to ride a bicycle or teaching a child to ski (Bruner, 1966). The information must be experienced to be understood. The second mode, iconic representation, is based on perception and visual analysis. In the iconic mode the learner is using the senses to

complete a mental picture of the data so it can be comprehended. For this stage, Bruner uses the imagery of a person finding their way through a maze by recognizing a pathway through it (Bruner 1966). The final mode of understanding is symbolic, which is considered the most complex. In the symbolic stage, the learner is no longer dealing with physical objects themselves, but with representations of them. Language and images are considered symbolic and require a high level of thinking to relate and understand (Bruner, 1966).

While these three levels, also called modes of representation, were based on the theories of Jean Piaget, Bruner's theory differed in that the three stages did not necessarily occur in a certain order or during a particular age, but were continuously feeding into one another (Bruner, 1966). This belief went against many established theories of learning which cited the age of the student as the main factor in determining where that student was developmentally. Bruner instead believed that any concept could be taught to a student of any age, so long as the information was structured correctly (Bruner, 1996).

<div align="center">Reflection</div>

As previously mentioned, Jerome Bruner's impact on modern education has been great. His attention to cognitive development and his work on explicating the stages learners go through to understand a concept helped to bring about a revolution in the way that information is presented to students. This change in educational methods has been so great that it is hard to imagine a time before Bruner's theories were being applied in the classroom. John Crace writes "the idea that children go through developmental stages of learning has pretty much been absorbed into mainstream public debate and can seem uncontroversial, even plain obvious" (2007). Before the twentieth century and the beginning of the cognitive revolution, education was looked at in a more teacher centered fashion. Taking into account the mental processes of the students and structuring

information in a way that facilitates the learning process has helped to reach more students in diverse environments.

One of the most notable changes Bruner has brought about is the consideration of culture and language when dealing with the education of students. Teachers must pay attention to the way their students are understanding the information in order to make it relevant to them (Bruner, 1996). For example, while observing students in a seventh grade English classroom, I noticed that the teacher was using examples from popular culture to teach vocabulary words. The students were connecting with the information because it was set in a familiar context and was appropriate for learners at their age level. The students also went through all three stages of learning, as they were given an activity to engage their enactive skills, a puzzle for their iconic learning, and finally a journal assignment to engage their symbolic learning by creating something new with the information they had been given. Central to Bruner's theory of stages is the idea that the three stages do not follow any certain order, but all bleed into one and other (Bruner, 1966). The students are practicing the integrating information by using all three types of learning to understand what is being taught.

Also important to modern education practices is Bruner's idea of the spiral curriculum. This concept has been used with great success, especially in the teaching of highly complex areas of math and science (Bruner, 1966). Educators have used this concept to teach their subject matter through a steady building of information that reinforces student knowledge while introducing new ideas. The application of this particular theory is possible for any subject matter, as long as the teacher continues to involve students actively in each step of the learning process.

Application

When considering how Bruner's developmental theory applies to student learning and the practice of teaching, the most obvious conclusion to reach is that the idea of different learning

stages influences both the structure and delivery of information in the classroom. As a teacher, it is important to keep students engaged and actively involved in their education. Lesson plans should include activities that stimulate enactive, iconic, and symbolic learning. Getting students to use all three types of learning will result in a better understanding of the subject matter and help students process and use information that they will be presented with in the future (Bruner, 1996).

While certain subjects will tend to depend more on the use of one particular stage, it is not impossible to work all three stages into any subject. Teaching and English class, for example, might seem to depend entirely on symbolic learning, just by the very nature of what is being taught. However, it is important to remember that the three stages are not perfectly distinct, but instead flow into each other in a circuitous manner (Bruner, 1966). While learning how to spell or understand a poem, techniques may be used to activate both iconic and enactive learning as well as symbolic learning, which deals primarily with language. A physical activity that requires students to learn a certain series of movements while learning a poem or spelling a word will stimulate enactive understanding, while having students solve a puzzle or analyze clues will make use of the iconic mode of representation. Lessons that link physical action with memory and memory with comprehension will help students to better understand and access information so that symbolic learning can then take place.

Developmental Grid Table

Jerome Bruner	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL	Enactive Environment Procedures Sensory Capabilities Balance Needs
VERBAL	Language Active Dialogue Terminology
EMOTIONAL	Expectations Intimacy Motivation Interactive Relationships

3 STAGES OF LEARNING	
STAGES	**DESCRIPTION**
Stage 1: ENACTIVE	Learning through action Can not be taught through explanation; must be experienced Actions are then practiced and habitualized Example: Learning to ride a bike
Stage 2: ICONIC	Learning through visual analysis and perceptive clues Sensory input is used to create a mental picture of the physical world Responses to the physical are made based on perception Example: Solving a puzzle or navigating a maze
Stage 3: SYMBOLIC	Learns through mental manipulation of representational matter Understands symbols as being representative of things or ideas Can manipulate symbols mentally and relate to the physical world Example: Using a story to teach a lesson

References

Boulware, B., & Crow, M. (2008, March 1). Using the Concept Attainment Strategy to Enhance

   Reading Comprehension. *Reading Teacher*, *61*(6), 491. (ERIC Document Reproduction

   Service No. EJ787678) Retrieved September 5, 2008, from ERIC   database.

Bruner, J. (1968). *On Knowing: Essays from the Left Hand.* New York: Atheneum

Bruner, J. (1996). *The Culture of Education.* Cambridge: Harvard University Press

Bruner, J. (1966). *Toward a Theory of Instruction.* Cambridge: The Belknap Press of Harvard

   University Press.

Crace, J. (2007, March 27). *Interview: Jerome Bruner | Education | The Guardian* . Retrieved

   September 9, 2008, from

   http://www.guardian.co.uk/education/2007/mar/27/academicexperts.highereducati

      onprofile.

Cognitive revolution - Wikipedia, the free encyclopedia. (2008, Sep. 8). Retrieved Sep. 19, 2008,

   from http://en.wikipedia.org/wiki/Cognitive_revolution.

Explorations in Learning & Instruction: The Theory into Practice Database.(2008). *Constructivist*

   Theory (J. Bruner). Retrieved September 1, 2008, from

   http://tip.psychology.org/bruner.html.

Hevern, V. W. (2004). Key theorists: Jerome S. Bruner. *Narrative psychology: Internet and*

   resource guide. Retrieved September 2, 2008, from http://web.lemoyne.edu/~hevern/nr-

   theorists/bruner_jerome_s.html

Rogers, P., & Aston, F. (1990, January 1). The Role of Research in Children's Education.

   Educational Studies, *16*(2), 151. (ERIC Document Reproduction Service No. EJ423802)

   Retrieved September 3, 2008, from ERIC database.

Samples, B. (1992, January 1). Using Learning Modalities to Celebrate Intelligence. *Educational*

   Leadership, *50*(2), 62. (ERIC Document Reproduction Service No. EJ451481) Retrieved

   September 3, 2008, from ERIC database.

Smith, M.K. (2002). Jerome S. Bruner and the process of education. *The Encyclopedia of Informal*

   Education http://www.infed.org/thinkers/bruner.htm.

Running head: GIBSON

Noam Chomsky Stubborn Without
Jamin Gibson
Shepherd University

Abstract

For the past three months, I have been studying Noam Chomsky and learning everything he has offered to American society. Noam Chomsky is a big part of our country's history today. Based on his theories of the human mind, many different thoughts and ideas have been established. Chomsky's theories are based on the study of linguistics, human language, and grammar. Noam Chomsky perceived American culture as a struggle. Unfortunately, the comparison between the U.S.A. being worse than Nazi Germany of WWII made me want to read more into his political and personal views of the United States of America. Chomsky had many educational opportunities and came up with his philosophical ideas based on his understanding through his personal life in Philadelphia and his schooling throughout the United States and the world.

Noam Chomsky Stubborn Without

Biographical

Noam Chomsky was born in Philadelphia, PA on December 7th, 1928. He was born in a

Jewish family as the son of William and Elise Chomsky. His father was from Ukraine, while his

mother was from Belarus. His family is described as consisting of a "Yiddish side" and a

"Hebrew side". However, Chomsky has described himself of being more aligned with that of the

Hebrew side of culture and literature. Growing up as a Jew, Chomsky was brought up with fear.

Being a part of the only Jewish family in his neighborhood as opposed to all of the Catholics that

lived around him, it was a fearful experience. (Barsky 2001)

Chomsky wrote his first article at the age of 10 about the threat of the spread of fascism.

As he got a few years older, he was involved with anarchist politics. He graduated from Central

High School of Philadelphia in 1945. In the fall of that same year, he began studying linguistics

and philosophy at the University of Pennsylvania. At the University of Pennsylvania, Chomsky

learned about Zellig S. Harris a linguist professor at the University of Pennsylvania. He

completed his undergraduate thesis on Hebrew language in 1949. He had to rewrite his thesis and

in 1951 completed his paper as the Morphophonemic's of Modern Hebrew. In his paper, he tried

to explain the dispersal of phonetic forms in Hebrew. Chomsky made the idea moving and going

until the publication as "The Logical Structure of Linguistic Theory." At first, his book was not

accepted. It was finally accepted and allowed for many linguists to go down the path that

Chomsky designed. (Crabtree 1999)

Chomsky is a father of three children; two daughters and one son. He is married to linguist

Carol Schatz. His daughter's names are Aviva and Diane, and his son's name is Harry. Despite

his work as a linguist, Chomsky is also a renowned anarchist, author, and civil libertarian. After

his undergraduate studies, Chomsky moved on to Harvard University as a Junior Fellow in the

Harvard University Society of fellows. This happened during the early 1950's and the young

Chomsky created a structural theory of linguistics that caused quite a rouse. After Harvard,

Chomsky went on to teach linguistics at the Massachusetts Institute of Technology.

Contextual

Noam Chomsky was born during the "Great Depression." Chomsky was born in the city

of Philadelphia, where things aren't so wealthy, so he was constantly dealing with the issue of

poverty. However, his father was a true influential factor on Chomsky. His father, William

Chomsky, was "one of the world's foremost Hebrew grammarians" obituary in the New York

Times July 22nd 1977. (Chomsky on Democracy and Education page 1)From the age of two until

he was 12, Noam Chomsky attended Oak Lane County School (an experimental school run by

Temple University). (Chomsky on Democracy and Education page 1) As a result, Noam

Chomsky was able to have influence and guidance from his father through his younger years

outside of school. He also obtained it growing up through Oak Lane County School.

The next historical event Chomsky dealt with was on December 7th, 1941. On this day, the

United States declared into WWII against Germany. The U.S., in my opinion, protected itself

against world domination and did was right for peace on this earth. However, Noam Chomsky

doesn't necessarily feel the same way. Chomsky said, "America is worse than Nazi Germany"

(http://www.discoverthenetworks.org/individualProfile.asp?indid=1232). "Professor Chomsky

has denounced every U.S. President from Woodrow Wilson and FDR to Ronald Reagan and Bill

Clinton as the front men in "four-year dictatorships" by a ruling class. In his view, the U.S., led by

a series of lesser Hitler's, picked up where the Nazis left off after they were defeated in 1945.

According to Chomsky, a case could be made for impeaching every President since World War II

because "they've all been either outright war criminals or involved in serious war crimes"

(http://www.discoverthenetworks.org/individualProfile.asp?indid=1232).

In my opinion, Chomsky has been truly been influential. The first two historical events in his life were a true and real influence on the viewpoints and opinions that he has on the United States today. The influence of his learning through his father, as well as the Oak Lane County School, also allowed Chomsky to be the individual who he is today.

<div align="center">Experimental</div>

As I come to learn about Noam Chomsky, he wasn't a great man when it came to actual experiments. However, Chomsky had a debate with Jean Piaget on language and learning that dealt with the experimentation. The first part of the debate described cognitive structures and their development. Piaget believed what can be explained on the assumption of fixed innate structures can be clarified as well as "the 'necessary' result of constructions of sensorimotor intelligence. (Palmarinin-Piattelli) Chomsky understood that through his knowledge, there were no substantive proposals involving "constructions of sensorimotor intelligence" that offer any hope of accounting for the phenomena of language that demand explanation. (Palmarinin-Piattelli pg.24)

Another experimentation event they discussed was the Structure-Dependent Property of Linguistics Rules. Chomsky provided rules that dealt with different parts of language. The process consisted of declarative-question pairs, specified subject conditions, "Mentally Present" subjects, and On the Notion "Specified Subject." An example of declarative pairs would be: The man is here—Is the man here? The man will leave—will the man leave? The experiment of this question you would have a child think the first question was the more fitting of the two, but actually, the second question is more appropriate grammatically because it consists of successive words and also abstract phrases such as "noun phrase." The phrases are "abstract" in that their boundaries and labeling are not in general physically marked in any way; rather, they are mental constructions (Palmarinin-Piattelli pgs.25-26).

The experiment of human biology naturally consists of the study of language. The language faculty, which somehow evolved in human prehistory, makes possible the amazing feat of language learning, while inevitably setting limits on the kinds of language that can be acquired in the normal way (Chomsky, Noam pg.32). This experiment was one other that Chomsky believed would help with "common sense understanding" with cognitive capacity having limits set on it based on human intellectual achievement (Chomsky, Noam pg.33).

Theoretical

One particular theory that Chomsky believed in was the mind. He felt by studying the mind through Linguistics, that there would be a better understanding on how the mind works. Chomsky believed that the nature of the mind, more specifically the nature of the human language, attention should come from the 17th Century, "the century of genius," in which the foundations of modern science were firmly established and the problems that still confound us were formulated with remarkable clarity and perspicuity. (Chomsky, Noam pg.56). Chomsky believed that the study of the mind faces us with a problem of quality of complexity, not merely degree of complexity. What that last sentence means is that how the mind is worked over time is the problem, not the idea of just the mind working itself.

Another theory that Chomsky believed in was the theory of language. The theory gives a set of simple concepts that provided the basis for some successes, and some deep but rather vague ideas that did not seem to lead to any further productive research. The perception of the theory of language was not necessarily the best perceived at first. However, it's important to not abandon useful tools; rather, it is, first, that one should maintain enough perspective to be able to detect the arrival of the day when research that can be conducted with these tools is no longer important; and, second, that one should value ideas and insights that are to the point (Chomsky, Noam pg.57).

Chomsky also believed in the theory of human language. In one particular story here, he describes his opinions on human language: Furthermore, it is wrong to think of human use of language as characteristically informative, in fact or in intention. Human language can be used to inform or mislead, to clarify one's own thoughts or to display one's cleverness, or simply for play. If I speak with no concern for modifying your behavior or thoughts, I am not using language any less than if I say exactly the same things with such intention. If we hope to understand human language and the psychological capacities on which it rests, we must first ask what it is, not how or for what purposes it is used. When we ask what human language is, we find no striking similarity to animal communication systems. There is nothing useful to be said about behavior or thought at the level of abstraction at which animal and human communication fall together. The examples of animal communication that have been examined to date do share many of the properties of human gestural systems, and it might be reasonable to explore the possibility of direct connection in this case. But human language, it appears, is based on entirely different principles. This, I think, is an important point, often overlooked by those who approach human language as a natural, biological phenomenon; in particular, it seems rather pointless, for these reasons, to speculate about the evolution of human language from simpler systems – perhaps as absurd as it would be to speculate about the "evolution" of atoms from clouds of elementary particles (http://www.mekong.net/cambodia/chomsky.htm).

In conclusion, I believe Chomsky has developed knowledge on language and the mind. It is important to know that language and mind are two important factors that we use in our society today. To think an individual who started with a rough beginning could create such a positive influence on our future world, is great. It inspires me to want to push myself and make a difference in the years to come!

Application

As it has come to my attention, there are important factors for why we had to write this research paper. Some of the different factors, which I feel, are important for the reflection is collaboration, experience, and commitment. These three factors I believe were the most beneficial and guided me to be successful as a current Education 320 student. I will discuss some of the reasons for the three factors that have made me successful as a current 320 student.

The first factor I want to talk about is collaboration. I have realized this semester that without collaboration, I would be on my own little island. It has been very helpful to work together with multiple students in Education 320 this semester. Some of the different collaboration projects that I have done were presenting my definition of "Deliberate Ambiguity," presenting on Carl Jung, and working in the clinical field at Spring Mills Middle School teaching other students how to play different sports. These projects were important because I was able to work on my communication skills, learn new ideas, and work with students. Someday I will be a health/physical education teacher and it is vital to work with students as much as I possibly can.

Another factor that was important is experience. As I worked with collaboration this semester, I have been able to gain experience in multiple areas as an individual. I have learned how to communicate to an audience effectively, learn new terms and definitions to expand my overall knowledge in general discussion with others, and provide guidance to students to help them be successful in health/physical education. Given the opportunity of making the most out of gaining experience, allows me to give others such as my classmates experience for the future.

One last factor of importance would be commitment. I believe it is crucial to have worked on this research paper and the Education 320 class in general. Without dedication, hard work, and persistence this assignment would not be completed. In addition, it would not allow me to really take the time and effort to comprise what it really means to me as a 320 student this semester in Dr. Burke's class.

In conclusion, it is important to reflect on this research assignment. The three factors as I previously stated: commitment, experience, and collaboration were the most important for me to think about while doing this assignment. I am glad to have learned a lot from Education 320 and everything it has offered. I will definitely apply and take everything I have learned and help me with my future not only as a student at Shepherd, but also as a health/physical education teacher!

Reflection

As it has come to my attention, I have been able to realize some importance between the class of Education 320 and my theorist Noam Chomsky. I have understood the impact which learning can have on making application of an assignment. I will be explaining a few theories of Chomsky and how they have applied to my clinical field experience.

One particular theory in which Chomsky contributes today is Linguistics. Linguistics is the study of language and literature. In this particular case, linguistics is used through the study of the mind and being able to have a better understanding of how it works. So how would linguistics apply to the clinical field?

When evaluating children, it's important to read the body language of your students and see how they react to certain things. For example, I am currently field observing at Spring Mills Middle School in Martinsburg, West Virginia. As a health/physical education major, I am able to observe both in the classroom, the gymnasium, and out on the athletic fields. As I have been studying/observing the children, I have seen that they really enjoy certain activities more than others.

For example, the children had a chance to play wiffle ball the first week I went to observe. This past week they got the opportunity of playing touch football. I noticed the student's enthusiasm level was higher as a whole for wiffle ball as opposed to touch football. Touch football was very interesting for the boys, but not so much the girls. I fear a challenge next week

in trying to teach the girls how to play touch football when I teach the whole class the actual rules of the game and splitting them into groups. I believe the idea of Chomsky and learning and studying the human mind through linguistics is important to create a positive and optimistic environment for all the students.

Another theory, which Chomsky created, was theory of language. The theory of language describes a basis for simple successes by being able to work with different individuals on their own self-beings. Chomsky believed in the importance of self-being and creating it through language and coming up with ways to intelligently fit in our society. Chomsky's theory was not perceived the best when it first came about, but it was able to hold up in people's minds.

The clinical field has shown to me how children can portray themselves as students. I have heard a few students periodically cursing at one another while playing a game of basketball. On another occasion, I was able to see interaction by girls, which provided great insight on the activity of basketball that they were playing. As for the education classroom itself, students of the middle school level can best be influenced with comradely spirit, energy, and enthusiasm to guide one another and help everyone fit in as one big group.

In conclusion, when it comes to interaction between different children at the middle school level, the idea of self-being is becoming more and more to the forefront. I believe the Chomsky theory of language and his theory of linguistics are two great examples of how students can create their own "clicks" and make friends. I have witnessed this on a number of occasions out in the field at Spring Mills Middle School. The importance of Chomsky's theories are getting your students at the earliest age possible, so they can be modeled and molded into the students that you would want and hope for them to become!

Developmental

Noam Chomsky	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL	Fine motor Gross motor　　　　　　　　　　　　Childhood Height　　　　　　　　　　　　　　　Preadolescence Weight　　　　　　　　　　　　　　　Adolescence Visual　　　　　　　　　　　　　　　Adulthood
VERBAL	Intonation　　　　　　　　　　　　　Vocalization Inflection　　　　　　　　　　　　　Vocabulary development Combinations　　　　　　　　　　　　Fluency Echolalia Nonverbal (hands, arms or full body including head, face, and eye movement)
EMOTIONAL	Feelings　　　　　　　　　　　　　　Adjustment issues Responses　　　　　　　　　　　　　Emotive spectrum Aggression　　　　　　　　　　　　　Imagination Neoteny (adolescent characteristics transfers into adulthood)
SOCIAL	Cultural influences　　　　　　　　　　Action Maneuverability　　　　　　　　　　　Reaction Acclimation　　　　　　　　　　　　　Interaction Assimilation
MENTAL	Comprehension　　　　　　　　　　　Sensory application Articulation　　　　　　　　　　　　　Conceptualization Classification　　　　　　　　　　　　Analysis Evaluation
MORAL	Self interest　　　　　　　　　　　　　Responsibility Sense of fairness　　　　　　　　　　　Expectations

THEORY	
STAGES	**DESCRIPTION**
Linguistics	Established that there would be a better understanding for how the mind works.
Language	Simple concepts that provided the basis for some successes, and also some deep but rather vague ideas that didn't seem to lead to any further productive research.
Human Language	Based on informing or misleading, to clarify one's own thoughts or to display one's cleverness, or simply for play. Attention should come from the 17th Century in which the foundations of modern science were firmly established and the problems that still confound us were formulated with remarkable clarity and perspicuity
Universal Grammar	Leads to containing the brain to a limited set of rules for organizing language. There is the assumption that all languages have a common structural basis.
Generative Grammar	Attempts to give a set of rules that will correctly predict which combinations of words will form grammatical sentences. In most approaches, the rules will also predict the morphology of a sentence.
X-bar	Works on identifying syntactic features common to all languages. The letter "X" is used to signify an arbitrary lexical category. When analyzing a specific utterance, specific categories are assigned. Thus, the "X" may become an "N" for noun, a "V" for Verb, an "A" for adjective, or a "P" for preposition.

Bibliography

Barsky, F.R. (2001). *Noam Chomsky. The Columbia Encyclopedia, 6th Edition*. Retrieved:

September 4th, 2008.

Blunden, Andy (2005). *Linguistic Contributions to the Study of Mind*. Retrieved September 18,

2008, from http://www.marxists.org/reference/subject/philosophy/works/us/chomsky.htm

Chomsky, Noam (1972). Language and Mind. Atlanta, GA: Harcourt Brace Jovanovich. 56-57.

Chomsky, Noam (1975). Reflections on Language. Random House, NY: Trustee of Chomsky

Children's Trust.32-33.

Collier, Peter (2007). Noam Chomsky. Retrieved September 4th, 2008 from

http://www.discoverthenetworks.org/individualProfile.asp?indid=1232

Crabtree, Elizabeth (1999). *Noam Chomsky*. Retrieved September 4, 2008 from

http://www.muskingum.edu/~psych/psycweb/history/chomsky.htm

D'Agostino, F. (2001). *Noam Chomsky*. Gale Encyclopedia of Psychology, 2nd Edition.

Hornstein, Norbert. (1998). Noam Chomsky. London: Routledge Encyclopedia of Philosophy.

MacLennan, Jennifer (2005). *Noam Chomsky Rebel without a Pause*. United States: Docu Rama

Palmarinin-Piattelli, Massimo (1980). *Language and Learning the Debate between Jean Piaget

and Noam Chomsky*. Cambridge, Massachusetts: Harvard University Press.

Running head: AUGUSTE COMTE

Auguste Comte

Heather Manning

Shepherd University

Abstract

Auguste Comte is known to many as the creator of the term "sociology." His work with Saint-Simon allowed Comte to further his knowledge of how to make a perfect society free of fighting and disputes. Comte came up with stages that he believed all human go through, and these stages would help to describe why humans act the way that they do, and how that leads to society being the way that it is. Comte never gets his perfect society, but his research is still used today in helping to obtain order.

Auguste Comte

Biographical

Auguste Comte was born January 19, 1798 in Montpellier, France during the beginning stages of the French Revolution. His father was a man devoted to his family, Catholic religion, and work as a government official. Being Catholic as well as a government official was difficult at this time due to the French Revolution, which his father despised, but he never gave up his job as a government official (Bolender, 2004). Hearing his father speak of the Revolution as he did influenced Comte's view of his government at a young age.

Comte entered a school in his village when he was nine years old. He battled with many illnesses as a child, but that did not stop him from being a remarkable student. It was early in Comte's schooling that he came to the conclusion that he detested the emperor of the time, and he looked forward to the ending days of the Revolution when France would finally be free. The emperor had an influence on a scientific school that Comte had worked very hard to get admitted into when he was a bit older however, it was not an influence that many of the young scientists cared for. The emperor set up the school in a military style, had it run by a military general, and tried to train the young students as military members and not the scientists that they wanted to be. This technique made Comte's dislike for the emperor even stronger. The school was in Paris, which Comte fell in love with and decided Paris was to be his home. The school was closed down for a short time due to students protesting, and Comte was enraged by this so he left the school. The next few years were difficult for him. He survived by tutoring students in math, and translating a geometry book from English to French. When the school that he was attending reopened, Comte did not even attempt to get back in. This could have been the best decision he made because something was about to happen to him that would change his life (Bolender, 2004). He decided to follow his mentors to make a name for himself.

Contextual

It was not only Comte's father and the war that influenced him in his beliefs, and according to Mary Pickering, "the seven-year association of Comte and Saint-Simon, from 1817 to 1824, profoundly changed each man's intellectual development" (1993). Saint-Simon wanted to affect social science by using the physical sciences that were largely used at that time. These physical sciences were used by doctors and scientists. These doctors and scientists focused on medicine and physiology, and their goal was to "focus on the physical, animal nature of man to see how his ideas were formed to his sensations" (Pickering, 1993). With this information, the knowledge of ideas helped to form Comte's theory of sociology (Pickering, 1993).

Comte and Saint-Simon had much in common in their lives. They both resented the emperor of France for his actions and wanted to bring France back together as a strong country. Physiology was a great interest to the men in their quest to better understand humanity and knowledge. However, the one event that brought them together was trying to stop the chaos that was happening in France (Pickering, 1993).

Comte and Saint-Simon met at a time when Saint-Simon was writing the third volume to *L'Industrie.* Pickering states that, "on the basis of evidence supplied by the Saint-Simonian bibliographer Henri Fournel, most scholars agree that Comte wrote all four of the *cahiers*, or issues of volume three and the first *cahier* of volume four, which appeared in September and October 1817 under Saint-Simon's name" (Pickering, 1993). The men knew from the beginning that they were thinking very closely and together they would be able to accomplish much. Comte and Saint Simon worked together side by side for the next several years to produce the new ideas that were presented by the two. Comte urged Saint-Simon to teach non-Christians secular moral principles by using "similar positive moral ideas" because they were the "sole bond that could unite members of society and improving positive morality was equivalent to improving the social

state" (Pickering, 1993). The way Comte went about the teaching of non-Christians was another beginning to the thought of sociology. Saint-Simon was unknowingly influencing and giving ideas to Comte by allowing him to work closely to him.

After Comte and Saint-Simon parted ways, Comte faced difficult decisions in his writings. He was not able to determine if he should list his writings under his own name or under Saint-Simon's name (Bolender, 2004). He had always given Saint-Simon the credit in the past, and it was due to Saint-Simon's influential wisdom that Comte was able to have the knowledge to do the writings. According to Bolender, "Comte was given one hundred copies of his work under his own name. At the same time, Saint-Simon put out one thousand copies entitled *Catechisme des industriels* by Henri de Saint-Simon, Third Installment, a work that included Comte's essay, with an unsigned preface written by Saint-Simon in which he found fault with his disciple" (2004). This infuriated Comte, and for the rest of his life he denied Saint-Simon.

Experimental

After his association with Saint-Simon, Comte began to study on his own. According to Bolender, "Comte's aim was to create a naturalistic science of society, which would both explain the past development of mankind and predict its future course" (2004). To do this Comte used social dynamics and social statics. Social dynamics are of progress and order, and social statics are of change and stability (Bolender, 2004). Comte felt that man needed to be studied by using the same scientific way that the nature was studied by scientists. Comte felt that the only way to really gain knowledge was to include reasoning and observation together. Comte needed to create a new science that would include both of these, because the old natural sciences did not include reasoning and observation together. To do this, Comte created a new social science, which he called sociology (Bolender, 2004).

Comte thought that if men believed "social actions followed no law and were, in fact, arbitrary and fortuitous, they could take no concerted action to ameliorate their lot. Under these circumstances men naturally clashed with one another in the pursuit of their differing individual interests" (Bolender, 2004). He came to the conclusion that men do not get along because they are different from one another, and interests vary as well as opinions. Bolender quotes Comte saying, "'We shall find that there is no chance of order and agreement but in subjecting social phenomena, like all others, to invariable natural laws, which shall, as a whole, prescribe for each period, with entire certainty, the limits and character of social action'"(Bolender, 2004).

Comte believed that his new social sciences had to follow along with the same resources of the natural sciences (Cohen, 1965). To form new conclusions Comte knew he had to observe, experiment, and compare. Comte felt observation was only useful when the observer was able to look at what was happening and associate it with something else. If the observer did not know what to specifically look for, then observing was insignificant. Comte believed that experimentation could only be used in the social sciences in certain situations. He believed that the only time that experimenting was of any use was when something out of the norm happened to a person. Bolender states that, "Pathological cases are the true scientific equivalent of pure experimentation." Disturbances in the social body are "analogous to diseases in the individual organism," and so the study of the pathological gives, as it were, privileged access to an understanding of the normal" (Bolender, 2004). Comte believed that comparison was the most important of the three resources that he borrowed from the natural sciences. Comte felt that the comparison between humans and animals was important because this would give him more understanding of what separates human society and human behavior from other species; however, he felt that being able to compare humans to humans was even more important, and would help to better understand behavior. Comte found of the three resources to be of value, but there was a

fourth that he found to be of superior importance. The fourth was historical method, and it was

comparisons throughout history that led human beings to be the way that they are today. Comte

believed that sociology had no importance if historical influences were not involved (Bolender,

2004).

Theoretical

The term sociology comes from the Greek word "soci" meaning society, and the Latin

word "ology" meaning study of (Auguste Comte (1), 2008). Comte believed that sociology

should be used in order to help bring social order to the world creating a better society. Comte

believed that "facts cannot be observed without the guidance of some theory" (Auguste Comte (1),

2008). The theory that Comte relied on the most was the theory of *positivism*. The new theory

would involve looking at the phenomena that was taking place, and compare it to something of the

norm of that time. It was believed that the new theory would also "establish the natural laws that

governed human affairs, establish institutions that would maintain order and guide us in social

change" (Auguste Comte (2), 2008). In order for Positivism to work, humans had to get an idea of

how pieces of society fit together, and how to use the natural laws to change themselves to make

society better.

In order for humans to understand the natural laws and how they affect sociology they

need to be able to perform the basic resources of the natural sciences. The resources are

observation, experimentation, and historical comparison. Through using these resources, Comte

believed that people pass through three stages. As children, people are devout believers, who will

accept anything they are told. As adolescences, people are metaphysicians. Finally, as adults,

people are positivists, meaning they rely on observation and reasoning to provide answers

(Auguste Comte (2), 2008). Along with the three stages, Comte also believes that man thinks

along the lines of three theoretical stages. The first stage is theological stage which is a belief in

gods, demons, and mythological beings or in a broader term, supernatural beings. The second

stage is the Metaphysical Stage.   This stage involves essence, existence, substance, and accident.

Comte believes that it is in this stage that the mind wonders. The third stage is the positive stage

which is the stage when explanations are discovered through experimentation, observation, and

logic (Auguste Comte (2), 2008). Comte believed that each stage grew from the stage before.

Comte believed that since humans go through the stages, then society also goes through the

stages since it is made of humans. Society's Theological Stage is made up of military men, and

the basic structure is the family. The Metaphysical Stage is made of churchmen and lawyers. The

Positive Stage is made of industrial administrators and scientific moral guides. Comte believes

that this is the stage when the human race becomes the main social unit (Auguste Comte (1),

2008). This social unit makes society the way people perceive it. Comte believed that each

individual experiences society, and how that individual experiences society will affect how they

act in that society. To determine the outcome of how individuals act in society, Comte came up

with a new science called sociology. In this new science, Comte studied human behavior and how

it affected and was affected by the society that the individual was part of. There are six stages that

Comte believes each individual goes through. Working with second grade students in the clinical

field, it is easy to see that the students are going through the first stage of Comte's theory. This is

the stage when children believe everything that they are told. The cooperating teacher was

teaching the students basic addition with tens and ones. After going over a few problems with the

class as a group, the teacher gave the students a problem to work out on their own, and they tell

the class how they were able to come to that conclusion. The teacher had three tens and four ones,

and told the class that the number was 44. Most of the students in the class believed the teacher,

and wrote that number down in their book. Some of the students did recognize that it was wrong,

and they told the teacher the correct answer. The teacher was testing the students to see if they

actually understood the concept or if they were just going by what they heard. It was obvious that they students were just believing the teacher regardless if he told them the right answer or not. Comte believed that it was not enough only to observe and experiment to find the answers, but to have something abnormal associated with what is being observed or experimented on to find out how individuals will react in a society, and how to make it the best society possible. In order to see this in the clinical field, one would have to change the norm to see how the students interact, and act in different situations. Having college students enter a second grade classroom is sure to make the students act differently. Comte would have the teacher observe this, and adapt his classroom to best fit the situation. Comte's goal was to create a perfect society, and adapting to changes seems to be the best way to do this.

Auguste Comte's sociology and Positivism can be used in a classroom to help a teacher identify and deal with why a student is acting a certain way. The teacher could even take on the role of Auguste Comte and try to make his or her "society" of the classroom perfect. The teacher needs to take into consideration the first stage of Comte's theory. When referring to the stage, the teacher can see that children are devout believers. The teacher will need to teach the children that they need to find answers by doing some sort of reasoning, experimentation, observation, or so on, and not simply believe everything that they are told. The teacher could test this by intentionally giving the students incorrect answers, and persuading the children to find the real answer, and to back their reasoning as to why they came to that conclusion. By teaching students to think for themselves, the teacher will be able to give his or her students more challenging assignments, and ultimately have an advanced group of students. The teacher also needs to look at how students interact with each other in the classroom. If there are two disruptive students sitting next to one another, then those students will most likely be distracting each other and the classmates around them. The teacher needs to move the students so that they are working well with each other and

creating order and peace in the society. This order and peace will be positive for student learning. Auguste Comte's goal was to create peace in a perfect society. A teacher is capable of doing this by observing, taking those observations, and applying them to his or her classroom to make it work best for the students. As long as the students feel that their "society" is peaceful and almost perfect, it is sure to have a positive influence on their learning.

Auguste Comte	
ATTRIBUTES	DESCRIPTIVE DETAILS
VERBAL	Vocalization
EMOTIONAL	Feelings Adjustment issues Responses Emotive spectrum Aggression Neoteny (adolescent characteristics transfers into adulthood)
SOCIAL	Cultural influences Action Reaction Acclimation Assimilation Interaction
MENTAL	Comprehension Sensory application Conceptualization Classification Integration Evaluation Analysis Logic
MORAL	Self interest (egocentrism) Conscience (sense of ethics, scruples, etc.) Obedience

THEORY	

STAGES	**DESCRIPTION**
Devout Believers:	As children, people tend to accept anything they are told.
Metaphysicians:	As adolescents, people tend to have a theory as to why things take place the way that they do.
Positivists:	Young Adults tend to rely on observation and reasoning to provide answers to all questions.
Theological:	A belief in gods, demons, and mythological beings or in a broader term, supernatural beings. After passing through the first three stages, some adults enter into this stage.
Metaphysical:	Essence, existence, substance, and accident. This is the stage that the mind wonders. After passing through the first three stages, some adults enter into this stage.
Positive:	Explanations are discovered through experimentation, observation, and logic. After passing through the first three stages, some adults enter into this stage.

References

Auguste Comte: 1798-1857 (1). Retrieved October 2, 2008, from RSU Faculty Web site:

www.faculty.rsu.edu/~felwell/Theorists/Comte/COMTE.PPT.

Bad Religion - Positive Aspect Of Negative Thinking lyrics. Retrieved August 31, 2008, from

YouTube Web site: http://www.youtube.com/watch?v=opvdsKBHwl0.

Auguste Comte, 1798-1857 (2). Retrieved September 5, 2008, from The History of Economic

Thought Web site: http://cepa.newschool.edu/het/profiles/comte.htm.

Bernhard, P. (2000). Auguste Comte on positivism and happiness. *Journal of Happiness Studies*.

1, 423-445. Retrieved Monday, August 18, 2008 from the Academic Search Premier

database.

Bolender, R (2004). Auguste Comte. Retrieved September 7, 2008, from Dr. Rob Bolender

Website:

http://www.bolender.com/Sociological%20Theory/Comte,%20Auguste/comte,_auguste.ht

m.

Cohen, D. (1965). Comte's changing sociology. *The American Journal of Sociology*. *71*, 168-177.

Retrieved Monday, August 18, 2008 from the JSTOR database.

Mill, J. (1882). *Auguste Comte and Positivism*. London: George Routledge & Sons, LTD.

Pickering, M. (1993). *Auguste Comte: An Intellectual Biography*. New York, NY: Press Syndicate

of the University of Cambridge.

Prendergast, C. (1997).The correspondence of John Stuart Mill and Auguste Comte/positivist

republic: Auguste Comte and the reconstruction of american liberalism, 1865-1920.

Journal of the History of Behavioral Sciences, *33*, 302-308. Retrieved Monday, August 18,

2008 from the Academic Search Premier database.

Swatos, W. (1998). *Encyclopedia of Religion and Society*. Retrieved September 5, 2008, from

    Hartford Institute for Religion Research Web site:

    http://hirr.hartsem.edu/ency/Positivism.htm.

Wernick, A. (2001). *Auguste Comte and the Religion of Humanity: The Post-Theistic Program of*

    French Social Theory. Cambridge: Cambridge University Press.

Running head: KAZIMIERZ DABROWSKI

Kazimierz Dabrowski

Kelly Marie Martin

Shepherd University

Abstract

Kazimierz Dabrowski was a psychologist and psychiatrist who spent all of his life studying

individuals based on their emotional development. His theory of Positive Disintegration is based

on his studies where he recognized different levels of emotional development within different

people. There are different causes and effects on people that fall into his theory. Many people fall

into Dabrowski's theory either for having a high level of physical energy, a large imagination, a

high level of curiosity and drive, or a deep caring for others. He classifies people with high

emotional sensitivity as having overexcitabilities. It is very important for people having these

overexcitabilities to express themselves in whatever way necessary as long as it is not harmful to

themselves or others; whether it be verbal, physical, mentally, or any other way of expressing

themselves. Knowing Kazimierz Dabrowski's theory is a key essential when working with

children as part of their learning progress, especially those with overexcitabilities.

Kazimierz Dabrowski

Biography

Kazimierz Dabrowski was born on September 1, 1902 in Klarow, Lublin, Poland. He is one of four children, having one older brother, a younger brother and sister. His father, Antoni, was an agriculture administrator. Dabrowski was introduced to death at the young age of six when his sister died at the age of three (Tillier, 2008, p. 1). Dabrowski formed a desire to better understand humans and their development at a young age.

Dabrowski's early education took place at home where he had access to books and music. His formal education first began at the Male College Szkola Lubeiska in Lublin where he was taught by "Catholic priests and pastors" (Tillier, 2008, p. 2). In 1921, he entered Katolicki Universytet Lubelski, Faculty of Polish Studies even though he was still a grammar school student. There he was a listener and attended lectures on psychology and philosophy. He passed university exams before even receiving his secondary school certificate.

Dabrowski's education continued at the university level where he studied philosophy, psychology, and literature. In 1924, he moved to Poznan and continued to study philosophy. He completed his Masters Degree in philosophy at the University of Poznan. In 1926, Dabrowski started attending Warsaw University, Faculty of Medicine. In 1928, the Polish National Culture Foundation gave Dabrowski a grant to study psychology and education at the Jean-Jacques Rousseau Institute in Geneva. He received his medical degree from the Forensic Medicine Department of the University of Geneva in 1929. "He continued to study there for his post undergraduate degree, which he completed in 1931" (Tillier, 2008, p. 3).

In 1933, Dabrowski was married to his first wife. He and his wife "went to Harvard University to study at the School of Public Health" (Tillier, 2008, p. 4). In1934, Dabrowski returned to Poland and created the Polish League of Mental Hygiene with financial help from the

Rockefeller Foundation and its leader. The first signs of the theory of Positive Disintegration were seen in 1937. By the year 1939, there were seven different branches of this institute, and by 1948, there were twelve branches and twenty dispensaries. Meanwhile, he continued his writing career and published different works on behaviorism, self-mutilation, and nervousness of children and youth.

In 1940, Dabrowski married his second wife, after his first wife passed away of tuberculosis. Dabrowski was heavily affected by death throughout his entire life. He states "I learned about death very early in my life. Death appeared to me not just as something threatening and incomprehensible, but as something that one must experience emotionally and cognitively at a close range" (Tillier, 2008, p. 2). His sister died at an early age and his younger brother was killed in 1941 during World War 1. Throughout his life Dabrowski saw many examples of negative human behavior and acts of high human character.

In 1942, Dabrowski was put in jail for giving soldiers of Armia Krajowa a place to hide in his College of Mental Hygiene and Applied Psychology, which he founded in 1942. "Due to co-operation with Polish underground authorities, Dabrowski was able to provide hiding-places to soldiers" (Tillier, 2008, p. 5). After a few months of investigation they set him free. It was said that his second wife, Eugenia, had a role in his jail release. During the year 1948, Dabrowski moved back to the United States to New York and studied mental health, child psychiatry and neuropsychiatry.

In 1965, Dabrowski moved his family to Edmonton, Canada and gave lectures at Feminina University. During his last years, he spent time writing, lecturing, and traveling throughout Alberta and Quebec. He often revisited Poland to maintain activity in the Polish Society of Mental Hygiene.

Kazimierz Dabrowski had a major heart attack in 1979. He wanted to be in his homeland when he died so he moved back to Poland. He died in Warsaw on November 26, 1980 at the age of seventy-eight. Dabrowski was buried beside his good friend and fellow physician, Piotr Radlo. His second wife and two children survived him.

Contextual

During Kazimierz Dabrowski's life time, both World War 1 and World War 2 occurred. World War II took place from 1939-1945 in Europe and Asia. The start of WWII began when Germany invaded Poland, Dabrowski's homeland. The war included countries around the world such as, Britain, France, Germany, Poland, Australia, New Zealand, Canada and South Africa. World War II was one of the largest historical events. Tillier (2003) states, "World War II produced about 50 million deaths, more than any other war to date" (p. 8). Tillier (2008) quotes Aronson, "of the 400 Polish psychiatrists practicing before the war… only thirty-eight survived**"** (p. 8). This gave Dabrowski even more of a drive to study humans.

Kazimierz Dabrowski was highly influenced by death throughout his life. He had an experience with death during World War I that was very significant to him. He was affected by the aftermath that he observed in a town near his hometown. Tillier (2008) states "as Dabrowski walked among the dead soldiers laying in his former playfield, he related how he was fascinated by the various positions their bodies took and the different expressions frozen on their faces" (p. 2). He also experienced the deaths of his younger sister and brother as well as his first wife. During his years of education, Dabrowski decided to study behaviorism due to a personal experience of a friend committing suicide. Tillier (2008) quotes Dabrowski, "I learned about death very early in my life. Death appeared to me not just something threatening and incomprehensible, but as something that one much experience emotionally and cognitively at a close range" (p. 2).

Dabrowski was influenced by a few people in his life. Jan Mazurkiewicz (1896-1988) who was a psychiatrist played a big role on Dabrowski's thinking. Dabrowski was also highly influenced by the grants and support that he received. One of the grants was from the Polish National Culture Foundation for him to study psychology. He also received financial help from the Rockefeller Foundation to continue his studies.

Kazimierz Dabrowski was also heavily influenced by people and their personal development. Dabrowski dedicated his entire life to the study of psychology, wanting to find out more and more about the development of humans. In his later years, his theory of Positive Disintegration finally emerged. Mika (2002) writes, "Theory of human personality development where the guiding role is assigned to emotions" (p. 2)**.** That quote describes what Dabrowski's theory is based on.

Experimental

Kazimierz Dabrowski spent all of his life dedicated to studying human behavior in the field of psychology. Tillier (2009) states "Dabrowski preserved with his studies of human development, developed his theory and practiced Psychiatry all his life" (p. 3). He focused heavily on influences that contribute to human behavior and was very committed to his studies.

When focusing on influences leading to human behavior, Dabrowski divided his reasoning into three different factors. His first factor "the strong and primitive influence of heredity" and the second "the robotic, dehumanizing role of the social environment" (Tillier, 2008, p. 6). His third factor was based on when a person "resist their lower impulses and the habitual responses characteristic of socialization" (Tillier, 2008, p. 6).

The first factor or phase was based on the influences and development while being out in the real world. Most people accept the values and morals of their family and friends early on in life. Dabrowski felt that this was a very large impact on the way humans behave. Tillier (2002)

says "They largely accept the values and mores of society with little question and have no internal conflict in abiding by the basic tenets of society" (p. 5). While in this developmental process humans sometimes see the bigger picture in life and set high goals when comparing their life to others. "Eventually, through the processes of advanced development and positive disintegration, one is able to develop control over one's reactions and actions" (Tillier, p. 6).

The second factor or phase was based on the influences that humans often act robotic by doing the same predictable routines daily. "During development, the clash between one's actual behavior and environment and one's imagined ideals creates a great deal of internal conflict" (Tillier, 2008, p. 7). In this developmental process, humans often become stubborn. Situations arise where a person may have a daily routine doing one thing but really wants to be doing something else. This then causes problems within ones own beliefs that lead to doubting, and a change of personality.

The third factor or phase of influence was based on humans realizing that they can reach a higher level in life then where they currently are. "Emerging autonomy is reflected in conscious and volitional choices toward what a person perceives as 'higher' in their internal and external milieus" (Tillier, 2008, p. 6). Over time this will shape personalities, ideas, and values. Tillier (2008) states "It is important to realize that this is not simply an actualization of oneself as is; it involves tremendous conscious work in differentiating the higher and lower in the self and in moving away from lower selfish and egocentric goals toward an idealized image of how 'you ough to be' (p. 7). It is in this stage of Dabrowski's ideas of development that humans decide what they want in life and who they want to be. Also, they avoid the lower levels and aim for the higher levels in life.

Dabrowski found occurring levels of development within the three factors or phases of influential development. The first level involves "an integrated but lower level expression of

hereditary and social forces" (Tillier, 2008, p. 7). This is known as the primary level where

humans will have little conflict with ones self, but not realize the possibilities in life. The second

level is "characterized by the process of disintegration and (also in levels three, and four)

psychoneuroses are common features" (Tillier, 2008, p. 7). In this level humans begin to doubt

what they have known of life as they realize what other possibilities are out there. The third level

"is the highest level, second integration, characterized by the expression of one's unique and

autonomous personality" (Tillier, 2008, p. 7).

<div align="center">Theoretical</div>

These three levels of influential development and the sub-levels of development all came

about from Dabrowski's study of human behavior. Kazimierz Dabrowski's theory of "Positive

Disintegration" is based on "emotional development, on the study of sensitive, non-aggressive,

highly intelligent, and creative individuals" (Silverman, 1994, p.2). He found the individuals in

public "oriented towards competition, power, status and wealth" (Silverman, 1994, p.2).

Dabrowski found during his studies that certain patterns of response grouped individuals into

different levels of values in life. He also found that gifted individuals had more distinct responses.

"He called this phenomenon "nadpobudliwosc", ("superstimulatability"); it has been translated as

"overexcitability"" (Silverman, 1994, p.2). Dabrowski put the overexcitability into five varieties:

(a) psychomotor, (b) sensual, (c) imaginational, (d) intellectual and (e) emotional. "The

overexcitabilities (OEs) may be thought of as an abundance of physical energy, heightened acuity

of the sense, vivid imagination, intellectual curiosity and drive, and a deep capacity to care"

(Silverman, 1994, p.2). Individuals can experience one or more than one type of OE at the same

time. It is important to know that studies have shown that gifted individuals tend to have stronger

OEs than non gifted individuals. Sensitivity, perfectionism, intensity and introversion are all

aspects of emotional overexcitability. Silverman (1994) states that "according to Dabrowski's

theory, gifted children who exhibit high degrees of sensitivity are endowed with high emotional OE" (p. 2).

There are five levels of development within Dabrowski's theory. The first level is Primary Integration. This is the level where "intelligence subsumed under primitive instincts" there are no inner conflicts (Mika, 2002, p.1). The second level is the Unilevel Disintegration, this is where mental disturbances are "very serious and have mostly unconscious character; moral relativity" (Mika, 2002, p. 1). The third level is the Spontaneous Multilevel Disintegration; there is inner conflict in this level. There is a "growing sense of "what out to be" and "what is"; actions guided by an emerging autonomous hierarchy of values and goals" (Mika, 2002, p. 1). The fourth level of development within his theory is the Organized Multilevel Disintegration. This level includes "shaping and systematization of one's behavior, conscious and planned self-transformation; growth of empathy, autonomy and clarity of values and goals" (Mika, 2002, p. 1). The last level is the Secondary Integration where organization and personality form; "dynamisms of responsibility, authentism, and autonomy, empathy, self-perfection, personality ideal" (Mika, 2002, p. 1).

There are three factors that influence the five levels of development of Dabrowski's theory. The first factor is the "genetic and permanent physical traits" (Mika, 2002, p. 2). The second factor is the "Influences of social environment" and the third factor makes self-determination possible "and is necessary for creativity and advanced development" (Mika, 2002, p. 2). There are also three types of Dabrowski's development. The first type is known as normal, this is the "statistical norm, fulfillment of biological and social imperative, no attempts at conscious self-transformation; underdevelopment of emotional functions" (Mika, 2002, p. 2). The second type of development is the "One-Sided" type. The one sided also known as "one strong skill, talent or set of skills" is where some emotional and intellectual potentials develop very well "while the rest remain undeveloped" (Mika, 2002 p. 2). The last type of development is the "Global (universal)

and accelerated" (Mika, 2002, p. 2) type. This is where "all cognitive AND emotional functions develop with equal intensity, self-aware and conscious direction of ones own development, positive disintegration" (Mika, 2002, p. 2).

While Kazimierz Dabrowski studied humans throughout his life, he placed them into different levels making his theory of Positive Disintegration. He was able to do this based on their responses to how they reacted in the real world; influences were a huge part of how they were placed. Overall Dabrowski placed individuals based on their emotional development.

Reflection

The research I have done on Kazimierz Dabrowski has been very important to me as a future educator. Learning about his theory of Positive Disintegration will be very beneficial to me in a classroom environment. I now have a better understanding of what I can expect from students who may have developed on emotions and may be classified as gifted; some students may fall into his theory that are not classified as gifted. Dabrowski's theory is based on emotional development and influences. After learning about these different types of developments and influences I will have a better understanding of why a student may act a particular way.

This research has impacted my life as an Elementary Education major. Overexcitabilities are found in everyone including myself; whether it be an abundance of physical energy, heightened acuity of the senses, vivid imagination, intellectual curiosity or a deep capacity to care. I have learned that Kazimierz Dabrowski's theory is tied to everyone in one way or another. Whether it is the influence of one's social environment, a genetic trait or an autonomous force, everyone can somehow relate to his theory.

While observing in a first grade classroom, I have already seen where different students fit into the different levels of development, according to Dabrowski's theory. Some students are more attached to the teacher while other students are more independent. Often students work

better with their peers rather than working with the teacher. Each student has a passion to learn

but learns in a different way. All of the students are very creative with their work and care deeply

about one another. They all fit into Dabrowski's theory in one way or another.

Again, the importance of this research done on Kazimierz Dabrowski will stick with me as

a student and one day as an educator. It is important to know and understand that everyone has a

different way of developing; even though all students do not learn the same way, they can still

learn the same material. I will be able to see the similarities in development within the students

and know what each learner will require to learn.

<div align="center">Application</div>

Kazimierz Dabrowski's theory of Positive Disintegration can be translated into guiding

principles for student learning in many different ways. Students that fall into Dabrowski's theory

are often energized, non-aggressive, sensitive, honest, and care deeply for others. It is important

to create an environment that has limited to no negativity or offensive atmosphere. Students need

to be able to express themselves but know what the limit is when it comes to stating or doing

something that could be harmful.

Providing a positive environment will make students feel comfortable and open to the

teacher and other students. All students, especially those with overexcitabilities, need to be in an

atmosphere full of positive emotions rather than negative that could affect their learning. It is

important to do this with students with OE because they will be able to express themselves, which

is very essential to their learning process.

While teaching students with OE "accept all feelings, regardless of intensity" (Lind, 2001,

p. 3). It is important for students to have their freedom of expressing how they feel and to be able

to have different emotions. Even if the emotion is negative towards a certain objective or even a

student let the student express him or herself. It will be important to help them understand the differences between being rude and expressing a true statement.

In conclusion, Kazimierz Dabrowski's theory is broken down into five different levels of intensity. The first attribute is physical; students that fall into his theory will be energized. It is important for students to be able to have time for "physical or verbal activity, before, during and after normal daily and school activities-these individuals love to do and need to do" (Lind, 2001, p. 1). For students with OE, they need to be able to express themselves with their energy as long as it is not harmful to themselves or others. Whether it is writing, drawing, singing, running, laughing, or talking just let them express their emotions before, during or after an activity. This is very important for their learning process.

Table 1.

Developmental Grid Table for Kazimierz Dabrowski

Kazimierz Dabrowski	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL	Energized- An abundance of physical energy
VERBAL	Perfectionism- Heightened acuity of the senses
EMOTIONAL	Empathy- Concern for others, sensitivity in relationships, emotional ties and attachments Sensitivity- Shows concern for others feelings Intensity- Intensity of feeling, extremes of emotion, complex emotions and feelings Introversion- A developmentally positive trait, it indicates the capacity to inhibit aggression
SOCIAL	Nonaggressive- Abstention from aggression Sensitivity- Sensitive, easily hurt, sensitive to the feelings of others
MENTAL	Curiousness- Intellectual curiosity and drive
MORAL	Honest- Will tell the truth even if he/she gets in trouble Sensitivity- Has a clear sense of right and wrong, deep capacity to care Consciousness- Well-developed sense of morals and values that goes beyond rules

Positive Disintegration	
Theory of human personality development where the guiding role is assigned to emotions. Theory of emotional development on the study of sensitive, nonaggressive, highly intelligent and creative individuals.	
Types of development	**DESCRIPTION**
Primary Integration	A particular development that is rigid and stereotypical. A character's intelligence is subsumed under primitive instincts. Acts off of impulsive actions, but does not have inner conflicts.
Unilevel Disintegration	A particular development where the previous well-integrated structure is loosened as a result of external circumstances. Unilevel mental disturbances are very serious and have mostly unconscious character; moral relativity.
Spontaneous Multilevel Disintegration	A particular development is guided by an emerging autonomous hierarchy of values and goals. The emergence of multilevelness – inner conflict of ML character. The character has a growing sense of "what ought to be" and is growing maladjustment to "what is".
Organized Multilevel Disintegration	A particular development that is conscious of shaping and systematization one's behavior. A character is conscious and plans self-transformation; growth of empathy, autonomy and clarity of values and goals are developed.
Secondary Integration	A particular development based on organization and harmonization of personality and personality ideal; Character forms dynamisms of responsibility, authentism, autonomy, empathy, self-perfection, and personality ideal.

References

Dabrowski, K. (1967). *Personality-Shaping Through Positive Disintegration*.

Boston: Little Brown.

Dabrowski, K. (1972). *Psychoneurosis Is Not an Illness*. London: Gryf.

Laycraft, Krystyna. (2006, August, 3-5). Positive Maladjustment

as a Transition from Chaos to Order. *The Seventh International Congress of the   Institute*

for Positive Disintegration in Human Development. Retrieved September 3, 2008,

http://members.shaw.ca/btillier/Laycraftb.pdf

Lind, Sharon. (2001). Overexcitability and the gifted. *SENG Newsletter.* 1-4

Mendaglio, S. (2008). *Dabrowski's Theory of Positive Disintegration*. United States;

Great Potential Press, Inc.

The Theory of Positive Disintegration by Kazimierz Dabrowski. (n.a.) Retrieved

September 1, 2008, from http://www.poitivedisintegration.com

Mika, Elizabeth. (2002). Presentation notes for an OGT Conference. *Dabrowski's Theory*

of Positive Disintegration, 1-10*.* Retrieved Sept 1, 2008 from,

http://talentdevelop.com/articles/DTOPD.html

Mika, Elizabeth. (2006, October). Research Commentary Point-Counterpoint: Diagnosis of

Giftedness and ADHD. *Roeper Review*, Vol. *28*, (4), pages 1-11.

Silverman, Linda Kreger. (1994). The Moral Sensitivity of Gifted Children and the

Evolution of Society. *Roeper Review*, Vol. *17*, (2), pages 1-14.

Tillier, Bill. (2008, February). *Biography of Kazimierz Dabrowski.* Retrieved Sept 1, 2008,

from, http://positivedisintegration.com/dabbio08.htm

Erik Erikson

Jennifer Nicewarner

Shepherd University

Abstract

This paper is about Erik Erikson and his theory of development. There are a few different parts of this paper; The first section is his biography and cultural background, his childhood, and his experiences. The next section is contextual and is about the historical events that happened during his life, and people that influenced his philosophy. The next section is experimental and it is about his experiences with people that helped influence him and his observations of them. The section after that is theoretical and it is about Erikson's eight stages of human development. The next section is developmental and it is a table that includes different characteristics based on Erikson's theory. Lastly, the conclusion is a reflection of the paper and an application of how to translate the theory into guiding principles for student learning.

Erik Erikson

Biography

Erik Erikson was born June 15, 1902 in Frankfurt, Germany. His mother was Karla

Abrahamsen. She was a young Jewish woman who was a single mother for the first three years of

Erikson's life. His father is unknown, but he was Danish. Karla ended up marrying Erikson's

doctor, Dr. Theodor Homberger. Erikson went by the last name of Homberger for a while because

his parents wanted to keep his real father a secret. This problem would lead to his future fixation

on identity.

Ultimately, Erikson's family moved to southern Germany. His childhood was hard. He was

Jewish and was constantly picked on while growing up. In school, he focused on art and different

languages instead of the core subjects which helped him later in his career. After high school he

took a year off and traveled around Europe. After that he decided to go to art school and ended up

becoming a teacher, with some influence from a friend.

Some of the children that he taught were Americans who came to Germany to for Freudian

training. Erikson was admitted into *Vienna Psychoanalytic Institute*. He married Joan Serson and

they had three children. He then left Vienna, went to Copenhagen, and ended up in Boston in 1933

and became Boston's first child analyst. He was then offered to teach at Harvard and decided to do

that for a while, privately practicing child psychoanalysis. He then transferred to Yale and then

University of California at Berkeley and later taught at the Menninger Foundation. Erikson then

went back to California and taught at the Center for Advanced Study in the Behavioral sciences at

Palo Alto and later because a clinician and psychiatric consultant at the Mount Zion Hospital in

San Francisco.

When he became a United States Citizen, he decided to change his last name to Erikson.

He wanted to define himself as a "self-made man" and Erikson means "Erik's son". In 1950 he

wrote *Childhood and Society*. He left Berkeley and went to work at a clinic in Massachusetts for

ten years and then went back to Harvard for another ten years. Erikson retired in 1970 and died in

1994.

<div align="center">Contextual</div>

Moving from the biographical aspect of Erik Erikson, there are some historical events and

factors that influenced his work. Erik Erikson lived from 1904 to 1994 and significant events

occurred. Most importantly, there were two major wars, World War I and World War II. The

Jewish community were the ones that were most impacted by the war, and the fact that Erikson

got picked on also helped him to come up with his identity crisis theory. The Second World War

had a great impact on Erikson's life because he was Jewish: "So here he was, a tall, blond, blue-

eyed boy who was also Jewish. At temple school, the kids teased him for being Nordic; at

grammar school, they teased him for being Jewish" (Boeree 2007). Getting picked on as a child

helped Erikson relate to the kids he was observing and also gave him a different point of view.

Erik Erikson was influenced by different aspects of society, but Sigmund and Anna Freud

were the people that had the most influence on Erikson. "Erikson was also constantly concerned

with the rapid social changes in America and wrote about issues such as the generation gap, racial

tensions, juvenile delinquency, changing sexual roles, and the dangers of nuclear war" (Sharkey

1997). These things going on in society led to great discoveries from Erikson. According to the

psych 2301 website,

> Erik Erikson was a follower of Sigmund Freud who broke with his teacher over the
>
> fundamental point of what motivates or drives human behavior. For Freud it was biology
>
> or more specifically the biological instincts of life and aggression. For Erikson, who was
>
> not trained in biology and/or the medical sciences the most important force driving human
>
> behavior and the development of personality was social interaction (psych 2301).

Erikson was a student of Freud and admired him greatly and he learned a lot from Freud.

<div align="center">Experimental</div>

Erik Erikson had a lot of experiences and interactions with people of every age throughout his life. According to Sharkey,

He studied combat crises in troubled American soldiers in World War II, child-rearing practices among the Sioux in South Dakota and the Yurok along the Pacific Coast, the play of disturbed and normal children, the conversations of troubled adolescents suffering identity crises, and social behavior in India. (Sharkey, 1997)

This quotation shows the variety of cultural situations in which Erikson observed people. He did not just pay attention to Americans, but human interactions in general which gives him a greater perspective on his studies.

"When he was treating children, for example, he always insisted on visiting his young patients' homes and on having dinner with the families" (Elkind, 1970). By doing this, he could get to see how the children interacted with their family. One can learn a lot from seeing parents interacting with their children, and vice versa.

Another group of people that Erikson worked with and made observations about were Indians that lived in South Dakota. According to Elkind,

Erikson did field work not only with the Oglala Sioux of Pine Ridge, South Dakota, but also with the salmon-fishing Yurok of Northern California. His reports on these experiences revealed his special gift for sensing and entering into the world views and modes of thinking of cultures other than his own (Elkind).

This quotation is proof that Erikson reached out of his own culture and took time to make observations about other cultures to influence his theory.

Erikson also spent a lot of time with injured World War I soldiers. "It seemed to Erikson that many of these men had lost sense of who they were…their main problem seemed to be identity confusion" (Elkind). This observation greatly helped with Erikson's identity crisis theory.

Theoretical

After Erikson completed all of his observations, he came up with his theory of human development. Erikson believed that there are eight stages of development. The first stage is called the oral-sensory stage and lasts for about the first year or year and a half of life. The conflict in this stage is trust versus mistrust. "If mom and dad can give the newborn a degree of familiarity, consistency, and continuity, then the child will develop the feeling that the world especially the social world is a safe place to be, that people are reliable and loving" (Boree). Erikson discovered that the responsibility of this stage lies in the hands of the caregiver (parent or babysitter).

The second stage of development is the muscular-anal stage which lasts between eighteen months and three years. The main conflict in this stage is autonomy, independence, versus shame or doubt. The parent, or care-giver, needs to let the child be independent and not reprimand them for the little things. If the parent reprimands the child too harshly they will develop a sense of shame instead of independence.

The third stage of development is the locomotor stage. This occurs between the ages of three to six. The conflict during this stage is initiative versus guilt. "Initiative means a positive response to the world's challenges, taking on responsibilities, learning new skills, feeling purposeful. Parents can encourage initiative by encouraging children to try out their ideas" (Boree). This skill is very important to have. Without it, the child will never want to try out new things and they will never branch out. The child needs to know though that there is a limit and if they exceed that limit then guilt comes into play. There needs to be a balance between initiative and guilt.

The forth stage of development is latency. This occurs between the ages of six and twelve. The conflict during this stage is industry versus inferiority. "Children must "tame the imagination" and dedicate themselves to education and to learning the social skills their society requires of them" (Boree). This stage occurs while children are in elementary and middle school. They need to be able to put a focus on education and learn that education comes first, but still have some humbleness.

Stage five of development is adolescence. This stage occurs between the ages of thirteen and eighteen. The conflict that evolves in this stage is identity versus role confusion. Children need to find out who they are on their own without any peer influence. "When an adolescent is confronted by role confusion, Erikson says he or she is suffering from an identity crisis. In fact, a common question adolescents in our society ask is a straight-forward question of identity: "Who am I? " (Boree). Identity crisis is a big part of Erikson's theory.

Stage six of development is young adulthood. This stage occurs between the ages of nineteen and forty. The conflict in this stage is intimacy versus isolation.

> Intimacy is the ability to be close to others, as a lover, a friend, and as a participant in society. Because you have a clear sense of who you are, you no longer need to fear "losing" yourself, as many adolescents do. The "fear of commitment" some people seem to exhibit is an example of immaturity in this stage. (Boree)

At this point in a person's life they need to put focus on the important things in life. They need to focus on getting married, having kids and having a job that provides enough money to stay stable.

Stage seven is middle adulthood. This stage lasts from about forty to sixty years of age. The conflict in the stage is generativity versus stagnation. The focus of this stage is producing offspring. According to Boree,

…there are many other ways as well. Erikson considers teaching, writing, invention, the arts

and sciences, social activism, and generally contributing to the welfare of future generations to

be generativity as well anything, in fact, that satisfies that old "need to be needed." (Boree).

The main goal is to provide a welcoming environment for future generations.

The eighth, and final stage, is maturity. This stage lasts from sixty-five years to death. The

conflict in this stage is integrity versus despair. This stage, especially from the perspective of

youth, seems like the most difficult of all. First comes a detachment from society, from a sense of

usefulness, for most people in our culture. Some retire from jobs they've held for years; others find

their duties as parents coming to a close; most find that their input is no longer requested or

required. The focus of this stage is for the person to realize their usefulness in society without

becoming depressed about that part of their life being over. Also recognizing the importance of the

relationships that they had and may still have is a big part.

Developmental

All in all, this research paper was important to do to get a better understanding on different

philosophers. I think that doing research on one specific philosopher and learning all we could

about them was a good idea. That way in the end there are twenty-two well written papers about

twenty-two different philosophers. I enjoyed learning about Erik Erikson and everything about

him and his philosophy.

This theory is very useful for student learning. With Erikson's theory in mind the teacher is

more in tune with what the students are going through. For example, in a first grade classroom, the

students are all going through the latency stage. According to Erikson's theory, the children are

dealing with industry versus inferiority. The teacher knows that the students struggle with

focusing on school work. With the teacher's knowledge of this they can adapt their lesson plans to

try to accommodate the student. Knowing Erik Erikson's theory helps with student learning.

Erik Erikson	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL	Infant Childhood Pre-adolescence Adolescence Young Adulthood Adult hood
EMOTIONAL	Autonomy Shame/Doubt
SOCIAL	Trust Mistrust Identity Role Confusion Intimacy Isolation Generatively Stagnation
MENTAL	Industry Inferiority
MORAL	Initiative Guilt Integrity Despair

Social Development Theory	
STAGES	**DESCRIPTION**
Stage 1: Oral Sensory	Occurs from birth to 18 months. Main conflict is trust vs. mistrust. The responsibility of this stage lies in the hands of the caregiver (parent or babysitter).
Stage 2: Muscular-anal	Occurs from 18 months to 3 years of age. The main conflict in this stage is autonomy, independence, vs. shame or doubt. Focus is on physical skills in this stage.
Stage 3: Locomotor	Occurs from 3 to 6 years of age. The main conflict is initiative vs. guilt. Initiative starts to take control in this stage, but could lead to feelings of guilt.
Stage 4: Latency	Occurs from 6 to 12 years of age. The main conflict is industry vs. inferiority. Children try to balance work and still try not to become inferior.
Stage 5: Adolescence	Occurs from 13 to 18 years of age. The main conflict is identity vs. role confusion. Children need to find out who they are on their own without any peer influence.
Stage 6: Young Adulthood	Occurs from 19 to 40 years of age. The main conflict is intimacy vs. isolation. At this point in a person's life they need to put focus on the important things in life (getting married, starting a family, getting a job).
Stage 7: Middle Adulthood	Occurs from 40 to 65 years of age. The main conflict is generativity vs. stagnation. The focus of this stage is producing offspring.
Stage 8: Maturity	Occurs from 65 to death. The main conflict is integrity vs. despair. The focus of this stage is for the person to realize their usefulness in society without becoming depressed about that part of their life being over.

References

Bingaman K. (April 2007).The Postmodern Life Cycle and Pastoral Care

and Counseling. *Journal of Spirituality in Mental Health*, 9(1):83. Retrieved September 4,

2008 from Academic Search Premiere database.

Boeree, C. (n.d.). *Erik Erikson*. Retrieved September 4, 2008, from

http://webspace.ship.edu/cgboer/erikson.html.

Erikson, E. (1986). *Vital Involvement in Old Age an Experience of Old Age in Our Time*. New

York: Norton.

Gross, F. (1987). *Introducing Erik Erikson: An Invitation to His Thinking*. New York: Univ Pr Of

Amer.

Guterman, J. (2006, October 19). *Erik Erikson*. Retrieved September 4, 2008, from

www.youtube.com/watch?v=7ZBogTzscJA.

Psyc2301 - Erik Erikson. (n.d.). Retrieved September 4, 2008, from

http://www.rlc.dcccd.edu/mathsci/anth/p101/dvlmentl/erikson.htm.

Sharkey, W. (n.d.). *Psychology History*. Retrieved September 4, 2008, from

http://www.muskingum.edu/~psych/psycweb/history/erikson.htm.

Smith, T. (1976). Social Violence and Conservative Social Psychology: The Case of Erik Erikson.

Journal of Peace Research, *13*(*1*), 1-12. Retrieved September 4, 2008, from the JSTOR

database.

Stevens, R. (1983). *Erik Erikson: An Introduction*. New York: Palgrave Macmillan.

Tu, T., & Lash, M. (2007, Winter2007/2008). Don't Tell Me No; I Tell You No!: Facilitating Self-Control in Infants and Toddlers. *Childhood Education*, *84*(2), 79-84. Retrieved September 4, 2008, from Academic Search Premier database.

Sigmund Freud: A Man on a Mission

Brian Porter

Shepherd University

Abstract

Throughout this paper it will be described how Sigmund Freud's ideas and theories helped to change the way people have reacted to his theories. The paper will range from Freud's idea of Topography and Structure to his idea of psychoanalysis as a therapy. Sigmund Freud is considered to be the most influential theorist to have ever lived. This paper describes his theories have related to a classroom setting. Throughout the writing of the paper it has been shown how many of his theories relate to a lot of things in life and society.

Sigmund Freud: A Man on a Mission

Biographical

Sigmund Freud was born on May 6, 1856 to Jewish parents in the Czech Republic. He was the oldest of eight children, and his parents sacrificed many personal luxuries in order to provide him with a proper education. Due to the economic crisis of 1857, Freud's father lost his business, and the family moved first to Leipzig before settling in Vienna (http://en.wikipedia.org/wiki/Sigmund_Freud).

At the age of seventeen, Freud joined the medical faculty at the University of Vienna to study with Karl Claus, who was a famous Darwinist professor. Freud perceived that the ultimate secret of power was not force, but understanding, a fact to which the great achievements of science in the past three centuries bear ample witness (Jones, 1959, 31). In Sigmund Freud's *Lectures on Physiology*, Freud stated that living organisms are a dynamic system in which laws of chemistry and physics interact. It was the starting point for Freud's dynamic psychology of the unconscious mind (http://en.wikipedia.org/wiki/Sigmund_Freud).

From 1882 to 1886 Freud worked at the General Hospital in Vienna, and experimented on the effects of cocaine, with himself as one of the patients. He used patients and tried to improve the drug's safety and to minimize its side effects. Doctors had, on several occasions, named his experiment a success, but Freud still wanted to make changes and make the drug better. Breuer was one of the scientists who was not impressed by the results of the experiments since the side effects and formation of continued use were not erased (Jones, 1959, 242-243).

Contextual

Sigmund Freud went to Paris in 1885 to study nerve and brain diseases under Jean Martin Charcot at the Salpetrière Hospital (http://en.wikipedia.org/wiki/Sigmund_Freud). Charcot treated many patients who had become paralyzed and who were unable to move different muscle groups.

Nerves give signals to muscles which make the muscles move, and ultimately, damaged nerves caused the paralysis in the patients. Freud believed that there was a mental cause for much of the paralysis rather than an illness or dysfunction in the muscles themselves. In 1886, Freud established a private medical practice to specialize in nerve and brain diseases (Nye, 1975, 1). While involved in his private practice, he recognized that many of his patients were like those he had seen while working with Charcot. They had paralyses that had no known causes. Freud believed that these patients had physical problems that were caused by mental illnesses and fears that could be traced back to their childhood. This was the beginning of Freud's formation of theories that many physical illnesses have an underlying hidden mental cause.

Throughout Sigmund Freud's career, he developed several different experiments for his different ideas. At one time, he left Vienna to study for a year in France with Jean Charcot and Breuer who were using hypnosis in their work with patients suffering from hysteria (Nye, 1975, 3). Freud spent several months in a psychiatric hospital, and while he was there, he learned a lot from the patients and the staff about what went on in peoples' minds (Jones, 1959, 62). Breuer and Freud called this experiment the Studies in Hysteria (Jones, 1959, 79). Breuer and Freud found that some patients could not be hypnotized, and both researchers realized that the patients had only gone into a deep sleep. Based on Freud's collaboration with Breur, in 1895 they published a book about hypnosis. This book discussed a person's unconscious mind and how it affects their life.

Freud believed that memories from early childhood stayed hidden in the mind and affected a person later in life resulting in mental illness. Freud began having patients talk about things that came into their minds. He recognized things that bothered the patients and analyzed what was spoken. By helping patients recall memories of past experiences, Freud helped them try to understand these thoughts. This resulted in improvement in healing. This method was called

psychoanalysis. In 1900, Freud published his first major work on this method called, *The*

Interpretation of Dreams.   This book essentially described a person's unconscious mind and how

they dreamed. It also described that a person's preconscious is more relaxed when asleep than

when that person was awake.

<div align="center">Experimental</div>

In one of his theories, Freud suggested a structural model of personality that was

constituted of the id, ego, and superego. The idea of the Id, Ego, and Superego theory was very

influential in Freud's theories. Sigmund Freud was considered one of the most influential minds

of his time period, and all of his works and ideas have helped change the way people think today.

One of the theories that he came up with was that of the ego and its releasing and controlling

functions. This theory showed that when an infant who was hungry and eventually fed the infant

developed a lasting image of the food based upon touch, smell, and taste the food. This worked

with many other items. For instance, if a child was asked to do a task, they were slow and took

longer the first time, but after getting accustomed to the task they became better in performing the

task. This example related to a person's ego. These two examples tied together since in both

instances the children showed that when given the opportunity to get accustomed to a task they

kept getting better at that particular task.

The idea of topography and structure and how they fit together was another one of Freud's

ideas (Nye, 1975, 15). In his model, the id was linked to the person's personality that was

unconscious. The id then was then responsible for a person's impulsive actions.

<div align="center">Theoretical</div>

Freud's psychosexual stages of development and the Oedipus complex were theories about

how adult human personality had a certain amount of flexibility and could be changed to some

degree. Freud believed that normal psychosexual development proceeded through a series of

stages. First was the oral stage (0-1 years old). Next was the anal stage (approximately 2-3 years

old), followed by the phallic stage (roughly 3-5 years old). Then there was a period of latency

(from age 6-12), and the genital stage (late teens until senility) came last. All of these had an

effect on a person's emotional and intellectual development (Nye, 1975, 17) and all stages were

based upon his ideas that everything in the development of a person was derived from conflict and

resolution, as it related to sexual feelings and tension from within.

In Freudian theory, there were three major sources of anxiety. First was reality anxiety

which dealt with anxiety in the conscious life. Second was moral anxiety which focused on the

anxiety felt as part of a person's conscience. Finally, there was neurotic anxiety, which dealt with

anxiety that turned the brain off. Freud theorized that when anxiety-producing conditions

continued or intensified, stress, fatigue and depression became evident (Nye, 1975, 28). The

theory of anxiety and the defense mechanisms of the ego said that a person who successfully

passed through the various stages of psychosexual development functioned as a well adjusted

adult (Nye, 1975, 23). This theory said that it was more important that the ego should be weak

rather than strong, because a weak ego was more flexible and dealt with situations better by being

more resilient (Nye, 1975, 24). According to Freud, when a person suffered from anxiety, this

was why it was better to have a weak ego.

Throughout the years in his life, Freud revised many of his theories (Nye, 1975, 2). By the

1930's, Freud's ideas were accepted by his other colleagues. In 1938 when Nazi Germany took

over Vienna, Freud was forced to move to London from Vienna to get away from the Nazi

persecution. He died in England on September 23, 1939.

In conclusion, Freud had many theories that helped change the way people think about

how the mind works. Freud's work changed the development of thinking in psychiatry. Many

patients improved after psychoanalysis, although it was greatly criticized. Freud's ideas were

different and many could not believe that mental illnesses might be the cause for physical ailments.

Application

Researching and writing this paper was important since it gave me a lot of insight on what Sigmund Freud's theories and ideas were about, as they related to several different topics. Writing this paper showed me how his ideas relate to the field of education, since he gave explanations for childhood behavior, thinking, and learning. Besides learning a lot about Sigmund Freud's theories and their relevance to education, I also learned a lot about his personal life.

Understanding his background and learning how he grew up gave me a lot of insight regarding how a lot of his theories were affected by his life. For example, in his early childhood, he found pleasure in reading and studying. He frequently stayed in his room and conducted research. This intensity for learning and studying continued throughout his life giving him interest in expanding his theories.

Looking at his theory of topography is important as it relates to the educational field. His idea of topography talked about a person's impulse and unconscious (Nye, 1975, 11). Students are motivated and driven by internal drives and thoughts, some are good while some are fear based. For example, in Mrs. Dunham's class at Hedgesville Elementary, many students act with impulsivity. They will often say the first thing that comes into their heads without actually thinking about the answer. Also in Mrs. Dunham's class, students will raise their hands right when a question is finished being read and often not have the right answer. According to Freud, the motivation behind these behaviors may be anxiety based, fears based, or even a desire for attention despite the consequences of being right or wrong. These are all examples of Sigmund Freud's theory of topography.

Another example of how Sigmund Freud's ideas affect education and learning can be related to topography and the psychosexual stages of development. As children get older and learn more skills, they have new ideas about a lot of different skills. Their ideas are built in layers upon old ideas and memories. This is learning. Relating this idea to my observation is demonstrated when the first graders can visually remember things but find it harder to grasp the concept. In the second grade, they seem able to understand all the tasks that they are presented with. This proves that when presented with new ideas, older students are able to grasp the tasks more easily and better since the learning has occurred in layers. Sigmund Freud developed several theories across several stages of development to explain the different stages and to explain why children have the ideas that they have. Writing this paper has given me new insights on how Freud's theories describe why students react to learning and why behaviors occur in the classroom.

Sigmund Freud	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL	All of us carry at least minor fixations into adulthood. Overeating, compulsive smoking, talking too much, drinking too much, and nail biting.
VERBAL	Freud developed a conceptual model of language which dealt with its role in consciousness, its relation to thought, the development of language in the child, its origins as an instrument of social communication, its function in the recitative efforts of schizophrenic patients, and the motivated nature of parapraxes and distortions in language.
EMOTIONAL	Guilt is an internal authority that is erected in the place, and as a result, of the impositions of external authority.
SOCIAL	He found that some patients could not be hypnotized, that sometimes the hypnotic trance was not deep enough. In a social atmosphere when Freud would test his hypnotic trances in society and realized that on some patients did work socially with the hypnosis.
MENTAL	Freud called dreams the "royal road to the unconscious". This meant that dreams illustrate the "logic" of the unconscious mind.
MORAL	The super-ego is the moral component of the psyche, which takes into account no special circumstances in which the morally right thing may not be right for a given situation.

THEORY-Topography and Structure: How They Fit Together	
STAGES (topography and structure)	**DESCRIPTION**
Stage 1: Conscious	Our most primitive, basic, instinctive impulses (which are generally socially condemned and therefore not allowed into consciousness)
Stage 2: Preconscious	Deals with a persons ego. Even after the ego has achieved some independent status, it still maintains, at its deeper levels, an interaction with the unconscious.
Stage 3: Unconscious	An unconscious aspect of the ego: its repressing force. That which is unacceptable or unpleasant to the person may be cut off from consciousness- that is, repressed. Repression is an ego-defense mechanism that occurs unconsciously.
Stage 4: ID	Functions in the *irrational* and *emotional* part of the mind. At birth a baby's mind is all Ids - *want want want*. The Id is the primitive mind.
Stage 5: EGO	Functions with the *rational* part of the mind. The Ego develops out of growing awareness that you can't always get what you want. The Ego relates to the real world and operates via the "reality principle".
Stage 6: Super Ego	The Superego is the last part of the mind to develop. It might be called the *moral* part of the mind. The Superego becomes an embodiment of parental and societal values. It stores and enforces rules.
Stage 7: Oedipus	Is named after the Greek mythical character Oedipus, who unknowingly kills his father, Laius, and marries his mother, Jocasta. According to the theory, the complex appears between the ages of three and five. The child feels sexual desire for the parent of the opposite sex and desires the death of the parent of the same sex.
Stage 8: Electa	Is a concept found in psychoanalytic theory regarding female psycho-sexual development. The idea is based largely on the work of Sigmund Freud, who uses the Oedipal complex as a point of reference for its elaboration. The term, however, was Introduced by Carl Jung in 1913. Freud himself explicitly rejected Jung's term, because it "seeks to emphasize the analogy between the attitude of the two sexes

References

Ellman, R. (1984, January 1). Freud and Literary Biography. *American Scholar*, *53*(4),   465.

  (ERIC Document Reproduction Service No. EJ307022) Retrieved August 31, 2008, from

  ERIC database.

Freud. LEC, September 27, 2001, retrieved September 1, 2008,

  http://www.colorado.edu/English/courses/ENGL2012Klages/freud.html

Jones, Ernest. (1953). *Life and works of Sigmund Freud Vol. 1*, New York, New York: Basic

  Books Inc.

Jones, Ernest. (1955). *Life and works of Sigmund Freud Vol. 2*, New York, New York: Basic

  Books Inc.

Nye, Robert D. (1975). *Three Views of Man:* Perspectives from Sigmund Freud, B.E. Skinner, and

  Carl Rogers. New York, New York: Malloy Lithographing, Inc.

Overskeid, G. (2007, September 1). Looking for Skinner and Finding Freud. *American*

  Psychologist, *62*(6), 590. (ERIC Document Reproduction Service No. EJ775565)

      Retrieved August 31, 2008, from ERIC database.

Seckinger, D., & Nel, J. (1993, December 1). Dewey and Freud. (ERIC Document Reproduction

  Service No. ED379181) Retrieved August 31, 2008, from ERIC database.

Sigmund Freud, (August 30, 2008), retrieved September 1, 2008,

  http://en.wikipedia.org/wiki/Sigmund_Freud

Sigmund Freud, (2002), retrieved September 1, 2008, http://www.kirjasto.sci.fi/freud.htm

"The century of the self." Happiness machine. Youtube. 1 Sept. 2008.

Running head: ARNOLD GESELL

Arnold Gesell

Denise Reed

Shepherd University

Abstract

Developmental theorist Arnold Gesell has had a strong impact on educators, scientists, and parents alike. Arnold Gesell's influence on the teachers of today's classrooms can be seen in nearly all school activities. Whether developing a lesson plan or monitoring the various social groups that form on the playground, a strong understanding of Gesell's theories will prove to be an invaluable resource. From his early days at Stevens Point, to the time he spent at The University of Wisconsin, Gesell had a strong desire to learn and grow--both as an individual and as a leader in his field. Gesell's influence is first seen during his days at Yale University working with psychologically damaged children and continues long after his death in 1961.

This paper examines the impact of Arnold Gesell on developmental psychology and its related areas of study. Its main objective is to give the reader an understanding of Gesell's life, his education, his mentors, the personal factors that shape him, and an understanding of how his research, findings, and theories are relevant today. After reading this paper, the reader should be left with a thorough understanding of these ideas and should be able to correlate Gesell's theories with modern day events in their professional and personal lives.

This paper is divided into five sections; biographical, contextual, experimental, theoretical, and developmental-- including a comprehensive grid outlining the stages of his theory. Each section details the specific factors relevant to Gesell's personal development and that of the reader. In addition, there is an in depth reflection and a segment on the prevalent application of his theory within a classroom setting.

Arnold Gesell

Biographical

Arnold Gesell was born in Alma, Wisconsin on June 21, 1880. His father was a photographer and his mother a teacher. He was the eldest of five children. He had two brothers and two sisters, often sharing in the responsibility of caring for them. These intimate associations seem to have influenced his own future due to the panorama of human development that unfolded before him (National Academy of Sciences [NAS], 1964). Growing up in the town of Alma, Gesell observed a variety of traumatic experiences; ravaging illnesses, menacing quarantines, continual alcoholism, and accidental drowning, witnessing a mass amount of death at young age (Dalton, 2005,182). Gesell noted, "These strange and sobering experiences possessed psychological significance, as they cumulatively left a deposit of impressions, which sensitized a background for my clinical studies in later life" (183).

Arnold graduated school in 1896. During the commencement Gesell demonstrated a flash-bang climax by filling a test tube with hydrogen and igniting it. For his encore he designed a large electromagnet that gently lifted his feet off the stage (NAS, 1964). At sixteen, Arnold Gesell was granted the opportunity to attend a teacher's institute in Alma where he became familiar with Mr. C. H. Sylvester-- developing a strong personal relationship. Sylvester became Gesell's mentor while attending Stevens Point high school (1964). Arnold Gesell graduated from Stevens Point in 1899. After graduation, Gesell became a teacher in U.S. history, ancient history, German, accounting, and commercial geography at Stevens Point (1964). Gesell took pleasure in teaching, but his own intellectual ambitions were not being fulfilled.

Arnold Gesell began attending the University of Wisconsin, Madison in 1902.   At the University, Gesell studied under Frederick Jackson Turner. Turner motivated Gesell to write his senior thesis unrestricted, "A Comparative Studying of Higher Education in Ohio and Wisconsin" (NAS, 1964). In 1903, Arnold graduated from University of Wisconsin with a B.Ph. degree (Dalton, 183). After graduation, Arnold became the principal at a high school in Chippawa Falls, Wisconsin. Gesell describes that year as "a body of lively students" formulating a successful year (NAS, 1964).

A psychology instructor, Edgar Swift, encouraged Gesell to attend Clark University (Dalton, 184). With Swift's reference letter and assistance of a tuition scholarship, Gesell was able to attend Clark University for the next two years where he was enrolled in the Ph.D. program of psychology. Gesell was enrolled in several of President G. Stanley Halls' courses. Previously, Hall had organized at The Johns Hopkins University, a department of psychology including a lab (NAS, 1964). Hall accentuated his lectures and studies on the investigation of the abilities and mental traits of children (1964). Gesell wrote his doctoral thesis in this equivalent convention, a research on jealously (1964). Arnold was awarded his Ph.D. degree at Clark in 1906 (Dalton, 185).

After graduating from Clark University, Arnold Gesell became an elementary school teacher and defrayal worker at East Side House in New York City. In 1907, he went back to his home state to teach psychology at the State Normal School of Platteville (NAS, 1964). Gesell would meet and marry his wife Beatrice Chandler on February 18, 1909. That summer, Gesell and his wife taught at the Pennsylvania Training School for Feeble-Minded Children (1964). Gesell also spent time reviewing work at the Vineland Training School at Vineland, New Jersey. Gesell marked his experience at Vineland as, "the beginning of his professional interest in backward and defective children" (1964).

While teaching in Los Angeles, Gesell realized he needed a stronger educational background in rearward children. He thought that this goal would be superlative by studying medicine. In 1910-1911, he studied human anatomy and histology at the University of Wisconsin (1964). During this time Gesell was invited to become an assistant professor of education at Yale University. While there, Gesell was able to teach at the graduate school and complete his own studies in the Medical Department (1964). A few of Gesell's colleges felt sympathetic with his plans to study retarded children that they provided him with a room in the New Haven Dispensary. In 1911, the "psycho- clinic" for children was established (Duchan, 2001-2008).   The New Haven Dispensary comprised the beginning of the Yale Clinic of Child Development. Gesell was the director of the Yale Clinic of Child Development from 1930-1948 (2001-2008). This clinic was the predecessor of the Child Study Center at the Yale School of Medicine (2001-2008).

<div align="center">Contextual</div>

Arnold Gesell developed his theory in the rise of racial hatred, genocide, and war in never-imagined proportions (Thelen & Adolph, 1992, 376). He witnessed the turbulence of two world wars, the rise of Nazism, and the nuclear age (376). In 1940, the Freudian movement pioneered the approach to thinking; often blaming parents on childhood problems as autism, schizophrenia, and left-handedness (Ames, 8). Gesell continued to develop his theory in the face of Watsonian behaviorism, arguments on schools of environmentalism, and of the entire psychoanalytic movement (8). Even though times were grim, Arnold Gesell was considered a pioneer in child behavior because of the infancy in such studies (8). Gesell believed that the intrinsic and ordained individuality of children shielded them from random evil influences of physical, social, and political surroundings (Thelen & Adolph, 376). He identified the unison of child and environment.

Gesell gave chivalrous acknowledgments to two historical men that assisted in his own behavioral developments; Pestalozzi and Froebel (Ames, 248). Pestalozzi was a leading educational reformer that believed social and educational reform could come through the home alone (249). Gesell credits Pestalozzi's views on empiricism helping to link it to later systematic studies of children. Arnold Gesell thought Frobel was the deepest interpreters of childhood. He valued the engagement in recreation and concepts of growth and development. In addition, Frobel implemented the idea of kindergarten (251). Frobel believed that kindergarten could not realize its full intentions unless some structure of parental training and collaboration was integrated into the program (252).

Scientist Charles Darwin influenced Gesell the most (252).   He felt that Darwin supplied a profound developmental outlook upon nature and man (253). Darwin translated the mystery of infancy to understanding the origin of the species. Darwin's approach to the problem of child behavior is comparative (254). Darwin was a naturalist and felt comparative psychology was more voluminous (254). Darwin's prevalent contribution to child psychology was personified in his volume on "Expression of Emotions" (254). Arnold Gesell applied numerous aspects of Charles Darwin's theory to his own.

Leading child psychologist, G. Stanly Hall impacted Gesell's thought process. Hall was the head of the department, at Clark University, where Gesell did his graduate work (255). Hall was Gesell's mentor while he attended Clark University. Hall's first milestone in child study in this country was the "Study of the Contents of Children's Minds on Entering School" (256). In addition, Hall made superior use of "observational biographical method of studying child behavior" (256). Hall was the father of a nationwide child study movement which liberalized elementary education leading to scientific advances in the study of child development (257). Arnold Gesell utilized his time and gained knowledge later expanding on Stanly Hall's theory.

Experimental

Arnold Gesell earned a reputation as having founded a new science, "child study" (Mills, 60). His studies were of childhood, its development, and the proper education of children (60). He was determined to establish universal developmental norms beginning at birth (Herman, 2007). He believed that the human race, development, and the achievement crown manifolds the activities of growth and living (Mills, 60). Development is not standardized; some are weak, some are strong and others are gifted while others are handicapped (62). These [disabilities] are all created by genetics and environmental dynamics in life's laboratory (62).

Gesell believes that the intricate human development could be enhanced by understanding it through scientific analysis; therefore he examined the "pathological" aspects represented in a subnormal or handicapped child who were attending schools or in special institutions (63). Arnold Gesell spent a majority of his time visiting rural schools to assist in identifying handicapped children. In addition, he worked with the teachers developing an individualized program enabling those children to make better progress (63). This led to the opening of classes for these children in city schools but also in country homes for dependent children (63). Gesell took mental surveys of elementary schools in New Haven, CT and submitted a two-volume report on dealing with the status of handicapped children (63). This report led to the formulation of the Division for Exceptional Children under the Connecticut Board of Education (64). Along with this report, the Yale Medical School was now seeing each "defective" child by appointments for the opportunity to be studied (64). Gesell believed that that enhancing environmental supports could alleviate the behavioral and emotional deficiencies resulting from poor nurturing (Dalton, 188).

Following his observations of handicapped children, Gesell thought that more progress could be made by accentuating normal infancy instead of "backward" children (Mills, 64). He perceived an astonishing difference, both physically and mentally, demonstrated by a pair of

highly gifted twins. This gradually turned his interest to the period of infancy and preschool years (64). He now wanted to define normative criteria utilizing the diagnostic appraisal of normal, deviant, and defective infants (64). He wanted to use this tool in diagnosing the developmental status in expression of motor, adaptive, language, and personal- social behavior (65). Gesell would have the children sit in their mother's laps, side by side, in front of tables filled with a variety of objects. During observation, the infants would react appropriately to the proportional instance and concurrently display their developmental discrepancies (65). This observational practice was both intrusive and gratifying to the students observing in the clinic (65).

Arnold Gesell utilized photography and motion pictures to study the growth and actions in infants. He used both slow-motion photography and time-lapsed arrangements during his observations (65). The moving picture, in an inconspicuous and naturalistic circumstance, could document the morphological aspects defining the legitimacy of the moments of action in a behavioral occurrence (66). When these sequences of behavior were sectioned together, they could be offered to viewers as an entire developmental epic (66). With increased support, Arnold Gesell and Professor Henry Halverson expanded on their theory and constructed a one-way vision observational dome (67). This dome could be rotated, allowing the cameras a lateral and vertical position seen through a narrow slot (67). A Pathe thirty five millimeter camera was available, giving a soft and cool illumination feel to the room (67). During this time, the focus was on the daily behaviors of the infants; sleep, waking, feeding, bath, play, bodily activities, and social behaviors (67). The studio had evolved into a domestic setting; with a mother caring for their infant (67).

The clinic was soon moved to a suite of rooms occupied by Yale Clinic of Child Development (68). These rooms had a one-way vision screen that was designed by Gesell. The wall facing the children's play nursery was of painted scenes suitable for a kindergarten (68).

Behind the screens, the observers could study the children with little to no distress to them (68).

Many parents would come and watch their child's unprompted behaviors-- enabling them to learn

and relate more to their child's social behaviors (69).

Furthermore, Arnold Gesell allocated some time to infancy and domestication of farm

animals and pets (Mills, 69). His study of Kamala, the wolf girl, concluded that a human child

adopted by animals represents an unusual kind of human conditioning (69). In addition, Gesell

found that monkeys showed more progression in a day than a human infant in a month (69).

Behavior manner ruined the attempts to prove that mental age equivalents could be established

(70).

Dr. Gesell held flamboyant interests of fraternal twins, but especially identical twins (70).

In association with Helen Thompson, Gesell took a comparative study of two highly identical twin

girls. They were observed from early infancy to determine, first, developmental correspondence

and, second, their developmental variances (70). This was done by training and confining one of

the twins. The identical twins demonstrated enormous degrees of similarities that were

established after elaborate and repeated examinations (70). The conclusion was that it seemed to

bare important relationships between learning and maturity (71).

Theoretical

Arnold Gesell developed his theory on the concepts on infant growth; behavior in the

human individual develops in a patterned, orderly manner, through stages which are decidedly

comparable, if not identical, from one human to another (Ames, 225). He accentuated the

importance that each infant and child was an individual (225). In addition, he emphasized that

behavior develops in a patterned fashion, through conventional stages, and that each individual

goes through these periods in a unique comportment (225). Gesell stresses the significance of

heredity and environment as a major concern to human behavior (225).

Gesell found that growth is the process of organization (Daly, 321). "It is a unitary and integrative process; if it were not unitary, the organism would lack wholeness; if it were not integrative, the organism would lack individuality" (321).   The exceptional principle to Gesell's theory was the maturational approach (Ames, 226). Maturation in the infant comes from the genes (Daly, 321). "The central nervous system becomes dominant and unifies the total organism as the infant develops from one cycle of growth to the next" (321). The cycles follow each other in an orderly manner. Growth is a progression from leading to stage to another stage of association (321). All infants mature in behavior approximately at the same time (321). For example, Gesell states most children sit at six months, stand at nine months, and walk at twelve months. Even though this is generalized, it is not always true (321). The concept of maturation can also be applied to motor development; reaching, grasping, rolling over, smiling, and so forth (321).

The next principle to his theory is of reciprocal interweaving (Ames, 227). This also refers to cepahlo-caudad growth; the infant, which means children, fundamentally develop from head to toe (Daly, 321). Gesell states that the head is "very precocious"; the fetal head is close in size to a trunk (322). At five months of age, an infant's head can be controlled (322). The eyes and mouth of the infant are further advanced then their hands and feet (322). The eyes mature quicker allowing the infant to follow moving objects; demonstrating alarm or enjoyment by stimulus presentation (322). In addition reciprocal interweaving explains the human behavior of an infant that lies on its stomach in the first year of life; defining twenty three stages of behavior before they can stand upright and walk (Ames, 227). As an infant and child mature, stages when behavior, in general, is in a stage of equilibrium alternate rather rhythmically with stages of disequilibrium (229). Gesell believes that this can significantly affect the harmony of a household if a child is in a stage of equilibrium or disequilibrium (229).

The forth principle is functional asymmetry (229). This is an exception to the rule of reciprocal interweaving, because a behavior may go through a period of asymmetric or unbalanced development enabling an organism to attain a measure of maturity (229). This is also known as tonic neck reflex (Daly, 322). It allows the development of both asymmetrical and symmetrical behavior to occur (322). This can be noticed in an infant as early as one week, but mostly manifests at four to six weeks of age (322). Tonic neck reflex also affects the motor-eye posture (322).

The fifth principle is self-regulatory fluctuation (Ames, 230). This refers to the infants daily living activities; eating, sleeping, and waking (230). Fluctuation is a typical idiom of self-regulatory mechanism of development (230). "As an infant matures, the total duration of sleep per day and the number of feeding periods diminishes; the daily schedule becomes increasingly patterned and predictable" (230). The maturing infant does not advance in a straight line, but in a spiral course; resulting in "seesaw" fluctuation (230).

"The cognitive-developmental and organismic theories share the some of the same characteristics as the behavioral model in terms of inclusiveness. They are relatively content-free (they do deal with such areas as cognition and moral development), but they are best represented by the dual processes of organization and adaptation" (231).

<div align="center">Reflection</div>

A child's growth can be measured from the time they are born, continuing throughout their childhood. This was the leading notion all through Arnold Gesell's theory; maturation. During Gesell's five stages, a childs' development cycles one another in an appropriate manner (Daly, 321). Growth is determined as a progression from one stage to another by association (321). This philological term maturation directly relates to a child's learning ability within a classroom. Each child is an individual and their learning styles are diversely unique. Every student that crosses the

threshold of the classroom is maturing at different stages and times during a school year. Their

maturity levels should be taken into consideration by the teacher when they are designing lesson

plans. Every student's educational and emotional needs should be met by the classroom teacher.

Understanding the concept of maturation enhances the teacher's knowledge of child development.

Conceptualizing a student's behavior changing could determine an asymmetric or unbalanced

development; enabling an organism to attain a measure of maturity (321). Maturation is a

significant term in relation to the field of teaching.

In the clinical field I have observed the maturation stages in most of the students. One of

the student's maturity levels is prevalently lower then some of the other students. The student's

desk is located in the front of the room where the teacher can carefully monitor the work and

behavior of the student. The teacher has modified some of her teaching methods to accommodate

the student's learning ability. She continually praises the student's handwriting skills and

encourages the student to obtain appropriate goals set for the day. She successfully meets the

emotional and educational necessitates of the student.

Before Gesell focused on his theory of maturation, he worked with special needs children.

During that time, children with disabilities were labeled as backward, deviant, and lacked the

nurture they required from their home environments. It was obvious that they were not accepted.

Today, society has modified their approaches to meet the emotional and educational needs of these

children. They are no longer considered to be "backward" children, but children with special

needs. School systems are now required to meet the needs of these students by implementing an

individual education plan when needed. In addition, maturation directly relates to the

developmental stages in special needs children. It is vital that teachers are able to recognize their

educational abilities and adjust their teaching techniques as needed. Society has positively

evolved in the acceptance and perceptions of special needs children.

Application

Maturation is significant to the field of teaching for a variety of reasons. A teacher needs to understand this fundamental concept because every student that enters the classroom is maturing at a different rate and progressing through the stages at different times during a school year. Without a solid ability to define the stages—and place the student appropriately with their respective maturity groups—my students may never have the opportunity to reach their full potential.

It is essential that the students' individual maturity levels be considered when designing lesson plans. For example, when planning for independent studies I will need to reflect upon the abilities of each student and be prepared to help those that may require additional assistance. Another occasion to consider the different levels of maturation contained within my classroom will be when creating peer teaching groups. My understanding of the different stages of maturity will prove to be imperative at this point because without it, I will not be able to properly pair the students (i.e. strong readers with weaker readers, etc.) into effective groups. By creating a group containing two students who are at the same maturity stage, I would not be creating an effective collaboration and therefore limiting my student's conceptual learning.

A thorough understanding of the maturation process will also be important when it comes to interactions with the students' parents, their guardians, and my colleagues. By recognizing each students maturity level I will effectively be able to convey their progress (or lack thereof) in the classroom to their families. Comprehensive knowledge of maturation will help to facilitate both my success as a teacher and as an individual.

Developmental Grid

ATTRIBUTES	DESCRIPTIVE DETAILS	
Physical	Infant	Maturation
	Integrative process	Childhood
	Motor Development	Cepahlo-caudad growth
	Unitary process	
Verbal	Cognitive	
	Stimulus	
	Nonverbal (hands, arms or full body including head, face, and eye movement)	
Emotional	Maturation	
Social	Maturity	
Mental	Asymmetric	
	Symmetrical	
	Maturity	
	Adaption	
Moral	Obedience	
	Expectations	
	Moral Development	

THEORY	

STAGES	DESCRIPTION
Growth	It is a unitary and integrative process; if it is was not unitary, the organism would lack wholeness; if it were not integrative, the organism would lack individuality".
Maturation	The cycles follow each other in an orderly manner. Growth is a progression from leading to stage to another stage of association. All infants mature in behavior approximately at the same time. The concept of maturation can also be applied to motor development; reaching, grasping, rolling over, smiling, and so forth.
Reciprocal Interweaving	This also refers to cepahlo-caudad growth; the infant, which means children, fundamentally develop from head to toe. At five months of age, an infant's head can be controlled. The eyes and mouth of the infant are further advanced then their hands and feet. As an infant and child mature, stages in behavior, in general, is in a stage of equilibrium alternate rather rhythmically with stages of disequilibrium.
Functional Asymmetry	A behavior may go through a period of asymmetric or unbalanced development enabling an organism to attain a measure of maturity. This is also known as tonic neck reflex. It enables the development of both asymmetrical and symmetrical behavior to occur.
Self-regulatory fluctuation	This refers to the infants daily living activities; eating, sleeping, and waking. Fluctuation is a typical idiom of self-regulatory mechanism of development.

References

Ames, L. (1989). *Arnold Gesell-Themes of his work.* New York: Human Sciences Press, INC.

Chapman, A., Conroy, W., & Sheehy, N. (Eds.). (1997). *Biographical dictionary of psychology.*

London & New York: Routledge.

Dalton, T. (2005, October). Arnold Gesell and the maturation controversy. *Integrative*

Physiological & Behavioral Science, 40 (4), 182-204. Retrieved August 29, 2008, from

Academic Search Premier database.

Daly, W. (2004, December 1). Gesell's infant growth orientation: A composite. *Journal of*

Instructional Psychology, 31(4), 321. (ERIC document reproduction service No.

EJ774116) Retrieved August 29, 2008, from ERIC database.

Duchan, J. (2001-2008). Getting here: A short history of speech pathology in America nineteenth

century. *Judy Duchan's short history of speech pathology.* Retrieved September 4, 2008,

from http://www.acsu.buffalo.edu/~duchan/new_history/hist19c/subpages...

Easterbrooks, M., Lerner, R., Mistry, & J., Weiner, I. (Eds.) (2003). *Handbook of Psychology*

(Vol.6). New Jersey: John Wiley & Sons, Inc.

Freedheim, D., & Weiner, I. (Eds.) (2003). *Handbook of Psychology* (Vol. 1). New Jersey: John

Wiley & Sons, Inc.

Herman, E. (2007). Adoption history: Arnold Gesell (1880-1961). *The Adoption History Project.*

Retrieved August 26, 2008, from   http://www.uoregon.edu/~adoption/people/gesell.html

Herman, E. (2001). Families made by science: Arnold Gesell and the technologies of modern

child adoption. *Isis* (Vol. 92, No. 4), 684-715. Retrieved September 4, 2008, from JSTOR

database (3080338).

National Academy of Sciences. (1964). *Arnold Lucius Gesell 1880-196*

A Biographical Memoir. Miles, W: Author.

Thelen, E., & Adolph. (1992,May). Arnold L. Gesell: The paradox of nature and nurture. *Developmental Psychology,* 28(3), 338. Retrieved September 4, 2008, from Academic Search Premier database.

Yale University. (2001). Medicine a. (2001). Medicine at Yale, 1901-1951: 1931-1941. *Medicine at Yale, 1901-1951.* Retrieved September 4, 2008, from http://info.med.yale.edu/library/exhibits/yalemed2/1931-1941.html

Running head: THROUGH THE EYES

Through The Eyes Of Theorist Carol Gilligan

Whitney Reed

Shepherd University

Abstract

This research paper mostly discusses that of Carol Gilligan. It discusses her developmental theory

and how she came upon finding her own theory. This paper also compares and contrasts the

differences and similarities that other theorists before her time and whom she studied under. It also

goes into detail about her background life, what she is up to today. It goes through the situations

that may have influenced her theory and who may have influenced her as well. The paper also

discusses events that may have had an impact on her life—for example the time period in which

she was born in had a bit of an influence. It describes Gilligan's brilliance in how she can see

things and make them known.

Through the Eyes of Theorist Carol Gilligan

Biographical

When one thinks of a famous psychologist or theorist usually those that are of the male sex come to mind first. They are usually famous for daring things that they have come up with or for certain things that they say. It is not any one persons fault**;** psychologists/theorists of the male sex are usually taught in the school system far more than those of the female sex. While this may be true, there are (of course) female psychologists/theorists out there making a name for them as well. This one in particular is an American feminist, ethicist, and psychologist (Carol Gilligan, n.d.). Her name is Carol Gilligan.

Carol Gilligan was born on November 28, 1936 in New York City (Carol Gilligan, n.d.). She is best known for her work with *and* against Lawrence Kohlberg (Carol Gilligan, n.d.). Together they focused on ethical community, ethical relationships, and certain subject-object problems that also had to do with ethics. Gilligan is currently a professor at New York University and a visiting professor at the University of Cambridge (Carol Gilligan, n.d.). Gilligan is best known for her 1982 work, *In a Different Voice (Gilligan, n.d.)*. Gilligan is also married to James Gilligan, M.D. who directed the center for the study of violence at Harvard Medical School.

Taking a glimpse into her background, Gilligan was the only child of a lawyer, William Friedman and a nursery school teacher, Mabel Caminez. During her graduate studies she played the piano and pursued a career in modern dance. Carol Gilligan received her B.A. *summa cum laude* in English literature from Swarthmore College, a master's degree in clinical psychology from Radcliffe College, and a Ph.D. in social psychology from Harvard University (Gilligan, n.d.). Carol Gilligan started teaching at Harvard University in 1967, where she received tenure with the Harvard Graduate School of Education in 1986 (Gilligan, n.d.). Gilligan taught for two years at the University of Cambridge (from 1992-1994) as a *Pitt Professor of American History and*

Institutions. In 1997, she was appointed to the *Patricia Albjerg Grahm Chair in Gender Studies*

(Gilligan, n.d.). Gilligan left Harvard in 2002 to join New York University as a full professor with

the School of Education and the School of Law (Gilligan, n.d.).

<div align="center">Contexual</div>

As previously mentioned before, Carol Gilligan was born in 1936 and she is still presently

living. Throughout her lifetime—so far—she has seen and experienced many events that have

taken place in the United States, many of which have almost all influenced her because she saw

everything on a first hand basis. From a young age Gilligan has been through more things than in

one person's lifetime today. Gilligan was alive during the 1950s, the 1960s, the 1970s, the 1980s,

and the 1990s. She has also made it to the new millennium.

What are some of the events that have happened in these time periods? When one thinks of

the sixties, usually there are the hippies and they sort of made their way into the seventies—that is

usually what comes to mind. She has gone through times of trials and tribulations**,** all of which

motivated her to get to the next level and achieve what she was set out to do. Gilligan has

probably had to have encountered many problems with women's issues and racial issues of the

sort. This is what probably inspired her to become the American feminist psychologist she is

today. Carol Gilligan set out to make a statement, and she has done just that.

For example, "Gilligans studies of adolescent girls, of women, making decisions to abort

or continue a pregnancy, of pre-school boys and their fathers, and of couples in therapy revealed a

vibrant awareness of the excitement of relationship" (Peggy Cooper and Carol Gilligan, 2002).

Gilligan was able to look at different relationships and interpret them the way she thought it was

being presented. "In her interviews, Gilligan was able to tap often suppressed attraction to the

logic of reciprocity" (Cooper and Gilligan, 2002). Gilligan was one step ahead of the rest, while

other theorists were focused on other things that include how babies worked, what they thought,

she was on a completely new level. Gilligan dared to take that step into a different direction and she made something of it as well.

Historically, things were changing in the United States and Gilligan was in the midst of it all. There were so many things going on that could have possibly influenced Carol Gilligan, so let's take a look at those events. Starting in the 1950s Gilligan was just fourteen years of age, and this time period marked the end of World War II. "The end of World War II brought thousands of young servicemen back to America to pick up their lives and start new families in new homes with new jobs" (Becky Bradley, 1998). This meant that all the women who had replaced the men who went to war were relieved of their positions and what were they going to do now?

The 1960s was a lot more chaotic than the fifties were. For one, "The Civil Rights Movement made great changes in society in the 1960s" (Susan Goodwin and Bradley, 1998). Two, " Betty Friedan, Pauli Murray, and Gloria Steinem, (National Organization for Women) questioned the unequal treatment of women; gave birth to Women's Lib and disclosed the 'glass ceiling'" (Goodwin and Bradley, 1998). Women started to be recognized and their voices started to be heard. Women were stepping up and out from behind, the too had things they wanted to say and they were doing anything they could to be taken seriously. Around this time Gilligan was already in her late 20s or early 30s. She was watching the slow change and she was ready to make her own proclamation.

Presently, Gilligan has an array of evidence that she did make her statement. "In, 1992, she received a Grawemey Award for Education (Wikipedia, 2008); in 1996, she received recognition in Time Magazine and was said to be one of the 25 most influential Americans (Wikipedia, 2008); and lastly she received a Heinz Award in 1947" (Wikipedia, 2008). "Best known for her work, *In a Different Voice*, Gilligan studied women's psychology and girl's development and co-authored

or edited number texts with her students" (Wikipedia, 2008). "She published her first novel, *Kyra* in 2008" (Wikipedia, 2008).

Most of Gilligan's influences have come from that of her adolescent years. She has grown into someone who we now can view as influential in our society. Gilligan has conducted many experiments and they have taken flight. Everything she has done in the past, every issue she has wanted to bring to light—she has done just that. While she has many books out and other forms of documentation, Gilligan has brought out the fact that women and girls' voices do in fact need to be heard, and she has also brought to our attention that there is in fact a reason why some of those voices are not heard.

Gilligan's studies are very thoroughly put together**.** For example, "In this study we will report in this book, we asked twenty-six girls who were designated "at risk" for high school drop out and early motherhood what they were feeling and thinking about themselves, their relationships, their lives, their futures, their experiences in school, and their decisions around sexuality" (Taylor, Gilligan, & Sullivan, 1995). "Our purpose in initiating these interview conversations stemmed from our conviction that the inclusion of these "at-risk" girls is essential to understanding women's psychology and girls' development" (Taylor, Gilligan, & Sullivan, 1995). "In the course of our research, we discovered the magnitude of their contribution. From a small group of twenty-six girls, interviewed annually over a three-year period, we learned to ask "Who's listening" as well as "Who's speaking" and to see more deeply into the psychological and political implications of this joining. We found that it was in fact a risky business, this listening to girls" (Taylor, Gilligan, & Sullivan, 1995). "Our group of twenty-six girls was so informative in part because of the cultural and racial differences among them: eight are African American or Caribbean; four are Latina; eight are Portuguese; and six are Irish or Italian American. All are from working-class or poor families. In the course of the project, six girls dropped out of school

and five of them became mothers; twenty graduated from high school at a level that suggested a continuation of their poor or working-class status" (Taylor, Gilligan, & Sullivan, 1995).

Many of these ideas came from Gilligan just observing these twenty-six girls. Gilligan realized that in order for her to reach the top she must first begin at the root of the problem. Gilligan wanted to get to the heart of the situation, and figure out why these women and girls had such strong opinions on certain things. Gilligan went into this study with a particular mindset— she quickly realized that that wasn't the way for her to go in order to open these women and girls up. She stepped back and took a different approach and that started to unbolt things. Everything sort of fell into place and she could compare and contrast the twenty-six girls she was interviewing with other women and girls from the privileged schools.

"Everything began to converge for Gilligan between 1973 and 1977—the years of *Roe v. Wade*. The voices of women that she often heard in literature but failed to hear in the canon of graduate school psychology began to come through" (Goldberg, 2000). "Gilligan had been taught to consult the work of Freud, Weber, Piaget, Kohlberg, and Erikson as the touchstones against which to judge psychological health and normative experience. The work of these men—all brilliant, dedicated, and even fair-minded—was rooted almost entirely in studying white male behavior and experience" (Goldberg, 2000). Gilligan began to question women even more than ever. To her it seemed as though all of these women were inquiring what would happen to them and those around them if they went forth with this type of decision they had to make. This began her thought processing on the voice of all women.

<div align="center">Experimental</div>

Gilligan mostly did observational experiments. She was right in the midst of everything that was going on, not missing a thing. She wrote down exactly what it was she saw. She listened to conversations about different things that were going on in each of the women and girl's lives.

She took notes on their environment in which they are in—everything is taken into consideration. Gilligan realized that these visual and other stimulus aspects affect these women and girls in a specific way. The more studies that she has gone through builds on what she has already learned. Sometimes she may ask questions but they are not direct, and it is in fact similar to a thinking question—to get them in a discussion state of mind. She gives them exactly the amount of questioning and as a result she gains so much more information than she could have ever imagined.

"I am in a room filled with thirteen-year old girls—the eight grade of the Laurel school in Cleveland. Portraits of women hang on the walls, looking down decorously at the sprawl of girls, backpacks, sweaters. The five-year study of girls' development which these girls have been part of has ended, and I want to know how they want to be involved, now that we are writing about his work and presenting it in public" (Gilligan, Rogers, & Tolman, 1991). Gilligan—throughout this five year study—finds out what triggers them. She has them express themselves, mostly through writing. She conducts many one on one interviews with the girls as well. She is specifically breaking her research down and figuring out the process of where these negative thoughts come in. Does it really affect the girls when they have been "ignored" all of their lives? Does where they come from, what race they are, how they were brought up have any effect on the way these girls voice their opinions? Carol Gilligan is learning and finding out if these factors do in fact influence the way these girls present themselves.

<div align="center">Theoretical</div>

Carol Gilligan is mostly known for her work with women. She is known for many of her experiments, her fieldwork and her interviews with girls as well. Many other important theorists have influenced her. Gilligan has been through many lectures and teachings of these theorists and she noticed a trend—they were all about males. For example, "Gilligan's book (In a Different

Voice) is a complaint against the male centered personality psychology of Freud and Erickson and the male centered developmental psychology of Kohlberg. Her complaint is not that it is unjust to leave women out of psychology (though she says that). Her complaint is that it is not good psychology if it leaves out half of the human race" (St. OLAF College CWIS policies, n.d.).

Throughout this time, Gilligan went against the grain—so to speak. She came about talking about her own theory, while using what she learned and knew. She took aspects from certain theorists and made it into her own theory. "As a student of Kohlberg's Gilligan was taken by the stage theory approach to understanding moral reasoning. But she disagreed with her mentor's assessment of the contentment of the moral system within which people developed. From her careful interviews with women making momentous decisions in their lives, Gilligan concludes that these women were thinking more about the caring things rather than the thing the rules allowed. So she thought Kohlberg was all wet, at least with regard to women's development in moral thinking" (St. OLAF College CWIS policies, n.d.).

During her development of her theory, many other psychologists had something to say about women, most of which Gilligan believed was incorrect. Her theory is mostly focused on redirecting what people thought about women and girls and their moral development. Their mindsets, or outlook on different situations about issues that men thought about differently. "Gilligan's reply was to assert that women were not inferior in their personal or moral development, but that they were different. They developed in a way that focused on connections among people (rather than separation) and with an ethic of care for those people (rather than an ethic of justice). Gilligan lays out in this groundbreaking book this alternative theory" (St. OLAF College CWIS policies, n.d.).

"Thus Gilligan produces her own stage theory of moral development for women. Like Kohlberg's it has three major divisions: preconventional, conventional, and post-conventional. But

for Gilligan, the transitions between the stages are fueled by changes in her sense of self rather

than in changes in cognitive capability. Remember that Kohlberg's approach is based on Piaget's

cognitive development model. Gilligan's is based instead on a modified version of Freud's

approach to ego development. Thus Gilligan is combining Freud (or at least a Freudian theme)

with Kohlberg and Piaget" (St. OLAF College CWIS policies, n.d.).

<div align="center">Developmental</div>

Throughout Carol Gilligan's interviews and experiments she has found out that women

perform differently developmentally I many aspects. In some aspects of socialization women and

girls are not encouraged to speak as freely as they possibly can—or at least some feel that is true.

During her interviews she gave light to certain issues that were brought up. She let these

women and children have a say just by sharing their information with her. "*In a Different Voice* is

grounded in three thoughtful studies that required close listening. The first study was of college

students who had dropped out of a course on moral and political choice. Of the 20 who dropped

the course, 16 were women. The second study focused on the abortion decisions of 29 women

ranging in age from 15 to 33 and representing a variety of ethnic and social backgrounds. The

third study was the rights and responsibilities study, in which a group of males and females were

interviewed across the life cycle, ages 6 to 60" (Goldberg, 2000).

As for the emotional component Gilligan realized after many interviews that women's

thoughts and feelings were based on something totally different than what was to be expected

from the outside looking in. She said, " Women's important moral decisions were typically based

not on their own deepest feelings but on highly respected rules of the patriarchal culture that

enveloped them" (Goldberg, 2000). Her challenges and goals were too put into a visual element

for all to see. Her chart expresses the way she sees women and how it is they care about

themselves or different developmental issues.

Carol learned from some of the best theorists and her chart is kind of similar to theirs but it is nowhere near identical. First she has three stages and they are all building blocks to the other. Without one stage a young woman would not develop througouhly. It is important to look at all of the preconventional stages and so forth and break them down for the betterment of woman altogether.

Reflection and Application

This research paper was important to me because it helped open my eyes to a new theorist. In school, I have always learned about Erikson, Piaget, Vygotsky, but I never heard of Gilligan's theory ever before this. It helped me gain insight on how women thought about certain moral things—it helped me to understand my *own* moral development, or at least it gave me some sort of perspective on how another believes that women develop morally.

I agree with Gilligan that before all subjects of experiments were mostly males at the time. Now in this generation or her generation there were experiments with women and girls. There are also experiments with animals and children as well. This makes the experiments a lot more valid and therefore if I were to base my decision-making on what theorist Gilligan has said I am able to relate and prove my decision a great deal more.

According to Gilligan, this is exactly how her model works. First girls are not worried about their surrounding environments so they are more prone to answer questions freely, and they are questions that have to do with themselves (Mark E. Goldberg, 2000). Secondly, the girls start to focus on others and not themselves (Goldberg, 2000). If a question pertains to an individual that has nothing to do with them they will answer (Goldberg, 2000). Thirdly, girls start to become a bit shyer, as I mentioned before they know the answer. In my opinion it is because they become more self-conscious and therefore hold back from the group (Goldberg, 2000).

In knowing what the theory is and knowing that Carol Gilligan's theory is based on the morality of women, this just makes me aware of how some women think. Some may believe that what they say may have a negative affect on a certain situation. Some choose not to speak up on issues because they believe that what they say may not be correct or other people will make fun of them. During some of her interviews and experiments she said that in some cases the girls knew the answers to questions but they would reply with an "I do not know." They would want the person asking them the question to kind of lead them to the answer they wanted so they wouldn't be incorrect. Gilligan knew that this was the case and in fact helped the young women out of this. She helped their moral and let them speak their minds. In my opinion it has shown with all of the work she has done for women alike. I believe the Carol Gilligan's theory was one that was needed and it will always be in the minds of women all around the world.

Carol Gilligan	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL	Fine motor Infant Gross motor Childhood Height Preadolescence Weight Adolescence Prenatal Adulthood
VERBAL	• Women's desire to respond is consonant with men's desire for separation vs. women's desire for connection (Cypher, A., 2008).
EMOTIONAL	• When girls have a dispute, they quit playing (in order to protect the relationship)(Cypher, 2008). • Responsibility shows an act of caring rather than restraint of aggression (cipher, 2008).
SOCIAL	The concept of separate self uncompromised by the constraints of reality is an adolescent ideal (cipher,2008). "Responsibility and caring about yourself and others" But realize that the principle put into practice here is still going to leave you with conflict. So you must accept responsibility for your decisions. Someone will be hurt (Cypher, 2008).
MENTAL	Women care about connecting with others (cipher, 2008). Women's reluctance to judge is not moral relativism, but rather a recognition of the intricacies of real-world situations, and the uniqueness of individual experiences (cipher, 2008).
MORAL	For women the rights of life and property are weighed in the abstract of logical priority, but in terms of the actual consequences their violation will have on the people involved (cipher, 2008), A frequent moral concern is the concern for hurting and being selfless harms the self and hence harms ones relationships (cipher, 2008).

Theory	
STAGES	**DESCRIPTION**
Stage 1: Selfish Stage	Female children start out with a selfish orientation (Cypher, 2008).
Stage 2: Belief in Conventional morality	Women typically feel it is wrong to act in their own interests and that they should value instead the interests of others. They equate concern with selfishness (cypher, 2008).
Stage 3: Post-Conventional	They learn that it is just as wrong to ignore their own interests as it is to ignore the interests of others. One way to this understanding comes through their concern with connecting with others

References

Bradley, B. (1998). American Cultural History: 1950-1959. Retrieved from Lonestage Kingwood:

http://kclibrary.lonestar.edu/decade50.html.

Bradley, B., & Goodwin S. (1998). American Cultural History: 1960-1969. Retrieved from

Lonestar College Kingwood: http://kclibrary.lonestar.edu/decade60.html.

Cooper Davis, P., & Gilligan ,C. (2002). *Reconstructing Law and Marriage.* Retrieved September

18, 2008 from The Good Society:

https://muse.jhu.edu/journals/good_society/v011/11.3davis.html

Cypher, A. (nd). *Notes on In a Different Voice by Carol Gilligan.* Retrieved October 10, 2008

from BookNotes Web Site: http://acypher.com/BookNotes/Gilligan.hmtl

Gilligan, C. (n.d.). *Carol Gilligan*. Retrieved September 4, 2008 from Wikipedia:

http://en.wikipedia.org/wiki/Carol_Gilligan

Gilligan, C. (1982). *In a different voice: Psychological Theory and Women's Development.*

Cambridge, Mass: Harvard University Press.

Hekman, Susan. 1993. "Moral voices, moral selves: About getting it right in moral theory."

Human Studies 16, no. 1/2: 143-162. Academic Search Premier, EBSCOhost (accessed

September 4, 2008).

Pratt, M., Pancer, M., Hunsberger, B., & Manchester, J. (1990). Reasoning About the Self and

Relationships in Maturity: An Integrative Complexity Analysis of Individual Differences.

Journal of Personality & Social Psychology, 59 (3), 575-581. Retrieved September 4,

2008, from Academic Search Premier database.

Rhodes, M. (1985, March). Gilligan's Theory of Moral Development as Applied to Social Work. *Social Work,* 30 (2), 101-105. Retrieved September 4, 2008, from Academic Search Premier database.

St. OLAF College CWIS Policies. (n.d.). Gilligan's In a Different Voice. Retrieved September 4, 2008 from http://www.stolaf.edu/People/huff/classes/handbook/Gilligan.html

Taylor, Jill McLean. (1995). *Between Voice and Silence: Women, Girls, Race and Relationship.* Cambridge, Mass: Harvard University Press.

(c1991). *Women and Girls and Psychotherapy.* New York: Haworth Press.

Women's Intellectual Contribution to the Study of Mind and society. (n.d.). *Carol Gilligan.* Retrieved September 4, 2008 from http://www.webster.edu/~wolflm/gilligan.html

Running head: ABRAHAM MASLOW

The Theories of Abraham Maslow

Kathleen Sutton

Shepherd University

Abstract

This research paper explores the biographical, contextual, experimental, theoretical, and developmental aspects of the life of Abraham Maslow. It also includes an in depth reflection and application of the above stated objectives. By exploring the early life of Abraham Maslow and the historical events and influential factors of his theories, we can better understand just why he came about his ideas. Abraham Maslow is arguably best known for his "Hierarchy of Needs" which is discussed in this paper. The last portion of the paper is a reflection and application of the ideas presented by Abraham Maslow.

The Theories of Abraham Maslow

Biographical

The mutuality of human potential and mental health explored by Abraham Maslow was most certainly the overwhelming basis of his lifelong research. Instead of dwelling upon the causes and negative aspects of human nature, Maslow instead focused upon the contributing factors of mental health. He once said, "Human nature is not nearly as bad as it has been thought to be" (A Science Odyssey, 1998). Maslow's optimistic approach to understanding the human psyche is quite remarkable considering his background. In 1908, Abraham H. Maslow was born in Brooklyn, New York. Born as a Jewish person in a non-Jewish suburb, Maslow once described his early life in Brooklyn as follows: "I was isolated and unhappy. I grew up in libraries and among books, almost without friends" (The Third Force, Goble, 1970, p.10). In those years of study and many hours spent in the library, Maslow quickly began to appreciate the works of such philosophers as Alfred North Whitehead, Henri Bergson, Thomas Jefferson, Abraham Lincoln, Plato, and Spinoza. He described the discovery of William Graham Sumner's *Folkways* as a "Mount Everest in my life" (Goble, 1970. p.10).

As Goble describes, Maslow had experience in the practical world as well (1970, p.10). He began working early in his life. First, he adopted a paper route and worked for a family-owned company, Universal Containers, Inc. During this time, Maslow attended City College in New York. Contrary to his father's wishes for Maslow to attend law school, Maslow instead decided to pursue his Master's Degree in Psychology at the University of Wisconsin. This was shortly after Maslow's marriage to his cousin Bertha (A Science Odyssey, 1998). "Life didn't really start for me until I got married and went

to Wisconsin," he says, "I had discovered J.B. Watson, and I was sold on Behaviorism. It was an explosion of excitement for me" (Goble, 1970, p. 11).

Maslow's enthusiasm for behaviorist thought quickly began to wane after reading more about Gestalt and Freudian Psychology, along with the birth of Abraham and Bertha's first child. In an interview for *Psychology Today*, Abraham declared, "I'd say that anyone who had a baby couldn't be a behaviorist" (Goble, 1970, p. 11).

<div align="center">Contextual</div>

Maslow simply could not bear the notion that humans were to be treated as objects as behaviorist thought allowed. He believed in exploring the subjective world in which human beings live. Personal freedom, choice, motivations and feelings had to have their place (Smith, The Humanistic Orientations to Learning, 1999).

According to Goble, Maslow described New York City as the "center of the psychological universe" (1970). In the 1930's, the Maslows relocated back to The Big Apple for this very reason. There, young Maslow became a psychology professor at Brooklyn College. In these years, Maslow met and conversed often with one of his most profound influences, Alfred Adler. It is easy to see why Maslow was so very influenced by Mr. Adler. One of Adler's major theories was that humans possess a single "drive" and this force was later to be coined as the constant drive to attain perfection for one self (Boeree, Alfred Adler, 1997, 2006).

In 1954, Abraham Maslow published his second book, *Motivation and Personality*. At this time, the two dominant theories in American Universities were Freudianism (Sigmund Freud) and Behaviorism (John B. Watson). Coincidentally, Maslow's humanistic theories would come to be considered the "Third Force" in American Psychology (Goble, pp. 5-9).

<div align="center">Experimental</div>

Abraham Maslow's experiments were not so much "experiments" as they were studies of culture and human development from these cultures. According to Goble, Maslow did not agree with the scientific way in which behaviorists approached psychology. He also did not see fit that the subjects of such experiments were animals. He also saw that Freud was preoccupied with the human subconscious as a determinant of human behavior. So, while the behaviorists objectified human behavior, and Freudian thinkers broadly focused on abstract concepts, Maslow saw it fit to learn about human nature in dealing with both the objective and subjective (The Third Force, p. 16).

With these thoughts and the onslaught of World War II, Maslow decided it best to devote his life to develop a universal theory of human behavior. A very profound influence was his observation in Alberta, Canada of the Northern Blackfoot Indian Tribe. By his ethnological studies, he came to find that hostile and destructive behavior among primitive cultures varied exponentially. In general, his experience with the Northern Blackfoot Indian Tribe convinced him that culture, and not heredity was really the basis of human aggression (The Third Force, Goble, p. 12).

"Intra-social hostility, for which I hunted for with all the anthropological and psychiatric means at my command, was certainly at a minimum compared to our larger society" (The Third Force, Goble, p.12). Maslow came to observe that the children of this culture were rarely punished physically. The Blackfoot actually looked down on the white man for their cruelty toward their fellow man (The Third Force, Goble, p. 13).

Another example of culture and human behavior came from his study, observation, and interview of the people of Bali. He noted, "The adult Balinese give the impression of being emotionally distant, never quite letting go in a positive or negative direction except on institutionalized occasions" (Maslow, Principles of Abnormal Psychology, p. 155). In conclusion,

he found that being brought up in an environment that is both frustrating and tense, the Balinese person may view themselves as helpless in the face of external threats or challenges (Maslow, Principles of Abnormal Psychology, p. 157).

In viewing our own culture, Maslow sees the family unit as "small". That is, it basically consists of parents and children. In this sense, the child soon learns to rely on necessities such as protection, affection, food, and dependence. He soon recognized these as "basic needs" (Maslow, Principles of Abnormal Psychology, p. 159).

From these cultural findings, Maslow soon became very interested in studying the self-actualized person. Although "self-actualization" was not yet defined at the time, the studies of these various groups led to the idea that an individual is very influenced by his/her culture (Maslow, Principles of Abnormal Psychology, p. 159).

Maslow later studied the healthiest one percent of the Brandeis College population. He wanted to use the best possible representation of human beings; this is what he came to call the "growing tip" (Goble, The Third Force, p. 23). While this seemed to negate the idea of studying an array of average persons, as so many other psychologists had in the past, Maslow described his reasoning as such: "If you wanted to know how fast a man could run a mile, or how to improve your ability to run a mile, you didn't study the average runner, you studied the exceptional runner, those at the growing tip. Only those individuals will give you an idea of man's potential to run a better mile" (Goble, p. 23).

<div align="center">Theoretical</div>

We soon begin to see the basis of Maslow's Hierarchy of Needs in these particular early findings.

"The goal of education—the human goal, the humanistic goal, the goal so far as human

beings are concerned—is ultimately the "self actualization" of a person, the becoming fully

human, the development of the fullest height that the human species can stand up to or that the particular individual can come to" (Maslow, The Farther Reaches of Human Nature, p.168-169).

Because Maslow viewed the aspect of human self-actualization as the end-all to human fulfillment, he would too be required to define the aspects of human life in how to reach the ultimate goal. In Maslow's *The Farther Reaches of Human Nature*, he discusses the value of *intrinsic* learning. In his words, this means learning how to become a human being (p. 170).

Abraham Maslow focused on the whole of a human being. In other words, the basic needs must fulfill a "whole" person. Maslow stated, "It is unusual, not usual, that an act or a conscious wish has but one motivation" (Goble, p. 36). In other words, the motivations within a person are interrelated. Motivation depends upon the reward or the objective for such a drive. In Maslow's findings, the means in which humans go about attaining these rewards may differ, but the intrinsic motivations are very much the same. For example, basic needs such as hunger, thirst, shelter, sleep, sex, shelter and oxygen are universal to all people, but the ways in which cultures go about attaining these are quite different (Goble, p 37).

Also important to human beings is the need for the feeling of belonging. According to Maslow's theory, affiliation needs must be met in order to achieve both self-esteem and self-actualization. For example, He pointed out that even in infancy, the child will focus their attention on the person who provides for their basic needs (Coy, Kovacs-Long, 139).

Maslow's Hierarchy of Needs consists of five levels, as stated by Mark K. Smith in his article, *The Humanistic Approach to Learning*:

 Level one: *Physiological needs* such as hunger, thirst, sex, sleep, relaxation and bodily integrity must be satisfied before the next level comes into play.

Level two: *Safety needs* call for a predictable and orderly world. If these are not satisfied people

will look to organize their worlds to provide for the greatest degree of safety and security. If

satisfied, people will come under the force of level three.

Level three: *Love and belonginess needs* cause people to seek warm and friendly relationships.

Level four: *Self-esteem needs* involve the desire for strength, achievement, adequacy, mastery and

competence. They also involve confidence, independence, reputation and prestige.

Level five: *Self-actualization* is the full use and expression of talents, capacities and potentialities.

Reflection

The intrinsic idea of Abraham Maslow's Hierarchy of Needs is that a person must be

truly happy with their physical and social environment and own self in order to reach their

fullest potential. The tiers of the hierarchy run from the most basic human needs to an idealistic

goal of Self-Actualization. The steps in between are necessary and crucial to achieving this level

of human perfection. In this respect, researching Abraham Maslow has not only been interesting,

but rewarding in that application of his theory can very possibly change my life and teaching

philosophy.

If a child enters a classroom and does not feel safe, comfortable, or that he or she is an

accepted part of the class, they will not likely flourish. Also important is a supportive

environment, where their skills are praised and their progress rewarded. Entering a classroom

where the child is constantly put down by either their peers or the teacher will undoubtedly lower

the child's self-esteem and surely hinder their ability to learn. If a child does not believe that he or

she can learn, they will unlikely not even try.

"According to the new third psychology," Maslow states, "the far goal of education—as of psychotherapy, of family life, of work, of society, of life itself—is to aid the person to grow to fullest humanness, to the greatest fulfillment and actualization of his highest potentials, to his greatest possible stature. In a word, it should help him to become the best he is capable of becoming, to become *actually*, what he deeply is *potentially*" (Abraham Maslow, *Religions, Values, and Peak Experiences*, p. 49. 1964).

The above stated quote by Abraham Maslow himself quite significant in that it successfully sums up the teaching philosophy that I have adopted as a result of my research. I value the opportunity to have been able to study the theories of Abraham Maslow. While I certainly did not condone negative reinforcement as a primary teaching strategy prior to this research paper, I now undoubtedly reject the practice of negative reinforcement as an effective way to teach. To emphasize to students their potential as citizens, as students, as human beings, they can more easily be on their way of climbing up the hierarchy to self-actualization.

Application

As a future classroom teacher, I will take these notions very seriously. In my personal experience, I have come across several instructors and coaches whose methods rely solely on negative reinforcement. While this may be effective in a toddler learning not to touch a hot stove, it does not apply equally to a school-aged child who is approaching more cognitive ways of perceiving the world. Those teachers and coaches who have constantly told me that I was wrong, lazy, or simply not trying were in a sense correct because by hearing this over and over, I soon became discouraged. With this discouragement, I was afraid to try, and in turn, I believed I was unable to succeed. In other words, my self-esteem was obliterated, and that tier of the hierarchy was shattered.

The tier beneath Self-Actualization in Abraham Maslow's Hierarchy of Needs is to acquire Self-Esteem. At such a young age in the classroom environment a positive, praising environment is crucial to the development of such self-esteem.

In no way does this mean to praise a child even in moments they may misbehave or go about a problem incorrectly. This simply means to focus upon the strengths of the student and allow them to make mistakes with the knowledge that mistakes are not only normal, but a means in which to learn.

In conclusion, the goal of the classroom teacher is to fulfill the needs for a student to reach their own self-actualization. In order to achieve this, the lower tiers must be satisfied. As a teacher I hope to supply the resources and state-of-mind for a pupil to reach their fullest potential. By giving them these tools, one can hope that they too can be self-actualized.

ABRAHAM MASLOW
Developmental Grid Table

ATTRIBUTES	DESCRIPTIVE DETAILS
PHYSICAL	Physical basic needs for food, water, sex, shelter, and safety
VERBAL	The ability to express knowledge, ideas, and capabilites
EMOTIONAL	Love, belonging, warm and friendly relationships
SOCIAL	Belonging, affiliation with a group, while also maintaining a personal identity, the need for friendship, love
MENTAL	Self-esteem required to attain knowledge, knowledge as a goal
MORAL	Sense of purpose and responsibility to self, community, and loved ones

THEORY	
STAGES	DESCRIPTION
Stage 1:	Physiological Needs: Food, Water, Sex, Shelter
Stage 2:	Safety Needs: The need to be safe and secure in one's environment
Stage 3:	Love and Belongingness Needs: The need to belong to a group and to have strong, meaningful relationships
Stage 4:	Self Esteem Needs: Persons must be content and confident in themselves to thrive and reach self-actualization
Stage 5:	Self-Actualization: Needs one through four have been met and this person can fully express their love, talents, and capabilities

References

Boeree, George C. Abraham Maslow. (1998). Retrieved September 2, 2008 from

http://webspace.ship.edu/cgboer/maslow.html.

Coy, Doris Rhea, & Koracs-Long, Judith. (2005). Maslow and Miller: An Exploration of Gender

and Affiliation in the Journey to Competence. *Journal of Counseling and Development, 83,*

138-145.

Dr. Edward Hoffman Lectures on Maslow: 2007. (2007). Retrieved August 20, 2008 from

http://www.youtube.com/watch?v=q88NzM3SHIY.

Goble, Frank G. (1970). *The Third Force: The Psychology of Abraham Maslow*. New

York: Grossman Publishers.

Maslow, Abraham H. (1971). *The Farther Reaches of Human Nature.* New York: The   Viking

Press.

Maslow, Abraham H., Mittelman, Bela. (1941). *Principles of Abnormal Psychology: The*

Dynamics of Psychic Illness. New York: Harper and Row.

Maslow, Abraham H. (1970). *Religions, Values, and Peak Experiences.* New York: Penguin

Group.

Pearson, Elaine M. (1999). Humanism and Individualism: *Maslow and His Critics. Adult*

Education Quarterly, 50, 14-29.

Satter, Ellyn. (2007). Hierarchy of Food Needs. *Journal of Nutrition Education and Behavior, 39,*

pS187-S188, 2p.

A Science Odyssey, People and Discoveries: Abraham Maslow. (1998). Retrieved August 29,

2008 from http://www.pbs.org/wgbh/aso/databank/entries/bhmasl.html.

Smith, Mark C. Humanistic Orientations to Learning. (1999). Retrieved September 4, 2008 from

http://www.infed.org/biblio/learning-humanistic.htm.

Dorothea McCarthy

Barbara Taylor

Shepherd University

Abstract

A short biography of the life of Dorothea McCarthy and a description of world events occurring during her lifetime lead to an understanding of the environment Dorothea was influenced by as she became an authority in the areas of child and language development. She spent many years devoted to the study and teaching of educational psychology. She was sought as a consultant or to collaborate to do specialized research in these areas. McCarthy focused on listening and speaking as they emerge early during the child development years; she focused on producing the most comprehensive study available on vocabulary and language development. Not satisfied with the existing methods for assessing the needs of children, she developed The McCarthy Scales of Children's Abilities, one of her most notable accomplishments, which was published in 1972.

Dorthea McCarthy

Biographical

Dorothea Agnes McCarthy was born on March 4, 1906, the only child of Mary (Malley) McCarthy and Francis D. McCarthy. She was born in Minneapolis, Minnesota and would spend her childhood and early adult years in Minnesota. She married Dr. Robert Rock on June 9, 1934, and together they had one daughter (Ogilvie & Harvey, 2000).

McCarthy chose to remain in Minnesota for her education and attended the University of Minnesota receiving a B.A. in 1925 and a Ph.D. in 1928, both in Psychology (Watson & Skinner, 2004). A significant accomplishment was receiving one of the first two Ph.D. degrees awarded by Minnesota's Institute of Child Development.

After graduating from the University of Minnesota, McCarthy accepted opportunities which lead her away from her familiar surroundings in Minnesota. In the same year she graduated, she became a National Research Council Fellow in Child Development for one year (Watson & Skinner, 2004). For the next two years, she shifted to the west coast working as a clinical psychologist for the California Bureau of Juvenile Research. From 1930 to 1932 she traveled to the east coast and took the position of Director of nursery school and associate professor at the University of Georgia (Watson & Skinner, 2004). 1932 brought her to New York where she joined the growing programs at Fordham University (Ogilvie & Harvey, 2000).

Prior to McCarthy joining Fordham University in 1932, the University had begun a period of change and development. In 1920, Educational Psychology was being taught within the education department with one person, Maurice Rogalin, overseeing all aspects of psychology within the education department (History, fordham.edu, 2008). In the early 1930's, there was a reorganization of the psychology offerings as they were scattered among different majors such as education, politics, and social services. In 1933 the Psychology Department separated from the

Philosophy Department and McCarthy was on the new Psychology Faculty Committee listed with

a Ph.D. in both Education and Psychology (History, fordham.edu, 2008).   In 1935, the Fordham

Graduate School became part of the Department of Educational Psychology and Measurements

under division of Education (History, fordham.edu, 2008). In 1940, she became associate

professor in the Graduate Department of School of Education and in Educational Psychology,

Measurements, and Guidance Educational Psychology and Measurements (History, fordham.edu,

2008).

The growth and development at Fordham University allowed McCarthy to continue her

work with education, psychology and children. The specialization in the education department at

Fordham allowed her to further her observations from earlier research. She was in the right place

within a good environment for her work and research to parallel each other.   She would spend the

remainder of her career in New York working as a professor until 1971 (Watson & Skinner, 2004).

While at Fordham University, McCarthy busied herself beyond the campus as well. From

1939-1940, she was Westchester County Children's court psychologist. The summers of 1941,

43, and 44 were spent as associate professor at Columbia University Teachers College (Watson &

Skinner, 2004). McCarthy was invited by Dr. Anna Speisman Starr to join her at Rutgers

University to research discrepancies with diagnoses of people with mental retardation (Watson &

Skinner, 2004). McCarthy was happy to do so and would write about her observations. From

1960 to 1961 she served within the American Psychological Association as President of the

Division of Developmental Psychology. She held honors and memberships with several

organizations including the American Psychological Association, the Society for Research in

Child Development, the Eastern Psychological Association and the New York State Psychological

Association (Watson & Skinner, 2004).

McCarthy was becoming a notable figure within the psychology and education fields. But it was her research and later developments that are still used today. She was known for her research in the area of language development of young children.   During the 1960's, her research in this area highly influenced the practice of speech pathologists of that time (Watson & Skinner, 2004). Finally, in 1972, after many years of research, the McCarthy Scales of Children's Abilities (MSCA) was completed and published (Kamphaus, 2005, p.23). Initially this was developed as a more accurate assessment tool for measuring the abilities of preschool children, but was later helpful with other assessment needs. Dorothea McCarthy died in 1974 at the age of 68 (Ogilvie & Harvey, 2000), but her life's work continues to be relevant to the needs of today. The McCarthy scales are still in use in many school districts as they try to meet the needs of their students through early intervention.

Contextual

During McCarthy's life span, both the United States and the world experienced many events, inventions, changes, evolutions, discoveries and advances that would mark this time of history. The growth and advancement experienced during her life would help provide a path for her work and developments to come to fruition without the impediments of previous generations.

The world was experiencing turmoil with political powers vying for supremacy. World War I occurred when McCarthy was 11 years old; she was very young to be aware of the political and military implications. She would have been much more informed of World War II as she was in her early 30's living in New York and working at Fordham University at the time (Ogilvie & Harvey, 2000). There was competition among nations to be the first to do or discover in many fields outside of war. Exploration provided competition as the race to cross the Atlantic by boat or later by airplane and for speed along with who could reach the poles first was being explored by the United States and other European nations (DK Publishing, p. 651,654,656,695)

This was also a positive time of rapid growth and advancement. McCarthy was born about the time that Pavlov was studying conditioned reflexes in dogs in Russia (DK., p.648). Carl Jung published his *"Theory of Psychoanalysis"* in 1912 (DK., p.660), so there was much experimenting and development occurring in the world in the field of psychology. Some of the biggest advances were made in the areas of technology, transportation, medicine and women's' rights. Medical research brought about the discovery of vaccines for diseases such as polio and typhus (DK., p.662), tetanus shots in 1926 (DK., p.640), and penicillin in 1928 (DK., p. 697). Advances in transportation during this time saw the Wright brothers and their flying machine in 1908 (DK., p.652), the same year that Henry Ford produced the first model T (DK., p. 690). The first transatlantic flight was made by Charles Lindbergh in 1927 (DK., p. 695) which opened the way for countries to travel and enlighten each other. By the time of her death, McCarthy saw many different companies competing in the areas that the technology was in the infancy stages when she was born. During her life, women's rights and the achievements and advancements that resulted created the way for women such as McCarthy to conduct research, develop theories and be accepted globally as contributors to the advancement of society.

Living and working in New York from 1932 until her death in 1974 placed McCarthy in an area of the country where she was exposed to implications of the events of the world and the nation. Staying in Minnesota would have put her further away from the impact of some of these events such as the panic on Wall Street, the stock market crash in the early 1930's along with the resulting unemployment of the depression that occurred in New York City (DK., p.699). The advancements in medicine helped the health and life span of children and provided the increased focus on the need for education in a child's development. Advancements in transportation and technologies created a way for communications between researchers to study the works of others and to expand on them as means for transferring information and travel improved. By the time of

her death, McCarthy was known beyond the state of New York and her testing scales were being used globally.

Experimental

Dorothea McCarthy spent many years devoted to the study and teaching of educational psychology. She was viewed as an authority on early childhood language development and was sought as a consultant or to collaborate with others in doing specialized research in this area. The McCarthy Scales of Children's Abilities was her most notable accomplishment in the area of early childhood development and remains a standard in the field of developmental screening tests (Spodek, 1993 p. 287). McCarthy was able to make significant contributions in a male dominant field.

For McCarthy, her lab environment encompassed the many classrooms of children she observed. Her work in nursery and day care centers led her to observe that preschool and learning disabled children were not being accurately assessed given the existing assessment tools (Watson & Skinner, 2004).   She saw further evidence of the disparity in assessment when invited to participate with Dr. Anna Speismann Scarr at Rutgers University in her research on differential diagnosis among persons with mental retardation (Watson & Skinner, 2004). As she participated, she became concerned that children were being mislabeled as mentally retarded only because the assessment test used was not adequate to test young children (Watson & Skinner, 2004). This concern led to her desire to develop a more accurate method for measuring cognitive abilities in children as there were primarily tests for older children at the time.

McCarthy became an authority on language development because she was so complete in her gathering, observation, and summary of research that had been conducted already. She would analyze research and summarize the results of studies and compose her documents from these comparisons.   This provided a comprehensive collection and resource for others in the fields of

education, psychology, language development, and other concentrations. Her research has helped

many people, including Lev Vygotsky as he gave partial credit to her for his understanding of the

Zone of Proximal Development (Robbins, 2001, p.3). Others would cite her research to help

substantiate claims or refer to it as a credible source, even though it was compiled decades earlier.

As a result of her analyzing research, McCarthy composed a comprehensive study on the

linguistic abilities of boys and girls. In the 64 comparisons she made, 43 favored the girls, 3 were

identical for each sex, and 18 favored the boys (Garrison, Kingston & McDonald, 1964). She

concluded that, generally, girls matured quicker in their language development than boys and that

the disparity continued through every stage of development although there were some

comparisons where the boys were stronger. As the children aged, differences would decrease but

the girls seemed to maintain an advantage that would remain. This information was helpful in

understanding why boys seem to struggle with school and have more difficulties than girls.

McCarthy suggested that some of the difficulties experienced by boys at school might stem from

their slower acquisition of verbal skills (Lindgren, 1956, p. 150).   This would give insight into

why there is a higher incidence of reading, speech and writing difficulties in boys (Lindgren, 1956,

p. 150)   and give educators an understanding of the source of the boys frustrations and see if

training or corrective measures would have any effect. McCarthy suggested that the differences

might be due to boys being forced to learn verbal skills before they have reached the proper

maturity to be able to be successful in their learning (Lindgren, 1956, p. 396). McCarthy also

noted that less significant factors such as social and cultural influences, boy-girl competition,   and

learning styles may influence the disparity to a lesser degree (Garrison et al., 1964).

Theoretical

McCarthy understood the stages of language development and became an authority in the

area of language development from birth to 2 years. According to Lee & Lee (1958), there are 4

vocabularies that encompass the development of language: listening, speaking, reading, and writing (p.91). McCarthy focused on listening and speaking as these emerge early during the ages she studied, reading and writing normally not developing until after beginning school.   Lee & Lee noted that McCarthy's research produced the "eight most comprehensive studies available" as she "analyzed two longitudinal studies and six studies which were principally cross-sectioned" (p.91). McCarthy tracked the vocabulary development of children from the early cooing and responding to voices, to the development of phrases and sentences occurring around 2 years (Lee & Lee, 1958). She noted that vocabulary growth begins gradually and then transitions into a rapid development stage and then transitions back to a slower rate of growth as a child's motor skills are busy learning how to walk (Lee & Lee, 1958). Although a child's early vocabulary may only be understood by their mother, by age 3 approximately 90% of a child's vocabulary is understandable (Garrison et al., 1964).

At different times in McCarthy's life, she worked with young children which created a spark of concern in her mind. She was not satisfied in using existing methods for assessing the development and needs of a child; it did not seem to be an appropriate fit. The results she was seeing from testing children did not accurately reflect the child's abilities and needs. While most tests were designed for assessment of older children, McCarthy was convinced that younger children could be assessed during the early years of rapid language development and that a plan could be constructed to strengthen any weaknesses brought to light in the earlier assessing of children. In turn, these plans could be implemented earlier in a child's development and greater overall success could be achieved.   This concern led to McCarthy developing the McCarthy Scales of Children's Abilities or MSCA, which was published in 1972, 2 years before her death.

The McCarthy Scales were unlike anything that existed at the time. They were very different and more advanced compared to other tests, but it was a welcome change. The test was

appealing to children as it involved creating artwork and physical activities such as tossing a bean bag. It was seen as an improvement as the preschoolers were no longer required to know concepts beyond their capability (Kamphaus, 2005, p.23). The MSCA was also the first assessment test to do away with the IQ term which McCarthy replaced with the *General Cognitive Index* or GCI (Kamphaus, 2005, p. 23).

According to a dictionary of Psychology, the McCarthy scales are defined as " a set of scales for measuring the development of intellectual abilities of children between 2 ½ and 8 ½ years of age, divided into verbal ability, perceptual ability, quantitative ability, memory, and motor ability" (2001). This was a "normed" (Lidz, 2003, p.145) instrument for young children. Children would be given a series of 18 tests with the purpose of "discriminating among developmental ages" and creating distinction along the spectrum of lower and upper functioning children (Lidz, 2003, p.145). Norms are presented for 6 month age intervals until age 5 ½ and 12 month intervals thereafter. According to Lidz (2003), the problem with application of the scales is that the norms are based off of the 1969-1970 census and need to be updated (p.145).

One of the advantages for McCarthy's scales is that children are easily involved and engaged in the tests. Some testing may be detrimental for a child as it creates labels that tend to remain with a child regardless of advancement or mastery of skills. It is possible to use tests to predict in a positive way for a child and develop a plan. Administered by trained educators, psychologists, counselors or other professionals, these tests help provide a valuable diagnostic tool that did not exist before the conceptualizing of McCarthy. There was a need in the field of childhood development and her love for what she devoted her life to, children and education, compelled her to fulfill it.

Reflection

Throughout history, women's roles have marched at a different pace than men's. The extent of societal contributions made by women was often determined by cultural norms and the opportunities afforded them. Dorothea McCarthy was fortunate to be in a time when opportunities for learning and advancing were open to women and she made full advantage of applying her skills, talents, and interests. By doing so, she was successful in setting precedence in her field of child and language development. She found respect among colleagues and was invited to collaborate with others. I have found it very motivational and inspiring to see her dedication and consistency throughout her life as she was continually engaging her mind and her abilities. She achieved bachelors, masters and PhD. degrees, but that was not her ending point of contribution. Even though she was married and had a child of her own, she continued to assess the world of child development and how best to address the need to be successful in receiving an education. Her work culminated in the publishing of the McCarthy Scales of Children's Abilities which was published 2 years before her death in 1974. She must have been an example of how busy people are capable of achieving and accomplishing much, particularly when you are fulfilling something you have a passion for. I found it very refreshing to research a woman and her accomplishments and liken it to my journey and experiences although mine will not equal McCarthy's.

Having been in the field several times now, I can see application of Dorothea McCarthy's view of disparity of assessment in children and the need for accurate testing. Ms. Hoffman's first grade classroom contains several levels of learners, some of which could be mislabeled if not tested correctly. Taking the time to accurately measure cognitive abilities and not applying a label first will allow for a successful learning plan to be created for the individual student. There are some students who are very bright, but could have been labeled and put in a lower functioning group which would not have been appropriate. With the help of a team, including the teacher and an aide, the students are able to remain in the classroom for a large part of the instructional day

and participate at their level instead of being removed to a lower level environment. There are areas of weakness, but also areas where they are at the same knowledge level as others in the class and correct assessment would develop a plan focused on the areas of need.

It is challenging for young children to always be in control of their physical movement and their expression of emotions. They experience a range of reactions during the day and often do so very quickly. With a reminder, most children in Ms. Hoffman's first grade class are able to quickly correct any behavior and return attention and focus. There is one student who is challenged with his ability to control his emotions and is unable to correct himself with a reminder from the teacher. This is a challenge for the classroom as the teacher is working with the student and his peers are adjusting to his emotional outbursts. The teacher is taking the initiative to evaluate the needs of this student and construct a plan of action to get the student the help he needs for him to be successful and not continue his frustrations. I would hope that after being observed by a specialist, an IEP could be created to enable the teacher and aids to work on the weak areas while not holding him back in all areas of learning as he is very bright. I think he is a good example of how quick a student can be mis-labeled by educators and continually punished for something that maybe he can not control or be put in a lower learning group because of a weakness in behavior management and not academic learning.

<div align="center">Application</div>

Dorothea McCarthy's developmental theories can translate into principles for student learning applicable from early childhood development throughout adulthood.   Dorothea McCarthy has shown that learning starts early and continues at differing rates in boys and girls. This is helpful in planning curriculum and expectations that adapt to the differences that are inherent with gender. Some differences between genders are due to a slower rate of development, typically in boys, with smaller influences stemming from social and cultural factors. It would not

be acceptable to punish or hold boys accountable for achieving beyond their level of proper maturity.

There would need to be accommodations and training for different learning styles as development occurs at different rates. This would apply both in early childhood development and also in the teen years as language development slows when there is growth of motor skills or other physical development which typically occurs during the teenage years. These times of growth were seen to help close the gap between gender development rates as both girls and boys were going through similar physical stages and changes. This allowed the boys to catch up to the girls.

McCarthy's research also shows how careful educators need to be in attaching labels of abilities to students. Depending on the method used to measure cognitive abilities, the results might classify a student's abilities incorrectly. A student may have weak areas of learning and also areas of strengths, but should not be classified only by weaknesses. A carefully developed education plan would address the specific weaknesses while allowing continued growth in stronger areas.

Dorothea McCarthy	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL Language Development	**Infant**: experiences slow then rapid increases **Childhood**: slows in relation to increase mastery of motor skills **Adolescence**: girls continue to out perform boys, but the gap is narrowed as boys experience growth **Adulthood**: differences between genders decrease with age, but girls maintain a slight advantage

VERBAL Language Development	**Vocalization**: Include steps of development
	                    Accuracy of pronunciation lags behind understandable responses
	Vocabulary development: Greatest growth achieved by age 3
	                    Affected by maturation, cultural, and gender factors

SOCIAL Language Development	**Cultural influences**: -Need good models to imitate
	                    -Socio-economic backgrounds can affect performance levels between genders
	                    -Play a role in the adult gender inequalities
	                    -Homes of professional, business and clerical workers brought language advantage

	Gender difference:
	 Girls:
	  -learn socially acceptable behavior
	  -attracted towards people and pictures
	  -earlier rate of maturity
	  -greater verbal capacities
	
	Boys:
	-attracted to objects, geometric forms, patterns
	-slower acquisition of verbal skills
	-increased behavior problems
	-higher incidence of reading, writing, speech problems
	-forced to learn verbal skills before reaching proper maturational development

MENTAL Testing	**Analysis:**
	    -MSCA Diagnostic/Assessment Test
	       -Attempt to determine specific strengths and weaknesses of a young child who may have a problem or delay
	       -provides indices beyond intelligence
	Evaluation:
	    -conducted by a skilled multidisciplinary team
	    -uses norms
	    -creates a General Cognitive Index (GCI)
	    -tests the cognitive and sensory functions of:
	        -verbal memory, R-L orientation, draw, leg coordination, numeric memory, grouping

THEORY

STAGES	DESCRIPTION
Months	
2-4	Infant's response to human voice
2-4	Cooing
6-10	Rudimentary imitation of sounds
9-12	Response to gestures and "Bye-Bye"
12	Two words or more
15-18	Five words or more
18-22	Naming of single objects or pictures
21-24	Naming three to five objects
23-24	First phrases, sentences, pronouns, prepositions

References

Beliavsky, N. (2006). Revisiting Vygotsky and Gardner: Realizing Human Potential. *Journal of Aesthetic Education,* 40 (2), 1-11.

Garrison, K., Kingston, A., McDonald, A. (1964). *Educational psychology*. New York: Appleton-Century-crofts, Inc.

History of Psychology Department, Fordham University. Retrieved September, 2008, from http://www.fordham.edu/academics/programs_at_fordham_/psychology/history_timeline.s html.

Kamphaus, R. (n.d.). *Clinical Assessment of the Child and Adolescent Intelligence.* p23. Retrieved August 2008 from http://books.google.com

Kaufman, A. S., & Kaufman, N. L. (1977). *Clinical Evaluation of Young Children with the McCarthy Scales.* New York: Grune and Stratton, Inc.

Lee, D. M., & Lee, J. M. (1958). *The child and his development*. New York: Appleton-Century-crofts, Inc.

Lidz, C.S. (2003). *Early childhood assessment.* New Jersey: John Wiley & Sons, Inc.

Lindgren, H.C. (1956). *Educational psychology in the classroom*. (4th ed.). New York: John Wiley & sons, Inc.

Macaulay, R. ( ). *The Social Art.* 95. Retrieved August 2008 from http://books.google.com

McCarthy, D.A. (1930). *The Language Development of the Preschool Child.* Minnesota: University Press.

McCarthy, D. (1930). A Study of the Seashore Measures of Musical Talent. *Journal of Applied psychology,* XIV, 437-455.

Millennium year by year. (1999). New York: DK Publishing, Inc.

Ogilvie, M. B. & Harvey, J. D. (Eds.). (200). *The Biographical Dictionary of Women in Science: Pioneering Lives.* (861-2). New York: Routledge.

Robbins, D. (2001). *Vygotsky's psychology – philosophy: A metaphor for language theory and learning*. New York: Plenum.

Spodek, B. (Ed.). (1993). *Handbook of research on the education of young children*. New York: MacMillan Publishing Co.

Watson, T.S., & Skinner, C.H. (eds.) (2004). *Encyclopedia of School Psychology*. New York: Springer. http://cchd.umn.edu/icd/about/default.html

Running head: JEAN PIAGET

Jean Piaget

Loria Webb

Shepherd University

Abstract

This paper is an examination of Jean Piaget's life and theories. The principal goals are to shed light onto Piaget's life experiences and the societal context during his life time that may have shaped his theoretical perspectives and to delve into Piaget's theories. The sources referenced in this piece are ones written by Jean Piaget and those written by others explaining and evaluating Piaget's work. In 1896 Piaget was born in Switzerland, and at a young age began pondering and studying how one comes to understand. Through study at many places, such as Binet's Laboratory in London, Piaget began to formulate his ideas. This paper explains the idea of genetic epistemology, and it's relation to development. Piaget's Theory of Cognitive Development has four stages: sensorimotor, pre-operational, concrete operational, and formal operations. The characteristics of the children in the pre-operational and concrete operational stages can be observed in a first grade class.

Jean Piaget

Biographical

In David Elkind's (1976) *Child Development and Education: A Piagetian Perspective*, it is recorded Piaget once said, "Raised in Protestantism by a devout mother and the son of an unbelieving father, I have experienced early in life, and in a very lively manner the conflict between science and religion" (p. 54). August 9, 1896 Jean Piaget was born in Neuchâtel, Switzerland (Boeree, 2006). C. Boeree (2006) writes that Piaget was the oldest child and because of this he became quite independent and published his first paper by the age of ten. Jean Piaget was a great innovator when it came to the ideas involved with cognitive development and much of his upbringing and experimentation have effected these beliefs.

According to *Educational Psychology Interactive* Piaget's main interest was "in the biological influences on 'how we come to know;'" the ability to do "abstract symbolic reasoning" was what Piaget believed separated animals and human beings (Huitt & Hummel, 2003). The film, *Piaget's Developmental Theory: An Overview* (2006) reports that the paper he published by the age of ten was "The Observation of an Albino Sparrow." As he got older, Piaget trained in zoology (Phillips, 1969, p. 3), and he also became educated in biology and philosophy (Huitt & Hummel, 2003). C. Boeree (2006) writes that in high school Piaget published works on mollusks and "became well known among European students of mollusks, who assumed he was an adult." C. Boeree (2006) also writes, "[Piaget] was particularly pleased to get a part time job with the director of Nuechâtel's Museum of Natural History." By the age of sixteen Piaget, being so well published, was offered a job as a curator of a museum, but he did not take the position because he was still in high school (*Piaget's Developmental Theory: An Overview,* 2006).

Piaget contemplated about his faith in his late adolescent years, and after studying and applying his own logic, he decided to search for the "biological explanation of knowledge"

(Boeree, 2006). He attended the University of Neuchâtel upon completing high school (Boeree, 2006). During his time there, he became ill and withdrew to the mountains (Boeree, 2006). After recuperation, Piaget wrote down his ideas saying, "In all fields of life (organic, mental, social) there exist 'totalities' qualitatively distinct from their parts and imposing on them an organization." (Boeree, 2006); this became the basis for his life's work. He graduated with a Doctorate in Science in 1918 (Boeree, 2006).

Piaget's interest in children's thought processes was sparked as he was working in Paris in Binet's IQ test lab (Huitt & Hummel, 2003). The Journal de Psychologie published Piaget's first article on the psychology of intelligence in 1921 (Boeree, 2006). His research on the reasoning of elementary school children began at this time while working at the Institute J. J. Rousseau in Geneva, and he wrote five books on this research (Boeree, 2006).

Piaget married one of his coworkers, Valentine Châtenay in 1923, and together they had three children (Boeree, 2006). Their first two offspring were girls born in 1925 and 1927 (Boeree, 2006). Their only son was born in 1931 (Boeree, 2006). C. Boeree (2006) records, "They immediately became the focus of intense observation by Piaget and his wife. This research became three more books!"

From 1929 until 1967, Piaget was employed as the director of the International Bureau of Education (Boeree, 2006). Through his achievements he became chair of Experimental Psychology, the Director of the psychology laboratory, and the president of the Swiss Society of Psychology in 1940 (Boeree, 2006). In 1942, he gave a series of lectures at the Collège de France, which became *The Psychology of Intelligence* (Boeree, 2006). He became President of the Swiss Commission of United Nation's Educational, Scientific, and Cultural Organization (Boeree, 2006). He received honorary degrees from Harvard in 1936, the Sorbonne in 1946, the University of Brussels and the University of Brazil in 1949 (Boeree, 2006). His synthesis, *Introduction to*

Genetic Epistemology was published in 1949 and 1950 (Boeree, 2006). He taught as a professor

at Sorbonne starting in 1952 (Boeree, 2006). In 1955 he founded the Center for Genetic

Epistemology (Elkind, 1976, p. 54).

Piaget continued work on a general theory of structures, psychological work in biology,

and work through the United Nations Educational, Scientific, and Cultural Organization. All

together, Piaget wrote more than sixty books and hundreds of articles (Boeree, 2006). September

16, 1980 at the age of eighty-four Piaget passed away in Geneva (*Piaget's Developmental Theory:*

An Overview, 2006). C. Boeree (2006) writes that Piaget died as "one of the most significant

psychologists of the twentieth century." David Elkind (1976) similarly notes, "It is a simple fact

that no psychologist, psychiatrist, or educator today can deem himself fully educated without

having had some exposure to Piaget's work" (p. 54). Jean Piaget was an extremely influential

man with his ideology and theories in psychology and education.

<div align="center">Contextual</div>

Fernando Vidal (2003) writes, "For Piaget, the evolution of moral judgment matched his

observations in other areas of child development (language, reasoning, representation of the world,

and notions of physical casualty), as well as progress as revealed by the history of religion,

politics, education, philosophy, and science" (p. 75). This "moral judgment" is the basis Piaget

and others use to formulate their individual ideas (Vidal, 2003, p. 75). Piaget lived through many

controversies including both world wars. He was considered "an intellectually outstanding figure

of the Christina youth movement of French-Speaking Switzerland" throughout World War I

(Vidal, 2003, p. 76). Even though these happenings affected many people, they did not seem to

have much effect on Piaget's work. Most of the influence for his work comes from internal

factors and the beliefs and studies of other people.

Piaget's parents, being of two different religious backgrounds, forced Piaget to choose for himself what beliefs to follow. His father was a non-believer, and his mother was a dedicated Christian (Elkind, 1976, p.54).   This led to an internal predicament to find "personal identity" (Vidal, 2003, p. 80). The attempt to find himself and develop his own belief system is reflected in his work.

<div align="center">Experimental</div>

Piaget's work is greatly influenced by his family because much of his findings originate through the observation of his own three children. At seven months, one of his daughters could not keep track of a toy when it dropped from view (Monastersky, 2000). At nine months, Piaget observed this same child gaze as he dropped his pocket watch near her (Cavicchi, 2006, p. 73). In first attempts, she did not look down to where the watch fell but stared questioningly at the empty hand (Cavicchi, 2006, p. 73). After one week of observation and repeated dropping of the watch, he noted that she now looked at the floor when something large was dropped (Cavicchi, 2006, p. 73).

While working in Binet's Lab, Piaget did some investigation dealing with the thought processes of children. In asking children questions, he saw that younger children's answers were qualitatively different than those of older children (Huitt & Hummel, 2003). Piaget concluded that the younger children "were not dumber (a quantitative position since as they got older and had more experiences they would get smarter)," but they responded another way because they thought differently than the older subjects (Huitt & Hummel, 2003).

Barbel Inhelder in conjunction with Piaget wrote the book *Mental Imagery in the Child* about experiments they did on "elementary static and kinetic reproductive images" (Inhelder & Piaget, 1971, p. 15). One test completed dealt with diversely aged subjects reproducing horizontal lines in identical places following different imagined displacements of a rod (Piaget, 1971, p. 16).

The line was drawn after a 180 degree turn of the rod, and afterwards, it was moved back; then, they drew the length they thought it would be in the turned direction (Inhelder & Piaget, 1971, p. 16). The study found that younger students underestimated the length of the rod; this underestimation went away with the progression of age (Inhelder & Piaget, 1971, p. 17). They conducted more experiments like this with reproduction of horizontal lines finding the same results: with age subjects' answers came closer to the correct one (Inhelder & Piaget, 1971).

Piaget also did testing on the development of mathematical development. He carried out tests where he demonstrated tactual representations of mathematical concepts (Baskovich). The experiment was done to understand the student's comprehension of a concept. One experiment on amounts was done with liquid in a container (Baskovich). The same amount of liquid was poured into a container of a different shape that was flatter than the original container (*Piaget's Developmental Theory: An Overview,* 2006). He observed to see if subjects thought there was the same amount of liquid in each container (Baskovich). The younger subjects noted the amount was less in the container that was flatter, and the older subjects noted the amounts were the same (*Piaget's Developmental Theory: An Overview,* 2006). This study, like the others, established that with age the probability of a correct answer grew.

Theoretical

Through his experiments and research, Piaget came to conclusions in theoretical form of genetic epistemology and cognitive development. Piaget (1968) writes, "The fundamental hypothesis of genetic epistemology is that there is a parallelism between the progress made in the logical and rational organization of knowledge and the corresponding formative psychological processes." A part of this is logical formalization; it is using logic to organize, interpret, and use knowledge (Piaget, 1968). However, it is also important to take psychology seriously and not try to come up with answers independently (Piaget, 1968). One should look to psychological research

when a question of fact arises (Piaget, 1968). The idea of genetic epistemology is that psychology

along with logistical formalization work to create an individual's knowledge (Piaget, 1968).

Piaget, after studying children, concluded that the younger children "were not dumber (a

quantitative position since as they got older and had more experiences they would get smarter),"

but they responded another way because they thought differently than the older subjects (Huitt &

Hummel, 2003). Through his conclusion, he came up with his theory of cognitive development.

The two main processes that are the basis of this theory are assimilation and accommodation.

Assimilation is the use of prior knowledge in an environment similar to the one the knowledge

was learned from, and accommodation is changing cognitive structures to understand something in

the environment (Huitt & Hummel, 2003). These two in conjunction with each other cause

humans to grow in knowledge (Huitt & Hummel, 2003). An example of assimilation is learning

to kick. Accommodation comes into play as one uses this concept of kicking to kick a ball instead

of just air. These two work together in a balancing act to get to the ideal state that Piaget calls

equilibrium; this is where both are in balance with each other (Boeree, 2006). Through his

research with children, Piaget found that there were certain ages at which children exhibited more

use of assimilation or more use of accommodation (Boeree, 2006). Also, at these different ages

children had different skills that were dominantly used which he called schema (Boeree, 2006).

Noticing this trend in ages, he came up with the stages or periods of cognitive development

(Boeree, 2006).

The first period is sensorimotor stage, which lasts from birth until age 2 (Phillips, 1969, p.

15). Knowledge is limited to physical interactions, and the knowledge is shown without the use

of symbols (Huitt & Hummel, 2003). Within this stage there are six stages (Phillips, 1969, p. 18).

Birth to one month is the stage of using the knowledge one receives at birth (Phillips, 1969, p. 19).

Primary circular reactions are from one to four months when infants begin to develop patterns

(Phillips, 1969, p. 19). The third stage is from four to eight months when infants develop skills in intention and means-end relations, understanding of the meaning of motor skills, and recognition of object permanence and the construction of space; this is called the secondary circulation reactions stage (Phillips, 1969, p. 20-25). Coordination of secondary schemata is the fourth stage occurring from eight to twelve months when infants develop on intention and means-end relations and object permanence and the construction of space, while learning symbolic meaning, incorporating new objects into existing schemata, and beginning to see the concept of causality (Phillips, 1969, p. 25-30). The fifth stage, happening from twelve to eighteen months, is when infants continue development in the understanding of the previous knowledge and condense it (Phillips, 1969, p. 30-35). The final stage in the sensorimotor period is the invention of new meanings through mental combination lasting from eighteen to twenty-four months involving infants growing on past knowledge and symbolizing it (Phillips, 1969, p. 36-41).

Next begins the concrete operations period. The next two stages in Piaget's theory fall under this; they are the pre-operational stage and concrete operational stage.   During the pre-operational stage from age two to seven, "intelligence is demonstrated through the use of symbols, language use matures, and memory and imagination are developed, but thinking is done in a nonlogical, nonreversable manner" (Huitt & Hummel, 2003). This stage is broken into two sub-stages: changes from sensorimotor and differences from adult. The change from sensorimotor stage occurs when children begin the use of symbols (Phillips, 1969, p. 54-58). The difference in the adult stage is when the child develops concepts of concreteness, irreversibility, states verses transformations, and centering (Phillips, 1969, p. 58-67). Children begin to become egocentric during this stage also (Phillips, 1969, p. 53).   From age seven to age eleven, children move into the concrete operations stage (Phillips, 1969, p. 69). Operations in the stage refer to the logical

standards one uses in problem solving (Boeree, 2006). While moving into this stage of using

logical principles, the child also begins losing the egocentric attitude (Huitt & Hummel, 2003)

The final stage takes place during ages eleven to fifteen, and it is the formal operations

period (Phillips, 1969, p. 91). Only about thirty five percent of people this age and older actually

fully reach this stage (Huitt & Hummel, 2003). Near the beginning of this stage there is a relapse

into the egocentric thought processes (Huitt & Hummel, 2003). For this stage, "intelligence is

demonstrated through the logical use of symbols related to abstract concepts" (Huitt & Hummel,

2003).   The important goal at the formal operations period is to think abstractly and get past

thinking in a concrete fashion (Boeree, 2006).

<div align="center">Developmental</div>

Knowing the developmental stages of children Piaget maps out can be helpful in the field

of education. It is important to note what level students are at when coming up with lesson plans

and materials. This way an educator can be more confident that his or her course work will be

appropriate for the learning capacity of the class. Through learning and understanding the stages

teachers can be prepared for the responses and feedback students may provide according to the

student's stage in development.

In observing a first grade class, one has the opportunity to see children of the ages six to

eight years. This age group falls in the end of the pre-operational stage and the beginning of the

concrete operational stage. During the first hour of observing first graders in the classroom

environment, a female student kept raising her hand to tell the teacher and the class what she had

accomplished so far that day. Every opportunity there was for student interaction, this particular

student would point out how her work was better than the other students' work around her. In

watching this student over a period of time, a trend developed where she would feel the need to

show off her accomplishments. This was a popular trend in most of the other students as well, but

did not occur as often. This egocentric attitude is a primary characteristic of Piaget's pre-operational stage (Phillips, 1969, p. 56).

In this same class, the students do much of their work in learning centers, and the students have the opportunity to be creative in most centers. One center involved choosing a word and covering the letters of the words with different types of beans; the students had a list of words to choose from, and a pale of beans to pick from. Some of the students had no logic behind which beans went where, and other students made sure that appropriate sized beans where used to contour the lines of each letter and colored coded each letter. In the pre-operational stage Piaget notes the children think in a "nonlogical" fashion (Huitt & Hummel, 2003). In the concrete operational period, children begin to put logic into practice when working on problems (Boeree, 2006). This use of reason in the bean placing shows the transition the students are going through at this age from one stage to the next.

Piaget includes assimilation and accommodation as major factors in the development of children (Huitt & Hummel, 2003). The first grade students used this tactic when reading books they found around the classroom. They would sound out the unfamiliar words; the students recalled the letter sounds they knew and used them to fit the new word. Teachers can use the information about assimilation and accommodation to teach concepts to students. A great deal of what students use to understand new concepts involves utilizing their past knowledge; this is the use of assimilation. Using accommodation, students put the new and old information together to solve problems. Piaget's theories shed light on this type of developmental learning.

Children are typically in the concrete operations period when in the elementary level of education. Piaget theorized that during the pre-operational stage "intelligence is demonstrated through the use of symbols, language use matures, and memory and imagination are developed, but thinking is done in a nonlogical, nonreversable manner" (Huitt & Hummel, 2003). During this

stage reading and writing are learned. As children move into the latter elementary grades they move into the concrete operations stage. Operations in the stage refer to the logical standards one uses in problem solving (Boeree, 2006). Teachers typically introduce word problems and more in depth thinking during these grades. At the secondary level children have moved in to formal operations stage. The important goal at this stage is to think abstractly and rise above thinking in a concrete fashion (Boeree, 2006). Educators have the ability to use this information in formatting lessons. Piaget's findings are relevant to today's classroom and can be utilized in understanding the development of children.

Jean Piaget	
ATTRIBUTES	**DESCRIPTIVE DETAILS**
PHYSICAL	As the child progresses through the cognitive stages of development they grow mentally and physically in weight and height. Children constantly interact with the physical world. Primary circular actions learned during the Sensorimotor Period.
VERBAL	Verbal skills materialize during the Preoperational Stage. Fluency and vocabulary develop as a child gets older.
EMOTIONAL	As emotions develop, children tend to attempt to make relationships with peers.
SOCIAL	Humans are born with an innate behavior to interact with others and their environment. Social interaction plays a major role in development. Accommodation and assimilation are key to development.
MENTAL	Children develop through four cognitive stages. Understanding of the meaning of motor skills occurs during the Sensorimotor Period. Logic and capacity to understand grow as a child grows.
MORAL	Through interactions with parents and peers, children develop morals.

Theory of Cognitive Development	
STAGES	**DESCRIPTION**
Stage 1: Sensorimotor Stage	This stage occurs from birth to age two. This period has six stages within it. During this period the child's knowledge is limited to physical interactions, and the knowledge is shown without the use of symbols.
Stage 2: Pre-operational Stage	Occurring from age two to age seven, this stage consists of two sub-stages. Intelligence is demonstrated through the use of symbols and words. During this period language use is established and developed upon.
Stage 3: Concrete Operational Stage	Age seven to age eleven, children move into the concrete operations stage. Operational thinking develops. Operations in the stage refer to the logical standards one uses in problem solving.
Stage 4: Formal Operational Stage	This stage occurs during the ages of eleven to eighteen. Intelligence is demonstrated though abstract thinking. This abstract thinking is relayed through the use and understanding of symbols.

References

Baskovich, B. (n.d.) *J. Piaget's Genetic Epistemology and the Teaching of Elementary Mathematics*. Retrieved September 22, 2008 from http://www.math.ufl.edu/ dept_news_events/long/essays/baskovich.html.

Boeree, C. (2006). Jean Piaget. *Personality Theories*. Retrieved August 27, 2008 from http://webspace.ship.edu/cgboer/piaget.html.

Cavicchi, E. (2006). Faraday and Piaget: Experimenting in Relation with the World. *Perspectives on Science*, *14*(1), 66-96.

Davidson Films Inc. (Producer). (March 21, 2006). *Piaget's Developmental Theory: An Overview* [online video clip]. Video posted to http://video.google.com/videoplay?docid=-9014865592046332725.

Elkind, D. (1976). *Child Development and Education*. New York: Oxford University Press.

Huitt, W., & Hummel, J. (2003). Piaget's theory of cognitive development. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved August 27, 2008 from http://chiron.valdosta.edu.

Inhelder, B. & Piaget, J. (1971). *Mental Imagery in the Child*. New York: Basic Books Inc.

Monastersky, R. (2000, March 24). A New Round of Research Rattles Old Ideas of How Infants Interpret the World. *Chronicle of Higher Education*, *46*(29), A22. Retrieved September 22, 2008, from Academic Search Premier database.

Piaget, J. (1968). Genetic Epistemology [Electronic version]. *Columbia University Press*. Retrieved August 27, 2008 from http://www.marxists.org.

Phillips, J (1969). *The Origins of Intellect: Piaget's Theory*. San Francisco: W.H. Freeman and Company.

Vidal, F. (2003, January). Contextual Biography and the Evolving Systems Approach to

Creativity. *Creativity Research Journal*, 15(1), 73-82.