**Preliminary Research On Perry's Scheme**

By Luis Valencia

*Luis Valencia’s project and the accompanying report were the culmination of the research requirement for PSYCH 2314, Honors Lifespan Growth and Development. The piece published here, an abbreviated version of the project’s first section, gives the rationale and presents sources relevant to the research question. It was followed by a formal statement of the hypothesis to be tested, the methodology that Luis used in data collection, results, conclusions based on the data, and discussion of the results, including issues that arose, comparison with prior research, and suggestions for further research. Luis’ work is outstanding in his thorough analysis of the seminal work by Perry. In addition to an impressive understanding of that work, Luis captured the issue that research exists within a historical context that one must consider in evaluating the meaning and implications of data.*

*---Psychology Professor Janice Hartgrove-Freile*

Psychologists such as Lev Vygotsky and Jean Piaget have shown how humans learn and develop throughout their life span (Berger, 2014). Many cognitive developmental theories, however, seem to put much focus and emphasis on the early years of life, such as childhood, and then decline in the amount of analysis and information given to later life stages such as emerging adulthood and middle adulthood. Around emerging adulthood, when going to college is a valid choice, does any cognitive development happen due to going to college? During the 1950’s and 1960’s, William G. Perry, Jr.( 1999) conducted a longitudinal study through a series of interviews of university students going through four years of education and created Perry's theory of intellectual development of college students. It was called Perry's Scheme-- "a theory specially constructed for understanding the cognitive development of [American] university students" (Zhang, 2002, p. 182). Perry (1999) described his scheme as "chronicl[ing] the course of an aesthetic yearning to apprehend a certain kind of truth: the truth of the limits of man's certainty" (p. 63). I n Perry's Scheme, there are nine positions-- divided into three groups--and the basics of the scheme are that college students start at Dualism, then move onto Relativism, and then achieve Commitment (Perry, 1969, 1999)

The Dualism group involves a narrow way of thinking, Relativism reflects the idea that there is no absolute truth, and Commitment displays that a person sticks to what he or she believe is true, but respects and is open to new ideas. This paper will analyze Perry's Scheme in detail and compare his research to other previous research.

# Background Research: Explanation of Perry's Scheme

During the 1950’s and 1960’s, Perry (1968) wanted to "[understand] intellectual and moral growth in late adolescence in a pluralistic society [by] creating a developmental scheme representing an evolution in forms of thought and values [that] was abstracted from students' report of their experience" (Document Resume section, para. 1 ). This paper will focus on the nine positions that Perry outlines but will omit the alternatives to growth : Temporizing, Retreat, and Escape because I did not have the resources to conduct interviews for my study which followed this paper. Around 1953, Perry (1999) was documenting the experience of undergraduates in Harvard for the Bureau of Study Counsel at Harvard College and found an interesting pattern in the reports (pp. 4-8). Perry and his team realized that college is a changing experience cognitively and with other events that happened like World War II, some people shifted in their thinki ng (pp. 4 & 8). After interviewing the first sample of students and notici ng a pattern among them, the initial study was extended to not only record the experience of college, but to organize this pattern into a scheme and test it (Perry, 1999, p. 11). To see how Perry developed his scheme and to understand it, this study explores the demographics, methodology, results of Perry's Scheme, and the testing of the scheme on other students in Perry's study.

Participants' Demographic Background

# Regarding age and ethnicity, even with Perry's 1968 government report and his 1999 book, nowhere in those sources did he ever speci fy the age or ethnicity of his subjects. Since the study happened during the 1950’s and 1960’s, we can assume that the subjects were mostl y between the ages of 18-19 and were mostly white; outside sources back up this claim.

Around 1967, 80.5% first year students were 18 years old, whi le 13.7% were 19 or older (Pryor, Hurtado, Saenz, Santos, & Korn, 2007, p. 9). In Thomas Brock's 2010 paper, "Before 1965, American colleges and universit ies were rarefied places populated mostly by whi te males from middle- or upper-income fami lies" (p. 1 10-1 1 1 ). This correlates well since only certa i n social classes could afford to go to elite uni versities like Harvard at that time.

Gender and Total Number of Subjects

All subjects were male except for two female four-year college students (Perry, 1999, p. 1 7). His first sample of consisted of 31 students, with 27 from Harvard and four from Radcliffe’s Class of I 958 (Perry, 1999, p. 17). His second sample consisted of 30 (Class of 1962), 79 (Class of 1963), 85 from Harvard, and 24 from Radcliffe (Perry, 1999, p. 17). Although his sample sizes seem small, this was a longitudinal study of four years as the methodology section will explain in greater detail. While Perry lacked sufficient females in this study, he concluded that "actual rati ngs provide no reason to question the judges' statement that they experienced no significant difference in locating men's and women's reports on the Chart of Development" (Perry, 1999, p.17). This is very debatable since he barely had any females in the study, and this could open up any future study to see if women follow Perry's scheme in the same way as men do.

Cohort

Perry (1999) himself realized the cohort limitation in his own description: "the scheme of development presented in [his] book in the accounts of college students of the so­ callcd 'Silent Generation '- undergraduates during the fiflies and early sixties” (p. xliii). Unlike the "Silent Generation," it was a mostly “unsilent” time of “activism, protest, reform, involvement, and confrontation-- both peaceful and violent" (Perry, 1999, p. xliii). World War II had just ended and other wars had started to draw the public's attention . In the current year, we l ive in the fear of terrorism ever since the attacks of September 9, 2001. The Uni ted States may be in a somewhat peaceful state right now, but we are experienci ng something differcnt than what Perry's subjects did during the 1950’s and 1960’s. This is very different from the study I conducted myself, which involved late millennials and other generations which are part of the diverse population of community colleges today.

Perry’s Methodology

Perry (1999) created his scheme based on the personal and open interviews he conducted with the students throughout their four years of college at Harvard or Radcliffe. Before he noticed the pattern of development in the students' interviews, "the invitations to the First Sample of volunteers were sent out on the basis of their scores on the Checklist of Educational Views" (Perry, 1999, p. 18). After seeing that pattern in the first sample and expanding his research, the "invitations for the Second Sample were sent out randomly, [ignoring their CLEV scores]" (Perry, 1999, pp. 18-19). The two samples "resulted in 464 interviews and 84 complete four-year sequences" (Perry, 1999, p. 18).

# His Results

After gathering the data from the longitudinal study and interviews, the nine positions of his scheme were created: Position 1 Basic Duality, Positon 2 Multiplicity Pre­legiti mate, Position 3 Multipl icity Subord inate, Posit ion 4 Multi pl icity Correlate or Relativism Subord inate, Position 5 Relati vism (Correlate, Competing, or Diffuse), Positon 6 Commitment Foreseen, Posit ion 7 Initial Commitment, Positon 8 Orientation in Implications of Commitment, and Positon 9 Developing Commitment(s) (Perry, 1999). These nine position are broken down into three groups: Positons 1-3 are Dualism, Positions 4-6 are Relativism, and Positions 7-9 are Commitments (Perry, 1999). So where do students start or end in Perry's Scheme? Basicall y, first year students start in Dual ism, and as they go through their college career, they move onto the Relati vism and then finally Commitment positions (Perry, 1999).

Testing His Scheme with Other Subjects

# Perry ( 1999) decided to test his theory with random students and judges in the fall of 1963 (p. 13). His 1968 government report dedicated Chapter I to this small test to see if his theory held. This paper will not go into great detail in analyzing aspects like estimated reliability on the judge' s score but will instead focus on the demographics of the subjects, methodology, and results.

Demographics of Participants

He used a total of twenty students (Perry, 1968, p. 66). Of those, ten of the students were randomly chosen from the sample of class of 1958, and ten from the sample of class of 1962 and 1963 (Perry, 1968, p. 66). Five came from the 1962 class and the other five from the 1963 class. As stated before, nowhere does the paper state the ethnicity, age, and even gender of the students. However, from previous sources we can assume that the participants were all whi te, between the ages of 18 and 19, and all male.

Methodology

Perry (1968) "enlisted ... five graduate students and one housewife [as judges]" (p. 55). Of the five assumed male judges, "four of the graduate students were in the field of English, and one in the field of comparative literature" (Perry, 1968, p. 55). The

housewife "had a [major] i n Philosophy. None had any extensive formal training in Psychology" (Perry, 1968, p. 55). These judges were given information about the study, a manual on how to rate the students in positions, and were asked to rate based on unedited transcripts of a four-year sequence of the interviews with the twenty students (Perry, 1999, p. 13).

Results

# On page 74 of Perry's 1968 paper, Table 6 shows the Average Judged Position for each class-- 1958, 1962, and 1963. For the class of 1958, freshmen averaged a position of 3.31 , sophomores averaged 3.68, juniors averaged 5.65, and seniors averaged 6.59 (Perry, 1968, p. 74). For the class of 1962, freshmen averaged a position of 4.16, sophomores averaged 5.13, juniors averaged 6.23, and seniors averaged 7.03 (Perry, 1968, p. 74). For the class of 1963, freshmen averaged a position of 5.13, sophomores averaged 5.83, juniors averaged 6.56, and seniors averaged 7.70 (Perry, 1968, p. 74). As with Perry's original study, students that had just started college advanced in Perry's Scheme over time. Sometimes the students’ starting position was a little bit higher than what is normally found, but they still followed the pattern of escalating to a higher position each year.

Perry’s Conclusion

Perry was able to find a cognitive progressive growth in emerging adults that many psychologists did not bother finding—they apparently assumed that further growth could not happen i n adults. The amount of time it took to interview students, compile the data, find patterns within the interviews to draw conclusions, and then finally describe the nine positions now called Perry's Scheme is extraordinary. Just reading each position explains a lot about why certain students, unlike others, are so stubborn to change or so open to new ideas. Although Perry had a very small number of students to test his theory with the six judges, the results show that the theory has ground and that students do move to higher positions as they advance through the years of higher education. Perry, however, did not take into account other factors like different age groups or ethnicity in his study. Future research has, however, filled this gap and shows that Perry's Scheme is still valid and useful.

What Other Research Found with Perry's Scheme

Perry (1999) knew that although he created the scheme "the times have changed" (p.

xi i ii). Humans develop over time as seen with civil rights movements of and the acceptance of homosexual ity in the United States. Perry understood that his theory may not even work in the future due to how much change in terms of culture has happened. What he hoped for is that "the general pattern of personal development at the level of forms may be more enduring, manifesting itself through many generations of particulars" (Perry, 1999, p. xliii ). He should be proud that his positions still hold, but other factors like ethnicity and age do not. These other studies showed what Perry was not able to test.

Perry's Scheme in Organic Chemistry

Perry did not focus much on what classes the students were taking, but Nathaniel P. Grove and Stacey Lowery Bretz did in their study. They focused on the class in organic chemistry and in their results observed the positions of the successful and struggling students. With eighteen participants, two semesters of organic chemistry, reflective essays, and interviews, the researchers concluded that if students were dualistic thinkers, they were the ones to have a harder time with the class (Grove & Bretz, 2010). This study not only shows that dualistic thinkers do not move forward well in education, but that higher levels of science require higher levels of thinking and positioning i n Perry's Scheme. Knowing this, professors could tune their classes to encourage students who are still dualistic thinkers to move to a higher position in Perry's Scheme in order to improve the likelihood of success.

Perry’s Scheme Comparing Different Cultures

Li-Fang Zhang and David Watkins found a very interesting cultural difference that not even Perry himself might have ever considered. 67 U.S and 193 Chinese were involved, and the Zhang Cognitive Developmental Inventory and Study Process Questionnaire were used to test for position in Perry's Scheme (Zhang & Watk ins, 2001 ). The main result was that the Chinese students demonstrated reverse order in Perry's Scheme while the American students developed as Perry described (Zhang & Watkins, 2001). The Chinese students showed that as they started

college, they went from Commitment to Dualism positions. The paper explained that the Chinese people had their choices made for them and it was not until later in life and in their higher education that the Chinese could make their own choices (Zhang & Watkins, 2001). On the other hand, the United States is an individualistic culture and that helps to explain the Perry 's Scheme progression.

**Conclusion**

While Perry's study created the Scheme of nine positions, many other studies showed how other factors can contribute to the occurrence of the different positions. Knowing these factors can help structure classes to allow cognitive growth. In this paper, the main objective is to explore Perry's Scheme, but a future study could explore whether community college students experience the same sequence as Perry observed in four-year university students.

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