

ROLE OF CRITICAL THINKING IN EGO IDENTITY STATUSES AMONG ADOLESCENTS OF CUTTACK DISTRICT IN ODISHA

Dr. Raj Kumar Nayak
Associate Professor

Fakir Mohan University, Vyasa Vihar, Balasore

Former Professor, BMCE, Choudhary Ranbir Singh University, Jind, Haryana

Visiting Expert N.C.T.E. (NRC) Inspection Team,

Life Time Member of AIAER, The Global community, IATE

Editor of "Global Evolution Bi-Annual" (Management & Teacher Education) Research Journal

Editor Of "Pahal Horizon" Bi Annual Journal, ISSN :2456-4842, International Research Journal

Ms. Tanushree Rath
(M.A. Education, B.Ed.)

Lecturer

B.J.B. Autonomous College, Bhubaneswar

ABSTRACT

The study aimed at examining the role of critical thinking in ego identity statuses (identity achievement, identity moratorium, identity foreclosure and identity diffusion) among adolescents. Three hypotheses were formulated for empirical verification. These are: Identity achieved adolescents would be high on critical thinking as compared to diffusions, foreclosures and moratoriums; Moratorium adolescents would be high on critical thinking as compared to diffusions and foreclosures; Foreclosure adolescents would be high on critical thinking as compared to diffusions. The study was conducted on 100 adolescents (their age ranges between 17-21). The research methods include Extended Objective Measure of Ego-Identity Status - R (Bennion & Adams, 1986) and Watson-Glaser Critical thinking Appraisal - R (Watson & Glaser, 1994). Data were analyzed using one way analysis of variance. The result findings showed that foreclosures were found to be high on critical thinking as compared to diffusions.

INTRODUCTION

Adolescence is the stage of development between childhood and adulthood where change occurs slowly and uncertainly, and the duration of this stage is not the same for every individual (Fitzgerald, 2005; Rice & Dolgin, 2005; Singleton, 2007). It is a period of physical, psychological, cognitive and social transformation (Dacey & Margolis, 2006; Scanlon, 2006; Singleton, 2007). Adolescents change more profoundly in the way they think about themselves and their world. According to Dacey & Margolis (2006) abstract thinking influences their observations, perceptions and relation towards the environment. During the period of adolescence formation of a coherent sense of self or identity is a fundamental psychosocial task for young people. Erikson has given eight psychosocial stages of development in which all human beings progress in sequential order throughout their lifespan. These stages include: Trust vs. Mistrust, Autonomy vs. Shame and Doubt, Initiative vs. Guilt, Industry vs. Inferiority, Identity vs. Identity Confusion, Intimacy vs. Isolation, Generativity vs. Stagnation, and Integrity vs. Despair. Each stage occurs during a different period of life and may involve a crisis that must be resolved by the individual for healthy development.

However, fifth psychosocial stage suggested by Erikson (1950, 1968) i.e. Identity vs. Identity Confusion, takes place throughout the adolescent period. Erikson (1968) recommended that the central challenge during this stage (identity versus role confusion) is for the adolescents to come into terms with who he or she is and where one is going in life and to achieve ego identity (Donald, Lazarus & Lolwana, 2002; Mdikana et al., 2008). Ego identity is defined as an acceptance of self, a sense of where one is going in life, and an ability to make decisions (de Man et. al., 2008). Adolescents who have achieved ego identity usually have high level of self-esteem and are likely to be more decisive, self-directed, and good at problem solving and are better able to cope with changing environmental demands (de Man, et. al., 2008).

Marcia's (1966, 1967) identity status model provides the most comprehensive model of Erikson's (1950; 1968) views on identity formation. According to him, identity refers to a sense, an attitude, a self-made vibrant organization of an individual's beliefs, values and goals, history, drives and abilities. Marcia developed her identity status model from Erik Erikson's (1950) fifth stage of psychosocial development, *Identity vs. Identity Diffusion*. Based on the dimensions of Exploration and Commitment, Marcia developed four identity statuses, identity Achievement, identity Moratorium, identity Diffusion.

Identity Achievement

Identity-achieved individual has experienced a crisis period and is committed to an occupation and ideology (Marcia, 1966). He has considered numerous occupational choices and has made a commitment. He has successfully resolved the psychosocial crisis of Identity vs. Identity confusion. These individuals are characterized as settled, are able to articulate their choices and the reasoning behind choices, and these individuals have a tendency to do well under stress, have an internalized locus of control, resist manipulation of self-esteem, and make decisions based on internalized, self-constructed values.

Identity Moratorium

Identity moratorium is characterized by active exploration of different alternatives without strong current commitments by the adolescents. According to Luyckx *et al.* (2005) these individuals score high on openness to new experiences, but low on conscientiousness which suggests that some of the steps of a career decision-making process like self-exploration, exploration of the environment are thoroughly observed by them, but they are less likely to reach at the final stage which is termed as commitment. According to Berzonsky and Kuk (2000), the more the level of self exploration that any individual has engaged in, the more prepared they are to accept tasks in a self - directed manner. They do not feel the urge to look towards others for any reassurance and emotional support.

Identity Foreclosure

Foreclosure is identified by strong commitments without exploring other possible alternatives. The goals or wishes of their parents become their goals and they are not able to distinguish it from their goal or wishes (Marcia, 1966). Thus, Foreclosure may be termed as certain degree of closed mindedness, misconception about self satisfaction and rigidity (Marcia, 1980). High levels of conformity, authoritarianism and aspiration change, coupled with low anxiety and use

of defensive narcissism become the main personality traits of foreclosed individuals (Cramer, 1995; Marcia, 1966, 1967). They close themselves to new experiences and generally use external locus of control (Clancy & Dollinger, 1993).

Identity Diffusion

It refers to the situation where adolescents do not actively explore different identity alternatives and lack strong identity commitments, genuine concern about identity issues (Holcomb-McCoy, 2005). These adolescents also run the risk of accepting and internalizing negative and faulty stereotypes beliefs. According to Luyckx *et al.* (2005) adolescents during this status show a considerable decrease in openness, and thus are less likely to explore any career options. They are also low on conscientiousness which leads to decrease in motivation in goal oriented behavior. It is therefore logical to assume that such diffused individuals are less likely to go through the career decision-making process as they would not explore any alternatives and are not motivated to commit to a career thus resulting in problematic social behavior, abuse substances and may turn delinquents as they are more likely to go against social norms relating to acceptable behavior.

The development of an individual's ego identity status is greatly affected by cognitive abilities. Some researchers (Adams, 1977; Boyes & Chandler, 1992; Krettenauer, 2005) have argued that a successful resolution of the identity crises is not possible without more sophisticated cognitive processing styles. Inhelder and Piaget (1958) noted that adolescence is the stage when formal operational thought, including the abilities for systematic logical analysis and critical thinking, are acquired. Critical thinking is one of the important components of cognitive development. The development of critical thinking skills is another dimension of cognition that is highly important in understanding the adolescent's decision-making and subsequent behaviour.

Critical thinking is defined as the intellectually disciplined process of gathering or generating information by observation, experience, reflection, reasoning, or communication. In Tempelaar's (2006) view critical thinking is a kind of metacognition, which was defined and originally purposed by Flavell (1979) as the process of "thinking about thinking". Critical thinking skill is pertinent for adolescent's as it enables them to deal with social, scientific, and practical problems in their life effectively (Shakirova, 2007). According to Erikson (1968) and others (e.g., Inhelder and Piaget, 1958; Marcia, 1980) cognitive growth play vital role in fostering identity formation.

A special capability of exploration and experimentation is necessary for healthy identity development and only those individual, who advance sufficiently during the formal operation period achieve the correlate skills of hypothetical reasoning, systematic introspection, and logical future-oriented planning which forms the foundation of identity formation. Formal operational competence also goes along with critical thinking beliefs. Although formal operations may become the basis of the development of critical beliefs, the two are not synonymous (Klaczynski & Gordon, 1996b). Formal operational competence may be viewed as the cornerstone of good critical thinking as the value adolescents allot to critical thinking skills may well determine how their underlying competencies are utilized in day to day situations. As a result, there is expectation of positive correlation between formal operational skills and critical thinking values. So this points to assume that there is a relation between identity statuses and critical thinking dispositions.

STATEMENT OF THE PROBLEM

ROLE OF CRITICAL THINKING IN EGO IDENTITY STATUSES AMONG ADOLESCENTS OF CUTTACK DISTRICT IN ODISHA

OBJECTIVE

To study the effect of critical thinking on ego identity statuses of adolescents.

HYPOTHESES

- 1) Identity achieved adolescents would be high on critical thinking as compared to diffusions, foreclosures and moratoriums.
- 2) Moratorium adolescents would be high on critical thinking as compared to diffusions and foreclosures.
- 3) Foreclosure adolescents would be high on critical thinking as compared to diffusions.

METHOD: Descriptive Survey method was used for the study

SAMPLE: The sample for the present study was comprised of 100 adolescents (age 17-21) randomly selected from different educational institutes of Cuttack district of Odisha.

MEASURES USED

- 1) Extended Objective Measure of Ego-Identity Status - R (Bennion & Adams, 1986): EOMEIS-2 comprises of 64 items, 32 of which measures Ideological Identity in the areas of occupation, politics, religion and personal life style values while, the other 32 items measures the Interpersonal Identity in the areas of sex-role, friendship, dating and recreational choices.
- 2) Watson-Glaser Critical thinking Appraisal - R (Watson & Glaser, 1994): The Watson-Glaser consists of 80 items with a set of five tests which are Inference, Recognition of Assumptions, Deduction, Interpretation, and Evaluation of Arguments. There are two types of item content: neutral and controversial and each test is composed of reading passages.

PROCEDURE:

To achieve the aim of the present study 100 students (17-21 years) were selected from various educational institutions of Cuttack district of Odisha. Before administration of the test a rapport was built with the students and they were assured that the information provided by them would be kept confidential. To obtain the data, two questionnaire i.e. Extended Objective Measure of Ego-Identity Status - 2 (EOMEIS-2), Watson-Glaser Critical thinking Appraisal - R were administered on them.

RESULTS AND DISCUSSION

The present study aimed at analyzing the level of significance of difference between mean scores of four groups of subjects with different identity statuses namely; identity achievement, identity moratorium, identity foreclosure and identity diffusion for critical thinking scores. The four groups were formed on the basis of their high scores on ego identity statuses of achievement, moratorium, foreclosure and diffusion. The criterion used for identifying a particular

high ego identity status was $M + \% SD$. One way analysis of variance was applied to the scores of critical thinking.

Table 1: Table 1 shows the mean, SD, and F-ratio of identity achievement with identity diffusion, identity foreclosure and identity moratorium.

	MEAN	SD	F-RATIO
Identity diffusion	46.85	6.01	1.053
Identity achievement	48.44	5.98	
Identity foreclosure	50.20	6.67	1.209
Identity achievement	48.44	5.98	
Identity moratorium	49.24	6.15	0.256
Identity achievement	48.44	5.98	

Table 1 shows the mean, sd and F-ratio of identity achievement with identity diffusion, identity foreclosure and identity moratorium. As shown in table 1 the mean score of identity diffusion and identity achievement is 46.85 and 48.44 respectively and the value of obtained F-ratio is 1.053. which is not significant either at .01 or .05 level which indicates that there is no observable difference in the critical thinking of present sample. Mean score of identity foreclosure and identity achievement is 50.20 and 48.44 respectively and their F-ratio comes out to be 1.209. Again, the mean score of identity moratorium and identity achievement is 49.24 and 48.44 and obtained F-ratio is 0.256. F-ratio's are not significant either at .01 or .05 level which indicates that there is no observable difference in the critical thinking of present sample. Therefore, these results doesn't confirm the first hypothesis which states that 'Identity achieved adolescents would be high on critical thinking as compared to diffusions, foreclosures and moratoriums.'

Table 2: Table 2 shows the mean, sd and F-ration of identity moratorium with identity diffusion and identity foreclosure

	Mean	SD	F-Ratio
Identity Diffusion	46.85	6.01	2.560
Identity Moratorium	49.24	6.15	
Identity Foreclosure	50.20	6.67	0.400
Identity moratorium	49.24	6.15	

Table 2 shows the mean, sd and F-ratio of identity moratorium with identity diffusion and identity foreclosure. The mean score of identity diffusion and identity moratorium is 46.85 and 49.24 respectively and their obtained value of F-ratio is 2.560. Similarly, the mean score of identity foreclosure and identity moratorium is 50.20 and 49.24 respectively and F-ratio comes out to be 0.400. Again, F-ratio is not significant at both the levels which implies that there is no observable differences in critical thinking of identity moratoriums, identity foreclosure and identity diffusions in present study. Therefore, these results don't confirm the second hypothesis which states that 'Moratorium adolescents would be high on critical thinking as compared to diffusions and foreclosures.'

Table 3: Table 3 shows the mean, sd and F-ratio of identity diffusion with identity foreclosure

	Mean	SD	F-Ratio
Identity Diffusion	46.85	6.01	4.956*
Identity Foreclosure	50.20	6.67	

Table 3 shows the mean, sd and F-ratio of identity diffusion with identity foreclosure. The mean score of identity diffusion and identity foreclosure come out to be 46.85 and 50.20 respectively and their F-ratio is 4.956 which is significant at .05 level which indicates that subjects from diffusion ego identity status had lower critical thinking than subjects from foreclosure ego identity status. Results provide clear support to the third hypothesis that 'Foreclosure adolescents would be high on critical thinking as compared to diffusions'.

Following the theoretical basis of the constructs of identity formation as well as critical thinking it was conjectured that there must exist differences in critical thinking at different levels of identity diffusion, identity foreclosure, identity moratorium and identity achievement. However, empirical testing of the contention the basis of data obtained from 100 subjects did not support the first and second hypothesis but it support our third hypothesis.

DISCUSSION

The main objective of the present study was to study the role of critical thinking in ego identity statuses among adolescents. One way analysis of variance was applied. Four different groups of subjects were formed on the basis of their scores on ego identity statuses, to see whether there is any difference in critical thinking of adolescents exhibiting different ego identity statuses namely identity achievement, identity moratorium, identity foreclosure and identity diffusion.

Following the objective of this study hypothesis concerning ego identity statuses and critical thinking in adolescents were formulated. The results of this study showed that the first hypothesis which states that 'Identity achieved adolescents would be high on critical thinking as compared to diffusions, foreclosures and moratoriums' has not been confirmed. This implies that these three groups does not differ in terms of critical thinking vis-a-vis it can be stated that critical thinking does not play significant role in forming these different identity statuses. The hypothesis was formulated following the theoretical nature of these constructs as put forth by Marcia (1966). However, this has not been confirmed in the present study which might be due to some cultural differences in upbringing of adolescents. In some cultures individuals exhibiting these identity statuses perhaps get different opportunities to explore alternatives and might indulge in critical thinking more often and this could be one of the reason that present study doesn't show differences in critical thinking of individuals, or this could be due to the small size. Past researches demonstrated that individuals who are able to think abstractly, critically and reason logically they have an easier time to explore and contemplate possible identities which leads to identity achievement phase (Marcia et al., 1993; Josselson, 1994; Berk, 2006), though results of the present study are not in line with these observations.

The second hypothesis postulates that 'Moratorium adolescents would be high on critical thinking as compared to diffusions and foreclosures' has also not been confirmed. The analysis of results again imply that adolescents with moratorium ego identity status will not have high level of critical thinking as compared to diffusion ego identity status and foreclosed identity status as was previously assumed. These results indicates that there is No difference in the

critical thinking of moratoriums, diffusions and foreclosures, again might be due to the sample size used in the present study, or this might be the result of individuals surroundings in which they are living, their families morals and values play a major role in developing their thought process, because of which individuals might have developed the critical thinking abilities which remains same for them at these levels of ego identity statuses, which is not in affirmation with the previous researches which depicted a significant association between critical thinking and moratorium identity status along with high levels of internalized prosocial values and behaviors and open-mindedness among young people as moratoriums explore different alternatives in which they critically evaluate alternatives before making any commitment, and for this they use critical thinking abilities while diffusions lack these abilities of critical thinking as they never explore different alternatives nor they commit themselves to any vocation (Schwartz, 2005, 2011). Again, the hypothesis postulating that moratorium adolescents would be high on critical thinking as compared to foreclosures has not been confirmed. However, if we assume that lowest level thinking is associated with the foreclosed identity status, individuals, in whom the process of exploration is not present, it also reveal the lowest level of critical thinking which is consistent with the research conducted by Grotevant (1987). Similarly, there are persons with foreclosed identity status who are characterized by critical thinking than those with moratorium identity status- an unexpected result revealed in analysis.

The third hypothesis, postulating 'Foreclosure adolescents would be high on critical thinking as compared to diffusions' has been confirmed. Diffusions are not active in their thought processes but despite of high level of conformity towards their elders foreclosures might think critically regarding their vocation in some of the cultures. Critical thinkers according to Bailin et al. (1999) and Facione (1990) have respect for, and are willing to entertain, others' viewpoints (and are indulge themselves in disciplined, self-directed thinking (Paul, 1992) same as the foreclosure individuals. Therefore, these results clearly indicate that as compared to diffusions, critical thinkers and foreclosures have some common characteristics.

Conclusion

As the theoretical constructs showed that there exists some relationship between these constructs, but in the present study with significant result, there is some insignificant results which indicates that there is a need to study critical thinking with these identity statuses at much broader level because critical thinking is the most important cognitive skill which facilitates adolescent's ego identity formation. In today's world it is becoming indispensable to inculcate these critical thinking skills in one's personality as these skills provide individuals with their successful identity formation. In every life decision critical thinking plays a very important role, as it is after only critically evaluating the things individuals come to some kind of conclusions.

REFERENCES FOR FURTHER STUDIES

- 1) Adams, G.R. (1977). Personal identity formation: A synthesis of cognitive and ego psychology. *Adolescence*, 12, 151-164.
- 2) Bailin, S., Case, R., Coombs, J.R., & Daniels, L.B. (1999). Conceptualizing critical thinking. *Journal of*

Curriculum Studies, 31 (3), 285-302.

- 3) Bennion, L.D., & Adams, G.R. (1986). A revision of the extended version of the objective measure of ego identity status: An identity instrument for use with late adolescents. *Journal of Adolescent Research*, 1, 183-198.
- 4) Berk, L. E. (2006). *Child Development*. 7th Edition. Allyn and Bacon, Boston, USA. Berzonsky, M.D., & Kuk, L.S. (2000). Identity status, identity processing style, and the transition to university. *Journal of Adolescent Research*, 15, 81-98.
- 5) Boyes, M.C., & Chandler, M. (1992). Cognitive development, epistemic doubt, and identity formation in adolescence. *Journal of Youth and Adolescence*, 21, 277-304.
- 6) Clancy, S.M., & Dollinger, S.J. (1993). Identity, self, and personality: Identity status and the five-factor model of personality. *Journal of Research on adolescence*, 3, 227-245. Cramer, P. (1995). Identity, narcissism, and defense mechanisms in late adolescence. *Journal of Research in Personality*, 29, 341-361.
- 7) Dacey, J. & Margolis, D. 2006. Psychosocial development: adolescence and sexuality. In: Thies, K.M. & Travers, J.F. (Eds). *Handbook of human development for health care professionals*. Sudbury: Jones and Bartlett Publishers.
- 8) De man, A.F., Harvey, S., Ward, S. & Benoit, A. (2008). Ego-Identity, Self-Esteem, and Psychological Stress in Adolescents who Attend School and Work Part-time. *Individual Differences Research*, 6(4), 245-252.
- 9) Donald, D., Lazarus, S., & Lolwana, P. (2002). *Educational Psychology in Social Context*. (3rd Ed). Oxford: South Africa.
- 10) Erikson, E.H. (1950). *Childhood and society*. New York: Norton.
- 11) Erikson, E.H. (1968). *Identity: Youth and crisis*. New York: W.W. Norton.
- 12) Facione, P.A. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*. Millbrae, CA: The California Academic Press. Fitzgerald, B. 2005. An existential view of adolescent development. *Adolescence*, 40(160), 793-799.
- 13) Flavell, J.H. (1979). Metacognition and cognitive monitoring: A new area of cognitive- development inquiry. *American Psychologist*, 34, 906-911.
- 14) Grotevant, H.D. (1987). Toward a process model of identity formation. *Journal of Adolescent Research*, 2, 203-222.
- 15) Holcomb-McCoy, C. (2005). Ethnic Identity Development in Early Adolescence: Implications and Recommendations for Middle School Counsellors. *Asca Professional School Counselling*, 120-127.
- 16) Inhelder, B., & Piaget, J. (1958). *The growth of logical thinking: From childhood to adolescence*. New York, NY: Basic Books.
- 17) Josselson, R. (1994). The theory of identity development and the question of intervention: An introduction. In S. L. Archer (Ed.), *Interventions for adolescent identity development* (pp. 12-25). Thousand Oaks, CA: Sage.
- 18) Klaczynski, P.A., and Gordon, D.H. (1996 b). Everyday statistical reasoning during adolescence and young adulthood: Motivational, general ability, and developmental influences. *Child Development*. 67, 2873-2891.
- 19) Krettenauer, T. (2005). The role of epistemic cognition in adolescent identity formation: Further evidence. *Journal of Youth and Adolescence*, 34, 185-198.
- 20) Luyckx, K., Goossens, L., Soenens, B., Breyers, W. & Vansteenkiste, M. (2005). Identity Statuses Based on 4

- Rather Than 2 Identity Dimensions: Extended and Refining Marcia's Paradigm. *Journal of Youth and Adolescence*, 34 (6), 605-618.
- 21) Marcia, J.E. (1966). Development and validation of ego identity status. *Journal of Personality and Social Psychology*, 3, 551-558.
- 22) Marcia, J.E. (1967). Ego identity status: relationship to change in self-esteem, "general maladjustment," and authoritarianism. *Journal of Personality*, 35, 118—133.
- 23) Marcia, J.E. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of Adolescent Psychology* (pp. 159-187). New York: Wiley.
- 24) Marcia, J.E., Waterman, A.S., Matteson, D.R., Archer, S.L., & Orlofsky, J.L. (Eds.). (1993a). *Ego identity: A handbook for psychosocial research*. New York: Springer Verlag.
- Mdikana, A.A., Seabi, J., Ntshangase, S., & Sandlane, N. (2008). Career Identity related Decision Making among IsiXhosa-Speaking adolescents. *Journal of Psychology in Africa*. 18(4), 615-620.
- 25) Paul, R.W. (1992). Critical thinking: What, why, and how? *New Directions for Community Colleges*, 1992 (77), 3-24.
- 26) Rice, F.P., & Dolgin, K.G. (2005). *The adolescent: development, relationships, and culture*, 11th edition. Boston: Pearson Education.
- 27) Scanlon, D. 2006. Learning disabilities and attention deficits. In: Thies, K.M. & Travers, J.F. (Eds). *Handbook of human development for health care professionals*. Sudbury: Jones and Bartlett Publishers.
- 28) Schwartz, S.J. (2005). A new identity for identity research: Recommendations for expanding and refocusing the identity literature. *Journal of Adolescent Research*, 20, 293-308.
- 29) Schwartz, S.J., Beyers, W., Luyckx, K., Soenens, B., Zamboanga, B.L., Forthun, L.F., et al. (2011). Examining the light and dark sides of emerging adults' identity: A study of identity status differences in positive and negative psychosocial functioning. *Journal of Youth and Adolescence*, 40, 839-859.
- 30) Shakirova, D.M. (2007). Technology for the shaping of college students' and upper-grade students' critical thinking. *Russian Education & Society*, 49 (9), 42-52.
- 31) Singleton, L. 2007. Developmental differences and their clinical impact in adolescents. *British Journal of Nursing*, 16(3), 140-143.
- 32) Tempelaar, D.T. (2006). The role of metacognition in business education. *Industry and Higher Education*, 20 (5), 291-297.
- 33) Watson, G., & Glaser, E.M. (1994). *Watson-Glaser Critical Thinking Appraisal, Form S manual*. San Antonio, TX: The Psychological Corporation.