

A Cognitive-Affective Perspective on Ego Identity Construction

INDERPREET SANDHU

Assistant Professor

Department of Psychology, Punjabi University, Patiala (Punjab) India

ABSTRACT

During the age of adolescence, he/she is confronted for the first time with the overwhelming complexities and abstract qualities of the world, as they develop complex cognitive skills. The primary task of the adolescents is to develop a stable sense of identity and have a purpose in life and, for this they require adequate cognitive repertoire. There are qualitative changes in the nature of mental ability, rather than any simple increase in cognitive skills around puberty, and it is at this point in development that formal operational thought becomes possible. This newly acquired ability to use the hypothetical reasoning allows them to create an ideal representation of the physical reality. They can perceive relationships among abstract concepts and conceptualize problems involving transitivity. Also, emotions and identity are closely related in many ways. As the adolescents start to explore life alternatives, they experience a gamut of emotions which can be both facilitative and debilitating. Thus, to understand the relationship between identity with cognitive styles (domain of field dependence/ independence) and emotions (positive and negative affect) is explored in the current study and a sample of 500 adolescents from Punjab, India state was taken.

Key Words : Identity status, Cognitive styles, Affect states, Adolescents

INTRODUCTION

As individual's cognitive capacity seems to be a necessary precondition for resolution of identity crises, so in order to evaluate alternatives and ideological assumptions, the adolescents should be able to think in terms of possibility, reason hypothetically and construct systems and theories which are logically coherent and consistent (Wagner, 1987). Erikson (1968) also noted that formal operations provide adolescents with the cognitive tools to develop a sense of identity as they have to make a series of ever narrowing selection of personal, occupational, sexual and ideological commitments. The primary requisite at the stage of adolescence is the development of positive ego identity development which is consistent and there is meaningful recognition of accomplishments. Erik Erikson (1968) gave a new direction to the study of adolescent ego development and described development as a series of nuclear crises that needed to be resolved, to build a foundation for the next growth period. There is a higher chance of positive outcome of the crisis if the previous crises have been resolved satisfactorily, and if the environment provides positive models of successful

outcome and support for making one's own choices.

When a relatively firm sense of ego identity is developed, behaviour and character become stabilized, and the community-sanctioned roles are acquired (Côté and Levine, 1987). Adams and Marshall (1996) proposed that the need for both a sense of individuation and connection, of interpersonal differentiation and integration must be balanced in healthy identity development. According to Adams (1998), identity serves a functional purpose, by providing structure for understanding who one is and also provides meaning and direction through commitments, values and goals. It enables the recognition of potential through a sense of future, possibilities, and alternative choices. Like cognitive, the affective domain too represents an organizing construct for diverse processes to shape responses to given events. These play a vital role in ordering human experience. In the affective domain, different emotions undergo various changes throughout different stages of development, both in terms of emotions themselves and in their patterns of expression. The process of individuation and identity exploration requires adolescents to become emotionally independent of parents. Increased autonomy occurs in the context of shifting priorities from parent-centred interactions to peer relationships. A feeling of anxiety is an important outcome of emotional reactions to stimuli, it is one of the most prevalent psychosocial problems among youth. On the positive side, anxiety stimulates individuals to explore and re-examine their identity commitments in order to avoid foreclosed commitments (Erikson, 1950).

Marcia (1966) has conceptualized four types of identity statuses. He postulates that these statuses represent "concentration points along a continuum of ego identity achievement". This continuum ranges from being in identity "diffusion" to "achievement" ego identity. These dimensions involve the presence or absence of a crisis period and the presence or absence of a clearly defined and stable commitment to values, beliefs, and standards. Marcia delineates the process of identity development in terms of four different identity statuses: *diffusion*, *foreclosure*, *moratorium*, and *achievement*. These statuses are defined in terms of two dimensions, namely *crisis* and *commitment*. 'Crisis' refers to a period of struggle or active questioning in arriving at such aspects of personal identity as vocational choice and an ideological belief, *i.e.*, an adolescent has to choose among meaningful alternatives. 'Commitment' is the part of the identity development in which adolescents show a personal investment in what they are going to do. It involves making a firm, unwavering decision and engaging in appropriate implementing activities.

Identity Diffusion:

This is the least developmentally advanced identity status. Commitment to an internally consistent set of values and goals is absent, and exploration is either missing or shallow. They may never have been in crisis, or they may have had a period of questioning and have been unable to resolve it, subsequently emerging without having made a decision. Empirical studies have evidenced poor self-esteem and low level of autonomy in diffusions (Marcia *et al.*, 1993). They function at pre-conventional or conventional levels of moral reasoning and use less complex cognitive styles than moratoriums and achievements (Podd, 1972; Hult, 1979; Slugoski, Marcia and Koopman, 1984; Skoe and Marcia, 1991).

Identity Foreclosure:

This status represents a high level of commitment following little or no exploration. People who follow the foreclosure pattern adopt a single set of values and goals without a period of questioning or exploration. The commitments that foreclosures have made generally reflect the

wishes of their parents or other authority figures. Jordan (1970, 1971). The lack of support for separation from parents may foster dependent rather than independent security in adolescent-parent relationships, and may circumvent adolescents' exploration of identity alternatives, which seems to be critical element of identity formation process (Marcia, 1980). Foreclosures also use less complex cognitive styles and function at pre-conventional or conventional stages in their levels of moral judgment (Hult, 1979; Rowe and Marcia, 1980; Slugoski, Marcia and Koopman, 1984; Skoe and Marcia, 1991).

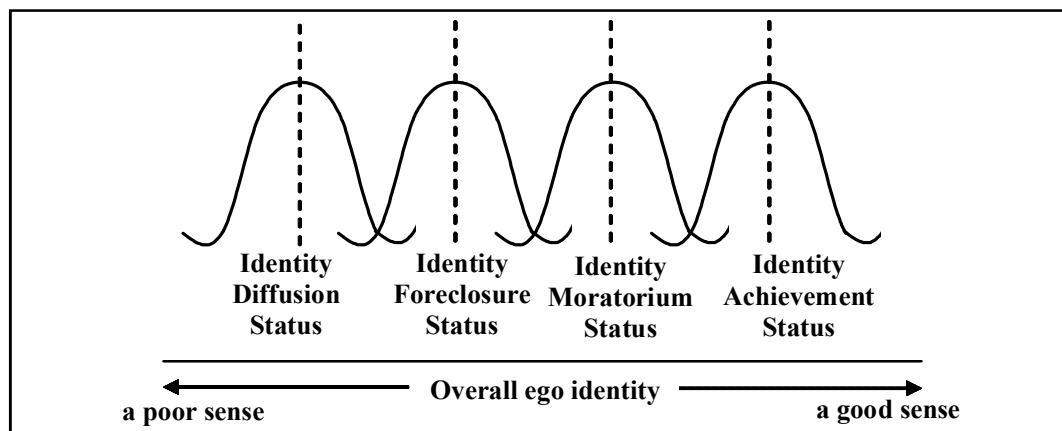
Moratorium:

The term moratorium is used to refer to a person who is currently in a state of crisis and is actively seeking different alternatives in an attempt to arrive at a choice. It is arguably considered a stage rather than a resolution of the identity formation process, although many people apparently remain in moratorium for many years. Empirical studies have found moratoriums to be consistently more anxious than achievement or foreclosure status individuals (Marcia, 1967; Podd, 1972; Sterling and Van Horn, 1989). In many ways, however, moratoriums resemble achievements in their cognitive complexity, with their higher levels of reasoning, and their failure to conform or rely on judgments of others for making decisions (Bourne, 1978; Slugoski, Marcia and Koopman, 1984; Skoe and Marcia, 1991).

Identity Achievement:

An 'Identity Achiever' is someone who has gone through a period of crisis and has developed relatively firm commitments. It represents an autonomous resolution of identity, incorporating a set of commitments adopted after a period of exploration (moratorium). Identity achievements function most frequently at the highest level of post-conventional moral reasoning (Hult, 1979; Rowe and Marcia, 1980; Skoe and Marcia, 1991). Research across cultures has found people in this category to be more mature and more competent in relationships than people in the other three statuses (Marcia, 1993). Furthermore, these individuals are intrapsychically more differentiated from others and more secure in their attachment patterns (Ginsburg and Orlofsky, 1981; Josselson, 1987; Kroger and Haslett, 1988; Papini *et al.*, 1989).

Diagram depicting the relational positioning of ego identity status and overall ego identity according to Marcia's paradigm :



Cognitive context of identity development:

Cognitions tend to play a challenging role in understanding and construction of reality about oneself and about others. On the basis of newly acquired skills in the cognitive sphere, adolescents build up elaborate knowledge through extensive experience in various areas. Erikson (1968) considered exploration and role experimentation as two core ingredients of identity development. Acquired cognitive skills and decision making processes come into play when adolescents try out various roles and choices to obtain, or to establish meaningful identity. Low (1999) also points to the importance of cognition in identity formation process. Adolescents with a strong sense of identity, who have undergone a period of exploration of alternatives, have more complex self-structure than those who had not explored alternatives (O'Connor, 1995; Berzonsky and Ferrari, 1996; Kroger, 2000).

Cognitive styles tend to play a vital role in identity formation. According to Witkin (1965), an individual's self consistent ways of functioning in their perceptual and intellectual activities are reflected through these styles. Their manifestations also cut across diverse psychological areas. The primary concern of studying the cognitive styles in the present study has been to understand their role in decision making and in the development of adaptive ego identity development. It is proposed that field independence is one such cognitive style which tends to reveal the differences in a sense of separate identity *i.e.*, autonomy of the individual.

Field dependence/ independence is a bipolar dimension reflecting characteristic styles of intellectual functioning. The extreme field independent individuals would be those whose cognitive style reflects an extreme degree of psychological differentiation. Thus, the field independent person can readily restructure a perceptual situation or impose a structure where one is absent or minimal. There is a strong sense of identity of self, as separate from others. The individual, thus, can have a clear delineation of the separation of self, needs, and values from those of others. Field independent individuals tend to detach themselves from others and behave in a relatively impersonal manner. Rather than interact with their environment, they are more prone to analyse it. Field dependent individuals, in contrast, interact with others in the environment and tend to develop sensitivity to what others are thinking or feeling. Thus, they build an information and skills bank from their relationships with others. This, in turn, may incline them to cope with everyday problems by resorting to social support system.

Adolescents with these two different cognitive styles of functioning are likely to draw different inferences while interacting with external environment and social reality. It is intended that objective exploration of the social environment by field independent adolescents would lead them to a clear ideology, world view and firm commitments. In case of field dependent adolescents, their stylistic tendency not to differentiate between self and others, as well as, their excessive reliance on social cues for forming their world view, might hinder their analytical exploration process. While chances of their committing to an ideology might exist but they generally lag behind in terms of exploration which renders them incapable of acquiring an identity achievement status.

The present investigation tends to verify this conjecture empirically by taking field independence/ field dependence as variables for the study.

Affective context of identity development:

Affection involves the expression of feelings which reflect warmth, regard, caring, sympathy, helpfulness etc. Adolescents' participation in activities, social interactions, their sense of attachment and commitment reflect expression of their emotions which tend to become a driving force in their lives. Emotions provide motivation to act in a certain way and provide an inner force for one to be

in interpersonal situations (Draper, 2005). Emotions and identity are related in various ways (Bosma and Kunnen, 2001). Negative emotions, such as distress (Adams and Marshall, 1996) and anxiety (Archer and Waterman, 1994) trigger the exploration process. Once activated, exploration involves feelings of anxiety and uncertainty, of being challenged or discouraged as a result of perceived failure, of sadness over opportunities that are foregone even when desired choices were made, or of satisfaction as a result of success. Positive emotions too promote the process of exploration as they facilitate new ways of looking at things.

Different emotions influence adolescent's view of the world and the role of the self in society in different ways. The appropriate expressions of both positive and negative affect states help develop appropriate relationship fulfilment and social skills. This implies that adolescents' positive self-image and sense of personal worth depends on the nature of emotions experienced/ expressed by him/her. In contrast, those who experience neglect and rejection form a negative self-image and experience related affect states.

In every developmental task, both emotions and thoughts are basic attributes. Every emotion has a cognitive component and every thought is influenced by emotional factors. In human beings, both emotions and thoughts are intimately enmeshed in a dialectical unity (Thomas and Chess, 1991). Differentiated psychological traits of adolescents' reflect interactive processes of both the constructs. Feelings and ideas reinforce each other in a cyclic manner to acquire meaning. This implies that affect and personality are inextricably intertwined; the crises resolution at any developmental stage cannot be accounted for without taking into consideration this affective part of the organization, *per se*. Ego identity achievement is such a subtle affair that direction and intensity of affect will shape it in no uncertain ways. Frijda, Kulpers and Terschure (1989), Roseman, Weist and Swartz (1994), Roseman and Evdokas (2004) studied the relation between discrete emotions and action tendencies. Haviland *et al.* (1994), Bosma and Kunnen (2001), Strayer (2002) and Crocetti *et al.* (2008) studied emotions connected to commitments. These studies hint at the significance of emotions for the development of identity. However, the findings of these and other empirical studies have been found to be equivocal, hence the need for further investigation.

The term affect represents a wide variety of processes involved in it pertaining to various mental and bodily changes. Diverse kinds of process specific empirical tasks are available to study these changes. However, in the context of present investigation, where emotional autonomy is the landmark of mature emotional development and positive developmental outcomes in terms of achievement of stable ego identity, adolescents' feeling states relating to their experience and expression of positive and negative affect, as well, as specific emotions *viz.* joviality, shyness, self-assurance, attentiveness, fatigue, and surprise need to be studied. This would help clarify the role of specific positive and negative affect states in the adaptive and non-adaptive identity development by helping them make firm choices and commitments.

Need of the study:

Acquisition of an identity necessitates the synthesis of various roles and selves into a unified sense of self. While the adolescents have to experiment with different roles and choices to establish a firm sense of identity, understandably, this period can prove to be a 'turning point' in their lives as this critical period can be a host for psychological and behavioural problems. A perception of inconsistent expectations may leave the adolescent feeling fragmented with little or no sense of where his life is heading and they may adopt a negative identity, which has been associated with emotional disorders, academic underachievement, low self-esteem, drug abuse, failure to establish

intimacy at a later time, sexual experimentation, eating disorders etc. It has been observed that most of the researchers have taken up one issue to the exclusion of the others and have drawn forceful conclusions on the basis of their findings. Overall existing scenario of researchers suggests that some inclusive approach needs to be adopted to identify the optimal facilitating conditions and requirement from affective and cognitive domains simultaneously, so that relative significance of each could be studied. In this context specific aspects of these domains of psychological functioning were taken up; their most relevant features were identified on the basis of previous studies available in literature. Specific positive and negative affect states from affective domain and field dependence/independence from cognitive domains were taken up for investigation in the context of four identity statuses *viz.*, identity diffusion, foreclosure, moratorium and identity achievement statuses.

The following hypotheses were formulated:

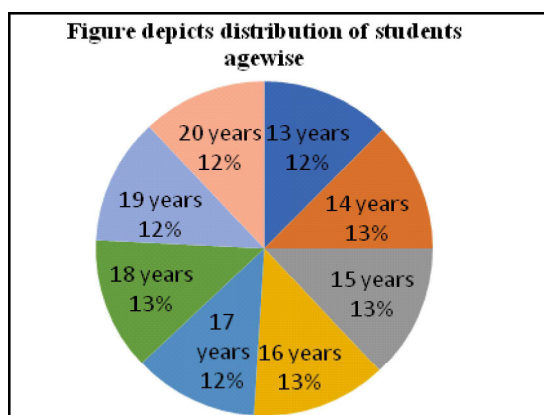
1. Moratorium and Identity Achieved females would be field independent in comparison to Diffusion and Foreclosures.
2. Diffusion and Foreclosed identity status females would be field dependent in comparison to Moratorium and Identity Achieved females.
3. Positive affect states would be positively correlated with Moratorium and Achievement identity status of female adolescents.
4. Negative affect states would be positively correlated with Diffusion and Foreclosure identity status of female adolescents.

METHODOLOGY

Sample:

Sample for the present study comprised of 500 subjects (age ranging between 13 to 20 years). Sample was covered from various secondary schools and colleges of Patiala and Chandigarh and an effort was made to give almost equal representation.

Age in Years	Frequency	%age
13	62	12%
14	63	13%
15	65	13%
16	65	13%
17	60	12%
18	64	13%
19	61	12%
20	60	12%
Total	500	
Mean Age	16.28	
S.D.	2.24	



The following tests were used:

Extended Objective Measure of Ego-Identity Status - EOMEIS (Adams, 1986):

The EOMEIS is a self-report measure of Ego-Identity status which classifies the subjects on four types of identity statuses – Diffusion, Foreclosure, Moratorium and Achievement, based on Marcia's paradigm of identity statuses. EOMEIS is used by researchers to classify adolescents/ young adults into different identity statuses in terms of their ideological and interpersonal aspects.

The scale comprises of 64 items, 32 of which assess ***Ideological Identity*** in the domains of

occupation, politics, religion and personal life-style values while, the other 32 items assess the **Interpersonal Identity** in the domains of *sex-role, friendship, dating and recreational choices*. However, after going through the content of items involved in subscales of sex-role and dating and finding unclear response of subjects to these items and considering the cultural context of our sample, thorough discussion with the supervisor was done about these and it was then decided to exclude them in the final analysis.

Group Embedded Figures Test-GEFT (Witkin, Oltman, Raskin and Karp, 1971):

The GEFT scale helps to evaluate the perceptual abilities of an individual. It assesses one's potential to break up an organized visual field so as to keep a part of it separate from the field. The items in the test are designed to quantify the ability of the subject to disengage and differentiate the desired perceptual stimuli from a wider framework. It comprises of 25 items, divided into three sections, Section-A, Section-B and Section-C. The items are complex geometrical figures, out of which simple figures like cuboids, hexagons etc. are to be spotted. Most of the figures in the test have been taken from the EFT. The desired figures for each section are printed at the end of the test booklet.

Positive and Negative Affect Schedule-Expanded Form (PANAS-X, Watson and Clark, 1994):

The Positive Affect Negative Affect Schedule (PANAS) is a widely-used affect scale developed by Watson and Clark (1988) based upon research demonstrating that self-reported mood states can be classified on two dimensions: **Positive Affect** (PA) and **Negative Affect** (NA). PANAS-X scale has 60 items covering different facets of PA and NA. This includes 11 factor analytically derived scales that assess specific, lower order affects. In addition to the two original higher order scales, the PANAS-X measures 11 specific affects: Fear, Sadness, Guilt, Hostility, Shyness, Fatigue, Surprise, Joviality, Self-Assurance, Attentiveness, and Serenity. The PANAS-X thus provides for mood measurement at two different levels. Positive Affect (PA) reflects the extent to which a person feels enthusiastic, active, and alert. Negative Affect (NA) represents a dimension reflecting a general state of, or disposition toward, subjective distress and unpleasurable engagement. Fear, Sadness, Guilt, and Hostility scales are classified as *Basic Negative Emotion Scales*. Joviality, Self-Assurance and Attentiveness are classified as *Basic Positive Emotion Scales*. Shyness, Fatigue, Surprise and Serenity are grouped as *Other Affective States* because they do not strongly or consistently define either of second-order factors.

Description of variables included in the study:

Sr. No.	Variables	Abbreviation
1.	Diffusion	Diff
2.	Foreclosure	For
3.	Moratorium	Mor
4.	Achievement	Ach
5.	Field Dependence/Field Independence	FD/FI
6.	Basic Negative Affect	BNA
7.	Basic Positive Affect	BPA
8.	Fear	Fr
9.	Hostility	Hos
10.	Guilt	Glt
11.	Sadness	Sad
12.	Joviality	Jov
13.	Self Assurance	Sf ass
14.	Attentiveness	Att

RESULTS AND DISCUSSION

Intercorrelations (Product Moment Correlation) and Analysis of Variance (ANOVA) were used to examine Identity Statuses, field-dependence/independence (Cognitive Styles) and Affective states.

Identity Statuses and Field-Dependence/Independence:

Field independence has negative and significant correlations with identity statuses of diffusion ($r = -.09$, $p < .05$), foreclosure ($r = -.13$, $p < .01$), and moratorium ($r = -.09$, $p < .05$). Correlation between achieved identity status and field independence is positive and significant ($r = .11$, $p < .05$). These results indicate that from base till the point of reaching the higher level of identity status, adolescents tend to remain field dependent in their cognitive styles. Cognitive styles of an individual are broader dimensions of personal functioning showing their manifestations in cognitive spheres. In adolescents', experiencing, exploration and decision making process tends to be closely linked with their cognitive styles (Witkin *et al.*, 1971).

Table 1 : Intercorrelations between indices of identity status, field-dependence/ independence and affective styles (N = 500 Girls)														
	<i>Diff</i>	<i>For</i>	<i>Mor</i>	<i>Ach</i>	<i>FI/FD</i>	<i>BNA</i>	<i>BPA</i>	<i>Fr</i>	<i>Hos</i>	<i>Glt</i>	<i>Sad</i>	<i>Jov</i>	<i>Sf ass</i>	<i>Att</i>
Diff	1.00	0.30	0.50	-0.03	-0.09	0.13	-0.04	0.07	0.08	0.13	0.12	-0.10	-0.05	0.01
For		1.00	0.19	0.12	-0.13	0.08	0.06	0.09	0.01	0.11	0.01	0.03	0.03	0.09
Mor			1.00	0.09	-0.09	0.14	0.06	0.10	0.09	0.14	0.11	0.02	0.03	0.01
Ach				1.00	0.11	-0.07	0.14	-0.09	-0.02	-0.08	-0.07	0.14	0.15	0.16
FD/FI					1.00	-0.10	-0.04	-0.10	0.01	-0.13	0.03	-0.07	-0.01	-0.09
BNA						1.00	-0.13	0.79	0.60	0.70	0.56	-0.28	-0.23	-0.14
BPA							1.00	-0.07	-0.08	-0.16	-0.20	0.54	0.54	0.63
Fr								1.00	0.36	0.48	0.34	-0.16	-0.23	-0.11
Hos									1.00	0.49	0.47	-0.26	-0.09	-0.10
Glt										1.00	0.54	-0.26	-0.14	-0.21
Sad											1.00	-0.48	-0.10	-0.17
Jov												1.00	0.40	0.31
Sf ass													1.00	0.34
Att														1.00
Significance level, $p < .01 = .12$, $p < .05 = .09$														

Positive associations between field dependence and diffusion, foreclosure and moratorium identity statuses reflect the undifferentiated nature of their exploration and decision-making process, that is, they tend to act on the stimuli in a passive manner. Their world view is guided by, or is largely influenced by, their perceptions of prevailing visual field in an unanalytical manner. These results show that adolescents in their earlier stages of identity development start to function in undifferentiated manner, a typical characteristic of field dependents, or it can be said that those who have stable disposition to be field dependent tend to oscillate between diffusion, foreclosure and moratorium statuses only. Positive significant correlation between achievement identity status and field independence ($r = .11$, $p < .05$) show that adolescents who are able to reach the stage of achieved identity status function in field independent manner in their decision making of all kinds. It can also be the case that only adolescents who are termed as field independents can attain the stage of achievement identity status. These results make it very clear that at the level of achieved

identity status, the required free and unbiased exploration, internal frame of reference, clear and differentiated world view, and discrete perceptions of reality are essential prerequisites of exploration and commitment dimensions of their decision making, the attributes which are the defining feature of field independent personality. There have been indications in literature that moratorium subjects show high level of differentiation and integration. But in case of present results it might be the case that cultural factors could have a binding effect on the freedom of exploration of adolescents, especially females, in their respective fields as adolescents in this stage are in the midst of crises, but have not made a clear commitment to an identity status. In such a state of pressure of transition on one hand, and cultural/ familial pressures of conformity on the other hand, field independence/ dependence cognitive style distinction remains blurred.

Ego identity status and affective states:

Correlation between diffused identity status and negative affect is positive and significant ($r = .13, p < .01$). Guilt and sadness have also positive and significant correlation with diffused identity status ($r = .13, p < .01$) ($r = .12, p < .01$) respectively. Foreclosed identity status has positive and significant correlation with fear ($r = .09, p < .05$) and guilt ($r = .11, p < .05$). Moratorium status has positive and significant correlation with negative affect ($r = .14, p < .01$), fear ($r = .10, p < .05$), hostility ($r = .09, p < .05$), guilt ($r = .14, p < .01$), and sadness ($r = .11, p < .05$). The case of achieved identity status is quite different from that of the other three statuses, as far as the functioning of their affect domain is concerned. It has positive and significant correlation with dimension of positive affect ($r = .14, p < .01$) and other basic positive emotions namely joviality ($r = .14, p < .01$), self-assurance ($r = .15, p < .01$), and attentiveness ($r = .16, p < .01$).

Presence of negative affect and its specific correlates, which are basic negative affect states, tend to block the pathways of emotional autonomy which would further stunt the adolescents' progress toward achievement identity status. Diffusion and foreclosure identity statuses, both bearing the same kind of affinity with negative affect and its accompanying specific negative emotions, seems to hint at the least progress during progression from diffusion to moratorium stages of ego identity development. Those who are able to develop emotional autonomy viz. a viz. the influence of positive affect along with some cognitive and social facilitators in their family system are able to form achievement identity status, which is adaptive identity position according to Ginsburg and Orlofsky (1981). Positive affect states have been found to be positively correlated with only achievement identity status of females. Negative affect states have been found to be positively correlated with diffusion and foreclosed identity statuses. Moratorium identity status is also showing the same affinity with negative affect. Results of correlational analysis reveal that first three identity statuses namely, diffusion, foreclosure and moratorium do not show clear boundary demarcation and their distinct position in terms of social and affective correlates. Only ego identity status of achievement stands out clearly in contrasting position. It appears as if the first three identity statuses represent a state of identity confusion in which firm commitments to any vocation or ideology are missing. This is understandable only in the specific Indian cultural context which is restricting and repressing rather than acting as a facilitator. Emotional autonomy empowers adolescents to handle criticism, hurdles and set-backs constructively by developing their own inner strengths (Atwater, 1992). Positive association of achievement identity status with dimension of positive affect and specific positive emotions of joviality, self-assurance and attentiveness are understandable in this context only. Content as well as degree of these specific emotional states along with general dimensions of positive affect seems to characterize emotional autonomy which paves a way for

freedom of choice, expression and commitment which further tends to contribute to the establishment of achieved ego identity status.

Analysis of variance:

In order to precisely look into the different levels of functioning of adolescents in four different ego identity statuses in terms of their cognitive styles and their identity statuses at different age levels within the adolescent period, analysis of variance was applied.

To test the hypothesis that adolescents with field independent cognitive style would be high on identity achievement and moratorium identity status and adolescents with field dependent cognitive style would be high on diffusion and foreclosure, one-way analysis of variance was applied on scores of cognitive styles and identity statuses. Groups of field independents (N=204) and field dependents (N=204) in each of the identity statuses were formed following the criteria of $M \pm \frac{1}{2} SD$ on their scores of GEFT. Results of these computations have been summarized in Tables 2 and 3.

Table 2 : Summary of one-way Anova for scores of identity diffusion, identity foreclosure, moratorium and identity achievement at two levels of cognitive styles viz., field independence (N=204) and field dependence (N=204)

	Source of Variation	SS	Df	MS	F
Identity Diffusion	Between Groups	255.7	1	255.7	5.59*
	Within Groups (Error)	18581.3	406	45.8	
	Total	18837.0	407		
Identity Foreclosure	Between Groups	1239.0	1	1239.0	13.338**
	Within Groups (Error)	37714.9	406	92.9	
	Total	38953.9	407		
Moratorium	Between Groups	142.4	1	142.4	2.72
	Within Groups (Error)	21255.2	406	52.4	
	Total	21397.6	407		
Identity Achievement	Between Groups	173	1	173	3.20
	Within Groups (Error)	21985	406	54	
	Total	22158	407		

* F significant at $\alpha = .05$ level

** F significant at $\alpha = .01$ level

Summary of one-way analysis of variance (Table 2) on scores of identity diffusion in relation to FI/FD and their mean values show that F value for cognitive styles of field independence and dependence of diffusion identity statuses is 5.59 which is significant at .05 level. Similarly, F-ratio

Table 3 : Means and SDs of identity diffusion, foreclosure, moratorium and achievement in relation to field dependent and field independent cognitive styles

Cognitive Styles					
Variables	Field Independents		Field Dependents		F. Ratio
	Means	SD	Means	SD	
Diffusion	42.21	6.69	43.79	6.83	5.59*
Foreclosure	39.82	9.82	43.31	9.45	13.338**
Moratorium	45.62	7.32	46.8	7.14	2.72
Achievement	50.26	7.28	48.96	7.43	3.20

for the two cognitive styles of foreclosed identity status is $F=13.338$ which is highly significant ($p<.01$). Differences in cognitive styles in case of moratorium and achievement identity statuses did not attain the levels of significance in one-way analysis of variance ($F=2.72$ and 3.20 , respectively).

Perusal of the Table 3 showing mean values of scores of field independence and field dependence of two different identity status female adolescents reveals that mean scores of identity diffusion adolescents for field dependence ($\bar{x}=43.79$) are higher than their scores of field independence ($\bar{x}=42.21$). Similarly mean scores of foreclosure identity status for field dependence ($\bar{x}=43.79$) are higher than their mean scores of field independence ($\bar{x}=39.82$). F-ratios for these two identity statuses are significant ($F=5.59$ and 13.338 , respectively).

In case of identity statuses of moratorium and achievement, F-ratios were not found to be significant for group differences in terms of field independence/dependence (Table 2). However, mean scores of moratorium identity status subjects for field dependence ($\bar{x}=46.8$) and field independence ($\bar{x}=45.62$) shows the same trend as is the case with diffusion and foreclosed identity statuses (Table 3). For achievement identity status adolescent females position it seems to be different. Though, differences fail to reach the level of significance, however, higher values of mean score of field independence ($\bar{x}=50.26$) than field dependence ($\bar{x}=48.96$) at least gives the indication of possible differences in cognitive styles of achieved identity status subjects (Table 3).

Diffusion and foreclosure identity status adolescents' emerging as field dependents are confirming the contention that in both cases active exploration of various alternatives is absent. Either no commitment is made (diffusion) or if is made at all it is based on factors which can be termed as dictative or other-focused instead of self-directed and inner-focused. This is what tends to be the case with cognitive style of field dependence. People showing high propensity of field dependence would behave passively, showing their dependence on structure of prevailing visual field rather than dealing with situations in field analytical manner. Their undifferentiation might be a stable feature of information processing style and personality, and might be the reason for their inability to overcome embeddedness. In the early stage of adolescence, when crises situations start impinging upon them, they have to deal with these with their still developing cognitive skills and slowly expanding their experience repertoire.

In case of moratorium identity status, it was following Marcia's theorizing about this stage that it was hypothesized that moratorium subjects would be field independent. According to Marcia (1966), though commitment is missing in moratorium status but active exploration of career and ideology related fields is certainly present. Where active exploration is involved, its implication is that individual would find and use his own internal frame of reference for processing information and deciding about values and goals. But non-significant differences in cognitive style of FD & FI in moratorium adolescents though contrary to hypothesized differences are only explainable in terms of cultural differences, opportunities and job related scenario available to our adolescents in local context even within India. In child rearing and socialization practices in collectivistic cultures, majority parents prefer to hand down readymade agenda and fixed set of values, accompanied by parental pressures of conformity to the prevailing system. Hence possibility of exploration of some other alternatives gets negated in their upward movement toward maturity. This seems to be the reason that despite being in moratorium status stage, they follow an approach rather adopt it as their life style; the tendency to be in the middle of the road which is indicated by their non-significant difference in scores of field dependence and field independence. The only hint that is showing a continuum with the earlier two stages, namely diffusion and foreclosure is holding the same direction

of mean scores which is higher for field dependence in comparison to field independence as is the case with earlier two stages.

In case of achievement identity status position of adolescents, though the differences between field independent and field dependent scores are not significant but contrary to moratorium status position, mean score of field independence are somewhat higher in comparison to field dependence. This indicates that the thrust of achievement identity status subjects is towards self-guided processing of information. In literature on cognitive styles, field independence has been linked with higher level of intelligence, cognitive complexity and tolerance for ambiguity (Witkin, 1962; Raphael, 1975, 1979). Findings of studies by Rowe and Marcia (1980), Wagner (1987) and Low (1999) link higher level of cognitive development with higher level of identity development which is in consonance with the findings of the present study, though it has certain limitations imposed by cultural context.

Summary:

Diffusion, foreclosure and moratorium identity statuses have been found to have positive and significant correlation with each other. Basic negative affect was found to be positively and significantly correlated with diffusion. Also, other negative affect states like guilt and sadness were seen to be positively and significantly associated with diffusion and a positive affect state of joviality was negatively a significantly associated with this lower identity status. Foreclosure identity status was found to have negative and significant relationship with field independence. Also, it has a positive correlation with basic negative affect state, as with fear and guilt as well. Negative affect states like hostility, guilt and sadness were positively associated with moratorium status and these adolescents were generally high on basic negative affect state as well. Basic positive affect state was seen to be positively associated with achieved identity status and, other positive affect states like joviality, self-assurance and attentiveness also came to be positively linked with this identity status. Fear and guilt were found to be negatively linked to identity achievement status. Adolescents in diffusion and foreclosure identity status position tend to adhere to cognitive style of field dependence as compared to field independence. Moratorium identity status adolescents show relatively more tendency toward field dependence as compared to field independence, though difference did not reach the level of significance. Achievement identity status subjects, despite their non-significant differences in their scores, show a tendency for field independent cognitive style as compared to field dependent cognitive style.

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