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THE RELATION BETWEEN STUDENTS ANXIETY AND COGNITIVE STYLES

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Abstract

The key to academic success is not only good quality teaching but also a individualized teaching and individualized approaching to the student's cognitive styles of learning and anxiety. The present paper tries to answer the question if the teachers and school counsellors may help improve students' learning by helping them to manage their behaviour and attitudes more effectively. Precisely, it postulates that as long as teachers may adapt their communication styles and teachings to the cognitive styles of their student's better results and more efficient learning they will get from them. It first presents a short literature review of anxiety and of cognitive styles of learning the relation, followed by the relation between anxiety and the cognitive styles and it finally postulates the main methodological approaches that any teachers should adopt to make his teaching more effective having in mind the relation between the two variables. Finally, implications for teaching are discussed, as are suggestions for the future researches.

Keywords: anxiety; cognitive styles; learning; teaching methodology;

1. INTRODUCTION

The field of individual differences in cognitive and learning style and how they may be correlated to the teacher's style has been constantly criticized for conceptual confusion, contested definitions, poor measurement and lack of validity ((A. Parkinson (2004), Furnham, 1992, ,Entwistle and Peterson, 2004).

Still most too often we notice that both at the undergraduate level and at bachelor's that the more loved and efficient teachers are those who manage to establish a special relation to the educated. Good quality teaching often comes from teachers who also meet the criteria of fulfilled persons in their personal lives as well. Could it be related to the fact that they have already learned how to handle difficult emotions? That



they learned how to master their anxiety? Or how to direct it towards rewarding aspects of their life and personality?

The relationship between cognitive styles and learning strategies have been established by many cognitive and educational studies both in Romania and abroad (Miclea, M,1999; Patrick R.Thomas, Jacinta B.McKay, 2010.). So there is no novelty concerning the hypothesis that cognitive styles have significant influence on learners' choices of learning strategies. Likewise, the hypothesis that students learn best when instructional material matches their cognitive style no longer needs re-examination. Synthesizing style, sharpener style, field-independent style and impulsive style of cognitive styles correlate positively almost with every strategy presented in the classroom.

However, there is always the need to take into consideration other important elements in the learner's personality such as their attitudes toward learning and their level of anxiety both during the process of learning and the assessments.

The cognitive styles that have impact the learners' learning strategy choices should also be correlated to the level of anxiety of each and every learner. Psychological developments on individual learning differences envision new approaches in three specific areas: processing capacity of the students' cognitive styles and understanding the process of knowledge. These are central to the understanding of students' differences. (Richard Riding, 2002)

The quality of students learning will improve by both managing the teaching styles according to the student's cognitive styles and the management of their anxiety.

2. HISTORICAL PERSPECTIVE ON ANXIETY

2.1. Anxiety in psychoanalytic vision

In psychology, the concept of *anxiety* was introduced by psychoanalysts and psychiatrists who examined anxiety as an innate personality trait, as an initial state characteristic of a person.

The term "anxiety" was first used in 1895 by Sigmund Freud, who gave a comprehensive description of the theory of anxiety. In his view, anxiety would be the signal of danger addressed to the Self, that is, to the conscious personality, which can react by appropriate measures or by mobilizing its defence mechanisms. (Freud, 2004, 658).

In his 1923 book "Anxiety Problems," Freud describes anxiety as an emotional state with two distinct aspects: a specific note of discomfort and a motor determinant, both felt, experienced by the subject.

Anna Freud (2002) stated that anxiety is a state without object of waiting for an indeterminate danger (Freud, 2002, 210).

W. Reich continued the work of the two, defining anxiety as an obstacle to the contact of this energy with the outside world, which creates "muscle fixations", distorts and destroys sensitivity. (Reich, 1938, p.176). In this way, W. Reich introduces an important aspect in the description of the phenomenon of anxiety, namely stiffness, "muscle fixation (tension)", refusal to perform the activity by blocking the organs of the body.

In A. Adler's view, anxiety arises in connection with the need to restore the lost social emotion when the social entourage places certain tasks in front of the individual. Even when the task is very easy, the person perceives it as a check on his integrity, which leads to an emotional reaction and a strong tension when it is performed.

2.2. Anxiety in Neo-Freudian vision

Karen Horney (1998) uses the term anxiety as synonymous with "fear," believing that there is a connection between anxiety and fear. She believes that both are, in fact, emotional reactions to a danger and both can be accompanied by physical sensations, such as sweating, violent palpitations, which can be so strong that an instantaneous and intense fear can lead to death.

Anxiety is a proportionate reaction to the hidden and subjective danger. She concluded that anxiety is the dynamic center of all neuroses, the main source of anxiety being not sexual impulses as S. Freud claimed, but hostile impulses. (Horney, 1998, p.216).

Erich Fromm (2004) points out that anxiety is caused by alienation, which is related to the fact that man perceives himself as a separate personality feeling helpless in the face of the forces of nature and the forces of society. The solution to this problem, according to E. Fromm, can be achieved through the various types of love that exist between people. (E. Fromm, 2004).

2.3. Behavioral approach to anxiety

James Watson defines anxiety as a reaction to conditioned fear, an acquired tendency. Starting from the main task of behaviorism "to be useful to practice", Watson exposes in his works not only theoretical theses, but also some advice to teachers and parents on ways to combat anxiety. (Watson, 1919,167).

Edward Tolman (1886-1959) makes a critical analysis of G. Watson's ideas, considering them boundless and introduces a series of intermediate values (heredity, impulses, physiological, maturity, thinking), in the formula $S \rightarrow R$. Thus according to him Tolman, human behavior is seen to be much more complex, directed by certain goals and determined by previous experiences (Tolman, 1938, 41).

2.4. Anxiety from the perspective of Gestalt psychology

(Fritz) Perls considers anxiety to be the rupture between "now" and "then"; it forces man to plan, to repeat his future. This not only confuses him to become aware of the present but also destroys the openness to the future, which is necessary for spontaneity and development.

2.5. The cognitive and humanistic approach to anxiety

George Kelly considers that anxiety is the awareness of the fact that the event with which man encounters. According to G. Kelly, anxiety is the result of awareness of existing constructs, which cannot be used to predict all the events that man encounters. Anxiety arises when a person becomes aware that, in principle, he does not have adequate constructs with which to interpret events, namely the inability to predict (predict); they determine the appearance of lack of defence, of helplessness, of weakness (Kelly, 1955, p.344).

Carl Rogers (1980) considered that the source of anxiety is the encounter of the subject with an experience which, if it is conscious, can threaten man's conception of himself. (Rogers, 1980, 237).

For Rollo May (1966), a classic of humanistic-existential psychology, the key word in understanding anxiety is the threat to the values of the individual. (May, 1966, .425).

It is important to note that from the perspective of cognitive and humanistic psychology, the concept of anxiety is radically different from that of psychoanalysis, where anxiety is defined as a consequence of unconscious conflicts and repression of instinctual energy.

Analysing the concepts of anxiety described above, we conclude that in all psychological currents there are two ways of defining anxiety, namely: anxiety is seen as a primary characteristic of man and as a reaction to the hostile (hostile) outside world.

If the anxiety comes from the inferiority complex, then the person who relives it has a motivation that is not related to the current situation. Another conception of A. Adler's theory is that anxiety is more often determined by those tasks that endanger the self-esteem of the individual (Adler, 1996, 275).

As stated by R. Feldman (1993), anxiety states not only have a dysfunctional effect on the mental life of the individual, but can also positively influence motivation and performance. But when anxiety arises and becomes chronic without any external justification, we can speak of a mental problem.

3. ACADEMIC ANXIETY OF STUDENTS

In this sense, academic anxiety is the reaction of students to different learning situations, knowledge acquisition, testing, examination, etc. This reaction manifests itself in two dimensions: cognitive and emotional.

Academic anxiety is a spectrum of manifestations, in which there is excessive fear, negative cognitions in relation to some academic situations. People with a high level of academic anxiety are very sensitive and not very resistant to anxious stimuli.

Therefore, anxiety as a personality trait to react to threats and danger and as a state related to a certain context or situation manifests itself differently over a limited time, being determined by several internal and external factors, which can be structured in two categories:

- 1) the category of biological factors;
- 2) the category of social-psychological factors.

The factors in the first category are represented by the native biological predispositions that influence the appearance of anxiety. For example, high parental sensitivity can be genetically transmitted to children.

The second category of factors that determine the appearance of anxiety are the social psychological ones. This category includes all the socio-affective, socio-cultural and educational factors within the human groups in which the person must be integrated or of which he is a part. From this category of factors we highlight: the factor of the academic environment, the factor of the complexity of the training, the relational factor.

Academic anxiety, therefore, is related to students' reaction to different learning situations: knowledge acquisition, testing, examination, academic assessment, and so on.

4. THE RELATIONSHIP BETWEEN ANXIETY AND COGNITIVE LEARNING STYLE

Anxiety is an exaggerated mobilization of mental energy and is part of the fundamental emotional reactions of man, as well as depression and suffering.

The fundamental feeling of anxiety is fear. This fear is a natural reaction to a real danger, but anxiety is the fear of an imaginary danger, being defined by specialists as a diffuse fear, without a well-defined object.

If fear teaches you to be careful, anxiety teaches you to be avoidant. Hence an essential idea about the nature of anxious behaviours, namely that they are learned, not innate. Due to this, anxious behaviours respond very well to short-term cognitive-behavioural therapies.

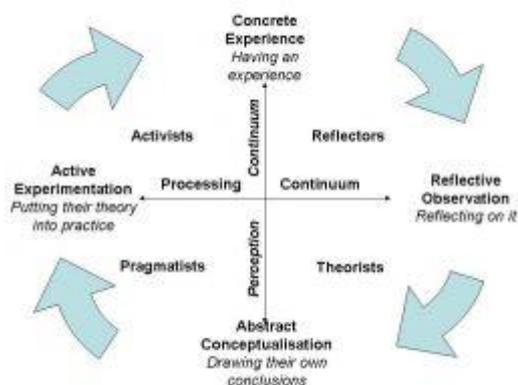
What needs to be remembered is that these anxious behaviours are learned so that they can be successfully addressed through cognitive-behavioural interventions and can disappear within a few months of the start of the intervention. The anxious person will learn to manage his fear by assigning it appropriately to each "obstacle" starting from an improved self-image with the help of therapeutic techniques, well defined but realistic.

The question arising here is the following: how can a professor correlate the students 'anxiety to their learning style? Is this the duty of the student only or should each teacher perceive and help some students manage their anxiety better? If the answer is affirmative, then the academic staff should be:

- expecting and managing anxiety (detecting anxious students)
- familiar with cognitive learning styles (simple and practical methods available to any teacher)
- aware of the relationship between anxious factors and learning ability

Specific psychological and educational intervention programs regarding the reduction / regulation of academic anxiety in students should normally be found at Career Counselling and Guidance Center of each university.

From the perspective of establishing the interaction between academic anxiety and cognitive style, we opted for the classification of cognitive styles by P. Honey and A. Mumford (2000):



Honey and Mumford's Learning Cycle linked with learning styles – Honey, P. & Mumford, A. (1995). *Using your learning styles*. Maidenhead: Peter Honey Publications Ltd.p. 17

Active cognitive style. Students prefer to be attentive, to act, they are well prepared for different types of activities. Their strengths are: initiative and activism. Usually, students in this category are extroverted and impulsive.

Reflexive cognitive style. Students with this style prefer to be prepared for classes, they like to analyze, to appreciate the results of their own activity, but also that of others. The strong point - adequate self-assessment and forecasting the necessary actions in the future.

Theoretical cognitive style. Students with this cognitive style have a high level of abstract thinking, show abilities of analysis, synthesis, conclusion, etc. These students are less impulsive and show a tendency toward optimal reflexivity.

Practical cognitive style. Students with this cognitive style have a pragmatic thinking, are prone to practical activities, are afraid of theoretical tasks. They are flexible in relation to practical and rigid activities in relation to the theoretical ones.

An understanding of Learning Styles theory may encourage learning facilitators/extension professionals to utilise a broader range of learning strategies – therefore providing for all learners through a more diverse learning experience. This increases the potential for more comprehensive learning.

The profile of the student with a high level of anxiety in relation to his cognitive and learning styles may look like the following:

- Rigid thinking
- exaggerated emotional reactions
- emotional instability
- Frustration
- nervousness
- low self-assertion
- lack of self-confidence
- low level of motivation
- exaggerated reflection

Each learner ought to understand their own learning style and seek out opportunities to learn in their learning style. But they should also develop their learning capacity in other styles to become a more well-rounded learner. This along with the proper management of their negative emotions will increase versatility in learning situations. So it is not only the professor's task to help them manage both their learning styles and anxiety but theirs as well.

5. METHODOLOGICAL INTERVENTIONS THAT VALUE THE RELATIONSHIP BETWEEN ANXIETY AND COGNITIVE STYLE

The methodological interventions regard the following:

1. Heuristic conversation
 - asking questions
 - answering questions
 - producing and implementing innovations
2. Problematization
 - creating problematic situations
 - solving problematic situations

- solving problem-situations
- 3. Brainstorming
 - brainstorming
 - debates
 - conversations
- 4. Case study
 - case analysis and debate
 - case research
 - proposing new solutions
- 5. Modelling
 - modelling learning contexts
 - modelling processes and outcomes
 - making decisions
- 6. Investigation
 - individual activity
 - induction
 - deduction
 - analogy
 - trial and error
- 7. The project
 - elaboration of projects
 - analysis and presentation of projects
 - appreciation of projects
- 8. Demonstration
 - analysis
 - synthesis
 - analogy
 - conclusion
- 9. Observation
 - direct
 - indirect
 - anxiety management tools

Capitalizing on the tools directly oriented towards the formation of reasons for learning also include:

1. Involvement of students in setting learning objectives / goals. How?
 - progressive setting of objectives;
 - individualization of objectives according to one's own personality;
 - prioritization of objectives;
 - monitoring progress towards objectives.
2. Building positive expectations and self-confidence. How?
 - supporting cognitive activities by expanding the area of information, interests;
 - development of independent thinking, intellectual courage, correctness.
3. Awareness of the essence and value of the task, perception of the connection between the current task and future professional problems. How?
 - planning how to solve tasks;

- differentiation of tasks by difficulty categories;
 - use of positive feedback techniques
 - creating an additional relational motivation.
4. Self-assessment. How?
- highlighting the progress made in each area of the learning act
5. Developing the feeling of self-efficacy, knowing one's own cognitive processes and regulating them. How?

- knowledge of one's own cognitive styles;

Teachers need to become aware of their students' learning styles so that they are more empathetic toward their students' learning (Smith 2002).

- self-confidence;
- continuous self-assessment

The professor, through his / her own teaching-evaluation styles, must involve the students in accomplishing the problem-tasks, varied and attractive tasks. She/he needs to capitalize on and improve communication styles with students, taking into account their cognitive styles, but also the level of manifestation of academic anxiety.

Another important need of the academic staff is to know and work individually with students with high levels of anxiety in the problem group

Finally, the creation of institutional centers for psychological counselling of students from the perspective of regulating and reducing academic anxiety is a fundamental step for each university.

Other important steps may include changes and initiatives around educational environment, curriculum and enhancing the collaboration with psychologists and other trainers:

- Adoption and application in practice by psychologists and university teachers of the proposed mechanism for regulating and reducing academic anxiety in students.
- Reviewing the university curriculum from the perspective of training psychologists in order to achieve motivational and reflective (psychological) valences to regulate and reduce academic anxiety in students.
- Application of psychological and educational mechanisms to regulate and reduce academic anxiety in students in special training, in the process of continuing education of psychologists, educators, teachers.
- Inclusion of students in research on the issue of academic anxiety at the level of bachelor's and master's theses

7. CONCLUSIONS

The university teacher need to become aware of their students' learning styles so that they are more empathetic toward their students' learning.

Not all students favour the same way of learning and they do not have the same personality traits; there are individual differences in managing the symptoms of anxiety and in the learning processes as well.

Each learner ought to understand their own learning style and seek out opportunities to learn in their learning style. But they should also develop their learning capacity in other styles to become a more well-rounded learner. This increases versatility in learning situations.

Although there may not be a significant relationship between learning styles and personality traits the knowledge and management of students 'anxiety by blending them with their cognitive styles may open the path to a new approach of what effective learning for future teacher candidates may mean.

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