



## STUDY REGARDING THE EARLY MALADAPTIVE COGNITIVE SCHEMAS FROM THE PERSPECTIVE OF AWARENESS CAPACITY

STELIANA, LEFTER<sup>a</sup>

<sup>a</sup> *Petroleum Gas University of Ploiesti, Faculty of Letters and Sciences  
Department of Education Sciences*

---

### **Abstract**

*The present study aims to investigate the impact of early maladaptive cognitive schemas (four of the schemas in the domain Disconnection and Rejection, considered to be the most harmful for the personality development) on the awareness capacity. The research was carried on 101 subjects aged between 18 and 35 years old. The Young Cognitive Schemas Questionnaire – YSQ-S3 was applied and the content developed by participants as a written response to two questions stated by the author was analysed. The content analysis aimed to determine and measure the awareness capacity based on the criteria developed by the author. The results of the study showed that it is an inverse correlation between the awareness capacity and the severity of maladaptive cognitive schemas. As in other research studies about this relationship, the present study emphasized the mediating role of awareness in healing, in the self-aware construction, in building healthy relationships with others.*

---

**Keywords:** *awareness, cognitive schemas, relationship.*

---

### 1. INTRODUCTION

The quality of human relationships is defining for individual and social development. Cultivated spontaneously and healthily by the individual who lives in an environment where their needs are met, relating to other people can sometimes be cause for suffering, whether acknowledged or not. Healing in a relationship

---

*Corresponding author: Steliana Lefter*

*E-mail address: steliana.lefter@yahoo.com*

---

becomes, in this context, a solution proven also by the multitude of therapeutic approaches that emphasize relationships as a source of healing. Our relationship with the self (whether or not it contains conscious structures) along with our relationship with others define the quality of healthy living. A series of early adaptive cognitive schemas, (as discussed by Elliott and Lassen, 1997, apud Young, Klosko & Weishaar, 2015) indicate healthy and trustful relationships with others. There are also maladaptive cognitive schemas though. What happens with those individuals who, failing to relate adequately to the significant people in their lives early on, build such dysfunctional internal relational structures, or maladaptive internal patterns? A well-structured, coherent relationship is the source that ultimately shapes a coherent, conscious life. Studied in the form of a theoretical and practical diversity, consciousness has raised and still raises many questions regarding its definition, structure, the value it brings in relation to itself and others, its nature and universality.

A study conducted in Romania on meditation, a modified form of consciousness, as an access gate towards a high level of awareness, investigated meditation from a neuro-psychologic point of view. Conducted by Ovidiu Brazdău with the help of Professor Leon Zăgrean and Doctor Ana Zăgrean during 1999-2001 in the Neuro-physiology Lab of the “Carol Davila” Faculty of Medicine and Pharmacy in Bucharest, the study reached a particularly valuable conclusion for our research. It obtained the objectivation of a state through which the subject has conscious access into the subconscious and can directly perceive archetypal contents.

Regarded as “primary socialization” and “secondary socialization” by the psycho-sociologist Iluț (2001), relational structures are both a blessing and a curse. If in the first socialization form the individual “assimilates the basic social world, by secondary socialization the individual acquires partial realities ... secondary socialization also means the transition from the world of childhood to a more heterogeneous one. Here there are significant people as well, but they are more volatile, and the individual has a certain degree of control over them, in the sense that the individual can give up some in favour of others in order to maintain one’s own identity” (Iluț, 2001, p.47).

Secondary socialization offers individuals a chance to give up relational schemas that, although perfectly adaptive at the time of their creation, have become totally dysfunctional and maladaptive later on. How much we capitalize on these chances depends on how much aware we are of these maladaptive patterns. Of course, this is a first step. Awareness appears, in this context, as a starting point but also as added value to a healthy, assumed, conscious and co-created life. A study conducted in 2017 by Jens Thimm from the University of Tromsø in Norway, called *Relationships between early maladaptive schemas, mindfulness, self-compassion and mental disorders* on 212 students with an average age of 21,8 years old, proved the existence of a negative correlation between early maladaptive

schemas, mindfulness and self-compassion. The author's conclusion was that mindfulness and self-compassion mediate, but do not reduce the link between early maladaptive schemas and associated mental disorders.

In the field of psychology, the term "schema" is associated most often with Piaget, whose concept of knowledge acquisition is known under the name of constructivism (Young, Klosko, Weishaar, 2015). To Piaget, mental schemas appear as a result of the interaction between the genetic datum and the specificity of actions by which organisms adapt to the environment (Iluț, 2009). "...at Piaget, the equilibration of schemas, the balance between organism and environment, as well as the actual structures that materialize them, are integrated by the organism to its own benefit through a series of operations called assimilation, reorganization and accommodation" (Piaget, 1988, apud Iluț, 2009, pp.141- 142).

For the cognitive psychology, the schema represents an abstract cognitive map, acting as a guide in interpreting information and solving problems (Young, 1990).

There are positive and negative cognitive schemas, as well as early and late schemas. Young, Klosko and Weishaar (2015) recall Elliott's polarity theory, which tried to show that for each early maladaptive cognitive schema there is an adaptive schema, as a complementary dimension.

Speaking about the relation between conscious-unconscious in the context of correcting a maladaptive pattern, it is important to accept that it is a long and never-ending process, because memories associated with these mental patterns cannot be erased. Correcting maladaptive schemas renders these patterns less active, and when they do become active, the associated experiences are less overwhelming and the individual recovers faster.

The Great Larousse Dictionary of Psychology (2006) defines the "conscious" as "*psychic content that belongs to consciousness at a certain time*" (p.253). The evolution of the concept involves going through some stages of content in the view of different schools of psychology. The pre-scientific stage of psychology considers as conscious the entire information brought to the psyche by the totality of psychological phenomena. Since the experimental introspection of Wundt and collaborators, the behaviouristic view of the concept takes into account its objectification in behaviours. Intermediate states of system exits are considered to be conscious, all other intermediate states are unconscious (Bloch, Chemama, Depret, Gallo, et al., 2006).

We notice that the term 'consciousness' is used in literature with general reference to the phenomenon of awareness: 'self-consciousness', 'oneroïd consciousness', 'consciousness disorders'. 'Consciousness' is preponderantly used to specifically emphasise the experience of 'being aware', as being closer to the meaning of 'lucidity', which is used less frequently.

Therefore, what does it mean to be conscious?

Defining consciousness briefly, Metzinger (2015) calls it a new “type of organ”. It is part of the “virtual organs” developed by biological organisms during their evolution, along with feelings or the phenomenological experience of seeing coloured objects, for example.

Another definition of consciousness is succinctly given by Bernard Baars (1997a). He speaks of the “global workspace” containing a functional space, namely the conscious information, as a subset of the active information in the brain that requires monitoring because it is not known which of our mental capabilities will be needed for later access to this information (Bernard, 1997a; Metzinger, 2015).

Based on the elements presented about consciousness, it can be concluded that talking about the conscious in the absence of the unconscious is nonsense. Also, conscious content may become partially unconscious on the basis of defence mechanisms, whether structured or not, which the subject may call upon, just as unconscious content can, at some point, be the subject of consciousness. Daniel David (2014) states: “*The simple linguistic expression of content and information processing means acknowledging them, but not correctly identifying them as causes for the subject's answers*” (p. 44).

“...the conscious and the unconscious are not some loci in the cognitive system, but... some attributes that contents and information processing acquire based on the presence or absence of the linguistic description associated to them” (David, D., 2014, p.49).

Anthropologists have reached the conclusion that most of the daily activities carried out by individuals are influenced by the unconscious (Brazdău, 2011).

Of course, awareness is important. Its relationship, however, with the most severe of the early maladaptive schemas (four of the five in the domain of DISCONNECTION and REJECTION), as well as its importance for personal development, is something the current study aims to determine.

## 2. OBJECTIVE AND HYPOTHESES

### 2.1. OBJECTIVE

The objective of the research is to make correlations between (early maladaptive) cognitive schemas and the awareness capacity.

### 2.2. HYPOTHESES

Research hypotheses: There are negative correlations between the early maladaptive schemas considered as the most powerful and harmful four schemas of

the total of 18 described by Young (Abandonment/ Instability; Mistrust/ Abuse; Emotional Deprivation and Defectiveness/ Shame) and the capacity for awareness.

### **3. METHOD**

#### **3.1. PARTICIPANTS**

The research was conducted on a number of 101 subjects, females, aged between 18 and 35 years old, both freshman and senior year in the Faculty of Letters and Sciences of the Petroleum Gas University of Ploiesti.

#### **3.2. INSTRUMENTS**

One of the instruments used for the purpose of this research is the Young Schema Questionnaire - Short Form Version 3 (YSQ-S3).

Also, content analysis was used in this research. Subjects were asked to answer two questions:

1. What does “being aware” mean to you? State your answer in a few lines.
2. From your point of view, how many types of awareness are there? Give an example for each identified category, by speaking about yourselves in a few lines.

The materials obtained were analysed in terms of three basic criteria according to which the awareness capacity was defined. These criteria are: personal mechanisms, relationships and sanctions/ consequences. Each criterion was considered to correspond to a certain degree of awareness, so that the higher the number of criteria identified in the materials of each subject, the greater their capacity for awareness. Thus, for no awareness criterion identified in the text, the subject scored 1 point, for one criterion they scored 2 points, for two criteria they scored 3 points, for three criteria they scored 4 points. This was done to achieve the value match between the scoring of the first research tool that was used, the YSQ-S3. Thus, in using the YSQ-S3 a value was assigned to each score of the maladaptive cognitive schemas as follows: 1 for a low score as per the scoring sheet, 2 for a medium score, 3 for a high score and 4 for a very high score.

#### **3.3. EXPERIMENTAL DESIGN**

The subjects were informed regarding the voluntary nature of their participation in the research. Each participant received the YSQ-S3 form with 114 items, as well as the set of two questions, to which the subjects were asked to answer in writing, and on the basis of which the content analysis was done to highlight the operationalization of the awareness capacity. The subjects were informed regarding the purpose of the study and they were told they would have access to the research results based on their status as participants. They were given

one hour to work on the materials, as the author deemed the average length of time for completing the YSQ-S3 questionnaire was 25 minutes. The subjects were instructed on how to answer to both the questionnaire and the questions, and further explanations were provided where appropriate.

Rating the answers to the YSQ-S3 questionnaire was done in accordance with the test manual. For the content analysis, a series of operationalization criteria has been attempted successively. In the end, the analysis focused on different content domains for the awareness experience, capturing the complexity of this process through the following criteria: psychological mechanisms, relationships, sanctions. The maximum numbers of criteria met by the content developed by each subject was considered to be consistent with a very high score in awareness capacity, a high score was assigned to those meeting two content criteria, a medium score for one criterion and a low score was assigned to the written content that was lacking those criteria altogether.

The cognitive theory of consciousness developed by Bernard Baars, professor at the Wright Institute in Berkeley, California inspired the criteria which the awareness capacity has been operationalized on. The merit of this theory is to have highlighted how the conscious and unconscious processes function in our psyche. The theory provided a solid base in developing the operational criteria for the awareness capacity our study deals with.

According to this theory, the “Global Workspace Theory” (Baars, 1997b, apud Brazdau, 2011), the content of our consciousness is kept into a so-called “global workspace”, a central processor whose role is to mediate communication between specialized unconscious processors. The global workspace area receives signals from these processors when they wish to broadcast information to the entire psychic system and distribute it to the other processors, making the information available to the entire system.

According to Baars’ theory, at any one point, we are fully aware of one single element, interior or exterior to us.

The examples provided by Baars regarding the content a person can become aware of proved very helpful in the selection operated. Here are included: elements perceived from the environment, visual imagery, or the inner speech of each individual. Other examples provided in this respect are: the present and traces that remain stored in the immediate memory, feelings, sensations, bodily perceptions, recalling of past events, expectations and actions, immediate intentions, beliefs about the self, world and life (Brazdău, 2010). All these contents have the potential to be brought into awareness. Closely connected to mental capacities, the awareness capacity is, however, according to this theory, limited by attention and immediate memory.

The human brain limits consciousness to a single information stream. This theory underlines the existence of a large number of unconscious processes taking place in the immediate vicinity of the conscious area.

Baars (1997a) compares the mind to a theatre. The contents of consciousness are the actors; voluntary attention is controlling the spotlights. The spotlight itself is consciousness, our awareness capacity. The unconscious represents the area outside the space where spotlights focus, the audience and the theatre staff.

The task assigned to participants in this study – to list domains of awareness from their perspective, as well as to provide personal examples in this respect – made them focus on aspects which, of course, would fall into this immediately conscious level Baars speaks of in his theory. Its richness gave us the chance to uncover among the content expressed by participants elements from their conscious regions that cross the theoretical plane of conscious content in direct correlation with the topic of our research.

Thus, questions like *why mechanisms, why relationships, why sanctions?* are answered. All of this with direct reference to the criteria according to which the awareness capacity was operationalized. It is about a psychological content that is supposed to be limited in its capacity of awareness, of toxic relationships with caregivers in the first years of life. The early maladaptive cognitive schemas, as systems of dysfunctional relationships, include content about relationships, the child's anticipation that their needs for security, stability, empathy, care, emotional reciprocity, respect, and acceptance will not be met in a predictable manner. The pattern of the family of origin that generates cognitive schemas in the domain Disconnection/ Rejection is a structure that is detached, critical, cold, explosive, lonesome, abusive or unpredictable.

#### 4. RESULTS

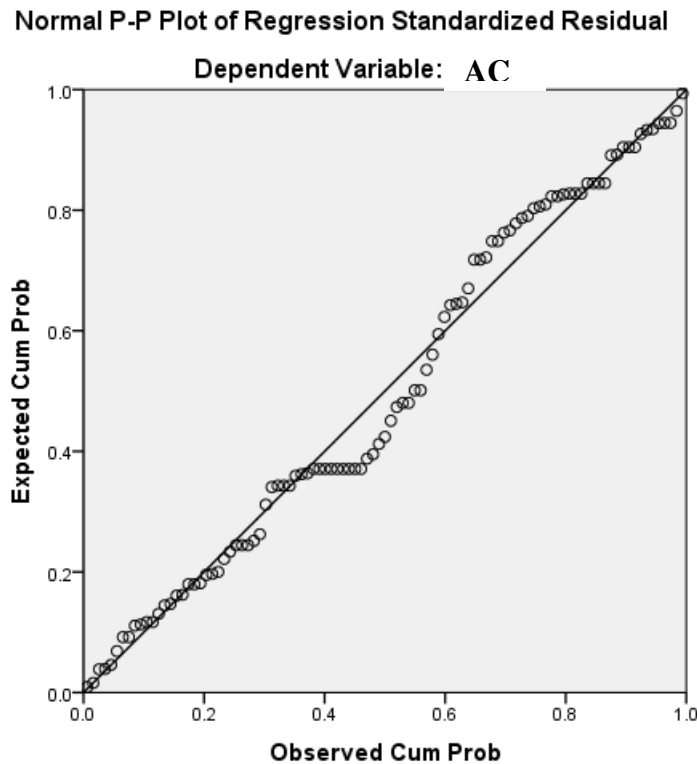
Early maladaptive schemas from the domain DISCONNECTION and REJECTION – the four ones analysed by us: Abandonment/ Instability (AB), Defectiveness/ Shame (DS), Emotional Deprivation (ED), Mistrust/ Abuse (MA) – define a quasi-linear relationship with the awareness capacity (AC) – also our topic of interest for the purpose of this research. The existence of a negative correlation is noted between the set of independent variables and the dependent variable AC, as there has already been anticipated in the hypothesis of the current research.

The statistical analysis applied separately on each early maladaptive schema in relation to the awareness capacity, provides us, each time, with the unitary picture of an inversely proportionate relationship. The Pearson product-moment correlation coefficient was calculated to evaluate the relationship between each early maladaptive scheme in relation to the awareness capacity. There was a negative correlation between the cognitive schema AB (Abandonment / Instability) and AC (capacity for awareness),  $r = -0.185$ ,  $df = 99$ ,  $p < 0.001$ , which is a poor correlation. Same for the correlation of the DS schema (Defectiveness/ Shame) with AC, which showed the following values:  $r = -0.22$ ,  $df = 99$ ,  $p < 0.001$  and for the cognitive schema ED (Emotional Deprivation) in relation to AC which showed

values such as:  $r = -.30$ ,  $df = 99$ ,  $p < 0,001$ ). By correlating the fourth early maladaptive schema, Mistrust/ Abuse (MA), with the capacity of awareness, the following values resulted:  $r = -0.71$ ,  $df = 99$ ,  $p < 0,001$ .

A scatterplot summarizes these results (Figure 1).

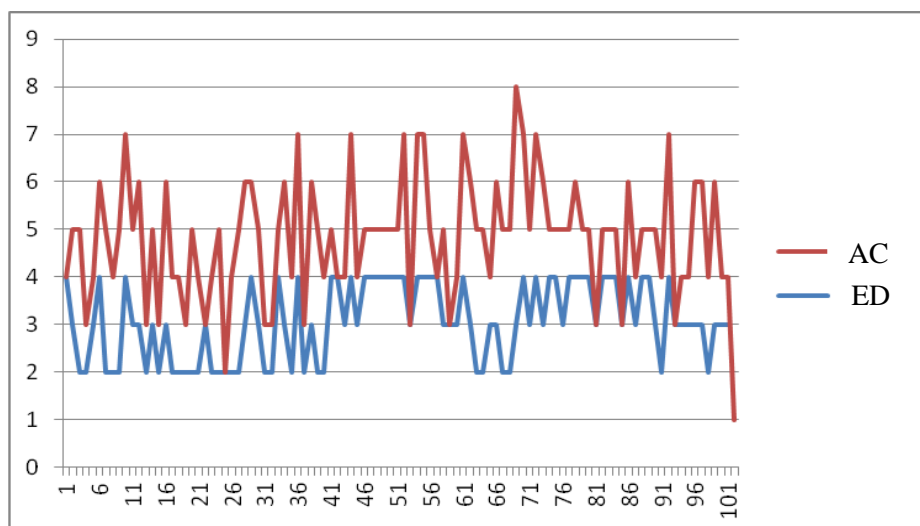
Figure 1. Multiple regressions (ED, AB, MA, DS to AC)



We provide below an example of a chart representation of the results (Figure 2), thus underlying the negative correlation captured between the awareness capacity (AC) and the early maladaptive schemas (in our example, ED).



Figure 2. Chart representation of ED's correlation with AC



## 5. CONCLUSIONS

As showed by the outcome of the research, the statistically reduced significance for the negative correlation between the early maladaptive schemas and the capacity for awareness can suggest that a significant healthy relationship can increase access to the unconscious content of the psyche even for individuals whose early onset in life has been under the influence of harmful experiences, either as frustrations or as traumatization or victimisation, over-protective experiences or selective internalization of the thoughts, feelings or behaviours of the significant toxic adult in their life. Between the capacity of awareness and the most toxic maladaptive patterns seems to be a significant relationship in terms of their tangibility as parts that contribute to the consistency of the same individual psychological construct that is the human personality as internal and external relational structure. As Baars theory shows, the fact that we are aware only of some parts of the psychic elements and sub-systems, which are, in fact, closely related, does not necessarily mean that what we are aware of is the essence or that only what we are aware of has effects on the whole. Our nervous system seems to prefer a decentralized operation system, as work is assigned to local processors. Consciousness only creates an access gate to the unconscious mind, it does not control the psychic functions and processes, underlines Baars (Brazdău, 2010). It seems the opportunity to heal ourselves is in us; we have the right to healthy relationships, irrespective of the type of relationships available to us at the beginning of our lives, when freedom of choice was seriously limited. Awareness is, for the outcome of our study and others, an element of mediation and not a

result, a chance and not a privilege, an internal relational resource that can be objectified at any time in new behaviours, adapted to the current circumstances, to conscious, assumed, real life situations.

In the future, there are plans for a study on the capacity for awareness in relation to the early maladaptive cognitive schemas that would include a larger number of operational criteria for the conscious psychological content. Also, the intention is to involve a larger number of subjects in a future research on this topic.

In the same respect, the Awareness Assessment Scale, the research instrument designed by Brazdău (2011) with the purpose of measuring the awareness capacity, retains the attention for a future research of a larger extent than the one conducted for the purpose of this study.

*Received at: 20.05.2018, Accepted for publication on: 28.05.2018*

## REFERENCES

- Baars, B. (1997a). In the Theatre of Consciousness. Global Workspace Theory. *Journal of Consciousness Studies*, nr.4, pp. 292/309.
- Baars, B. (1997b). *The Workspace of the Mind*. Oxford: Oxford University Press.
- Bloch, H., Chemama, R., Depret, R., Gallo, A., Leconte, P., Leny, J- F., Postel, J., Reuchlin, M. (2006). *Larousse- Marele dicționar al psihologiei*. București: Trei.
- Brazdău, O. (2010). *Experiența conștientizării. Teorii și cercetări moderne privind stările de conștiență*. București: Info- Sănătate.
- Brazdău, O. (2011). *Coeficientul de conștientizare*. București: Info- Sănătate.
- David, D. (2014). *Prelucrări inconștiente de informație*, București: Tritonic.
- Elliott, C. H. & Lassen, M. K. (1997). A schema polarity model for case conceptualization, intervention, and research. *Clinical Psychology: Science and Practice*, 4, pp.12-28.
- Iluț, P. (2001). *Sinele și cunoașterea lui*. Iași: Polirom.
- Iluț, P. (2009). *Psihologie socială și sociopsihologie*. Iași: Polirom.
- Metzinger, T. (2015). *Tunelul eului*. București: Humanitas.
- Piaget, J. (1988). Psihogeneza cunoștințelor și semnificația ei epistemologică, în *Teorii ale limbajului. Teorii ale învățării. Dezbateri dintre Jean Piaget și Noam Chomsky*. București: Editura Politică.
- Young, J. (1990). *Cognitive therapy for personality disorders*. Sarasota, FL: Professional Resources Press.
- Young, J., Klosko, J., Weishaar, M. (2015). *Terapia centrată pe scheme cognitive*. Cluj- Napoca: Editura ASCR.
- Young, J.E. & Brown, G. (2001). *Young Schema Questionnaire. Special Edition*. New York: Schema Therapy Institute.
- Thimm, J. (2017). Relationships between Early Maladaptive Schemas, Mindfulness, Self-compassion, and Psychological Distress. *International Journal of Psychology and Psychological Therapy*, 17 <http://www.redalyc.org/html/560/56049624001>. Consulted on 17.06.2017, at 9:38 pm

**Copyright:** Submission of a manuscript implies that the work described has not except in the form of an abstract or as part of a published lecture, been published before (or thesis) and it is not under consideration for publication elsewhere; that when the manuscript is accepted for publication, the authors agree to automatic transfer of the copyright to the publisher.

---