

# INFLUENCE OF COGNITIVE FACTORS ON RISK BEHAVIORS

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**Abstract:** This work is part of the concerns about the implications of certain psychological factors on the behavior of maintaining and preventing health. The latest findings in the medical world show that among the most important determinants of health are physical activity, healthy eating and avoidance of excessive consumption of substances. Also, statistics produced both in the country and at the European level indicate that a significant percentage among young people is adopting more and more frequent behaviors such as alcohol consumption, smoking, excessive coffee consumption and other energy drinks, a sedentary life, and uses an unhealthy diet. These considerations have prompted us to choose this theme, considering that it is relevant and useful to know certain psychic aspects that may relate to such behaviors. We have tried to study the implications that the disadaptive attribution style (internally, stably and globally negative), negative thinking, life satisfaction, perception of problem solving ability have on risk behaviors referred to in this work as risk behaviors. In the first part of the theoretical foundation we presented some of the concepts used by health psychology such as the concept of health, illness, lifestyle, well-being, preventive behaviors and risk behaviors.

**Key words:** psychological factors, risk behaviors, illness, lifestyle

## **Theoretical framework**

In the category of risk behaviors, the literature introduces behaviors such as alcohol, tobacco, caffeine, sedentary, unhealthy food. In the second part of the theoretical foundation we presented the cognitive factors involved in health: the attributive style, the negative thinking, the perception of the problem solving capacity and the satisfaction in life. According to the attribution theory it is considered that attribution is the way people explain the meaning and cause of their own behavior and the likelihood of influencing and controlling life events, the assignments start from the need to explain the environment in which individuals live to explain the cause of what and the need to have an accurate representation of reality. Negative thinking is characterized by a general, relatively stable tendency to have a negative conception or vision of the future, and negative expectations about the effect of the actions taken. Persons with a negative view of life are people who systematically infer that the negative events they are experiencing are produced from stable and global causes are characterized by hopelessness and by a catastrophic assessment of the consequences of these negative events in their own life, they are convinced that these events are due to the fact that they are incapable or do not have enough abilities or resources to block the unfolding of these events. People who have confidence in their problem-solving capacity are making more effort to solve them than people who doubt their own abilities that give up very easily when difficulties arise. Life satisfaction refers to the extent to which individuals assess the quality of their own lives through criteria they have set. People with a high level of life satisfaction are considered to be optimistic about life, socially and physically positive assessment of the environment, investing more effort to prevent problems or to transform them, to enjoy life more, to adjust more effectively behavior towards stress and illness. In the methodology we tried to study the impact of negative attributions on risk behaviors, then we tried to see to what extent the interaction between negative thinking on one's own person and perceived control mediated unhealthy behaviors, and in the last part of research I tried to see to what extent the despair according to the attribution theory correlates with the confidence in their own problem-solving capacity and the risk behaviors.

In this study we aim to analyze the implications of the disadaptive attributive style (negative internally, stable and global), negative thinking, life satisfaction and the perception of problem solving ability on risk behaviors.

## **Hypotheses**

**H1.** We assume that students who have a disadaptive attribution style (internally, steadily and globally negative) will more frequently exhibit risk behaviors.

**H2.** We assume that students who have a negative thinking about their own person and a low perceived low control of the problems will manifest more frequently behaviors of risk.

**H3.** We assume that there is a relationship between the level of despondency, the confidence in the perceived problem-solving capacity and the risk behaviors.

Our study was attended by 122 students from the "Mihai Viteazul" High School in Ineu, representing the 12th grade students.

### **Instruments**

Attribution Style Questionnaire, Inventory of Problem Solving, Cognitive Triad and Risk Behaviors Questionnaire.

I made a questionnaire to measure the frequency with which respondents practice pathogenetic behaviors. In the category of pathogenetic behaviors, we introduced the item which refers to the lack of concern about health, lack of physical activity, unhealthy nutrition, and consumption of substances such as alcohol, tobacco, coffee. An example of an item would be "How often do you do physical activities?" Respondents have the choice of one of the 5 ways of responding: 1 - daily 2 - once every 2 days 3 once every 3-4 days 4 once a week 5 less frequently. Depending on the score, they were ranked in the low vs. high risk category. After statistical processing, we excluded items that did not ask for each other and we calculated internal consistency by obtaining a Cronbach alpha coefficient of .68.

### **Results and their interpretation**

#### *Study 1. Implications of attribution style on risk behaviors*

In order to verify the first hypothesis, we conducted a comparison study between the disadaptive attribution style (internal, stable and global negative) and the frequency of pathogenetic behaviors, the results are presented below.

We used a one-factor quasi-experimental design for hypothesis 1.

**Tabel 1.1/ Data distribution**

|                  | K-S   | p    |
|------------------|-------|------|
| Risk behaviors   | 1.119 | .737 |
| Assignment style | .685  | .164 |

The distribution of data on the two variables is symmetric at the population level (KS = 1.119,  $p > .05$  for risk behaviors and KS = 685,  $p > .05$  for the assignment style variable) which allows us to use parametric methods, namely the significance t. The results are presented in the following tables:

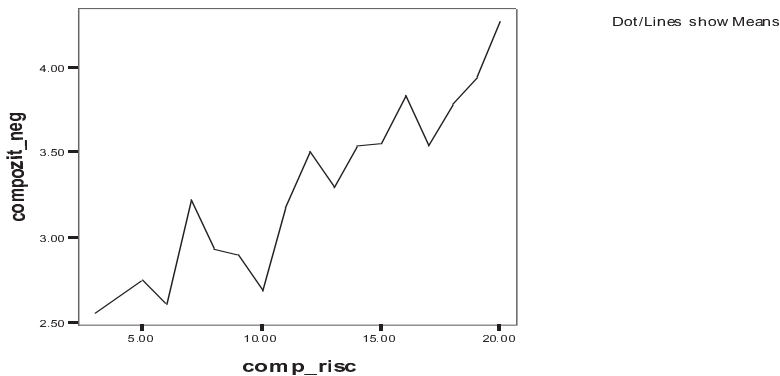
**Table 1.2. Statistics indices for risk behavior variables**

|                |      | N  | Average | Standard deviation | Dispersion |
|----------------|------|----|---------|--------------------|------------|
| Risk behaviors | low  | 65 | 1.32    | .471               | .058       |
|                | high | 57 | 1.68    | .469               | .062       |

As can be seen from the table above, those with a disadaptive attribution style (internally, stably and globally negative) record a higher average of the frequency of risk behaviors Tabel 1.3. Test t for comparing attribution style and risk behaviors

| t.     | df  | p.   |
|--------|-----|------|
| -4.232 | 120 | .000 |

Based on the significance test, we can see that with a disadaptive attribution style (internally, stably and globally negative) it contributes statistically significant ( $t = -4.232$ ,  $p < .01$ ) to the frequency with which students exhibit pathogenetic or risk behaviors on health.



The way in which people explain their positive or negative events, determines their explanatory style, which may be optimistic or pessimistic (Peterson 2000 apud Marian and Cioara 2009), a negative attributing style is considered to have repercussions on the pessimistic style of thinking.

*Study 2. The role of perceived control and self-reflection on risk behaviors.*

To verify the second hypothesis, we have conducted a comparison study between negative or positive thinking about oneself, perceived problem control, and risk behaviors. The results are presented below:

**Table 2.1. Data distribution**

|                        | K-S   | p    |
|------------------------|-------|------|
| Negative thinking      | 1.086 | .189 |
| Problem-solver control | .976  | .297 |

The distribution of the data on the two variables is symmetrical in the population (K-S = 1.086,  $p > .05$ ) for the negative self-negative variable and (K-S = .976,  $p > .05$ ) for the problem-solver control variable.

**Table 2.2. Variable statistics indicate perceived control and negative thinking**

| The image of one's own person | Problem-solver control | Average | Stand. Dev. |
|-------------------------------|------------------------|---------|-------------|
| Negative thinking             | low                    | 1.50    | .506        |
|                               | high                   | 1.43    | .507        |
| Positive thinking             | high                   | 1.22    | .422        |
|                               | low                    | 1.68    | .471        |

As can be seen from the table above, people who have a negative thinking or vision about their own person and perceive having low control over problem solving more often exhibit risk behaviors compared to those who have a positive vision and control high perceived problem solving.

**Table 2.3. The Levene test for variance homogeneity.**

| F    | df1 | df2 | Sig. |
|------|-----|-----|------|
| .446 | 3   | 118 | .720 |

Homogeneity of variants can be assumed because we have a significance threshold  $p = .720$  higher than the critical threshold  $p = .05$

**Table 2.4. Interaction between negative thinking on one's own person and perceived control of problem-solving on risk behaviors (ANOVA summary).**

| Variable          | F     | Significance |
|-------------------|-------|--------------|
| Negative thinking | .022  | .882         |
| Perceived control | 4.751 | .031         |
| Image x control   | 8.804 | .004         |

As can be seen from the table above, the thought or the negative image of one's own person does not statistically influence ( $F = .022$ ,  $p > .05$ ) the

frequency with which the students practice risk behaviors, at the same time the perception of the control of the solution of individual problems has a significant statistical influence ( $F = 4.751, p < .05$ ) on the frequency of risk behaviors. A negative or positive thinking about one's own person is not a good predictor of risk behaviors but an interaction between this and the problem-solving control perception proves to be responsible for the frequency of adopting risk behaviors ( $F = 8.804, p < .01$ ).

People who are perceived as having control over stressful issues or situations are not defensive, they do not avoid problems and use adaptive coping strategies, unlike people who think they have no control over these situations, focusing on their disabilities and catastrophic interpretation of the problems considering them unresolved. People who consider themselves capable of exercising control over what is happening will tend to look for ways to deal with unpleasant events, unlike those who perceive problems as uncontrollable, having a passive and harmless way to react to them.

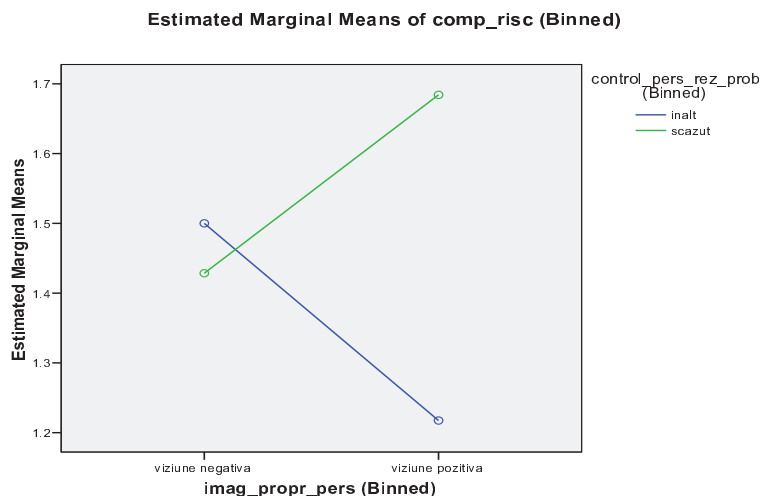


Figure 2.1 Graphically the interaction between perceived control, negative thinking and risk behaviors

*Study 3. Relationship between despair, confidence in problem-solving ability and risk behaviors.*

To verify the third hypothesis, we have conducted a correlation study between desperate variables, confidence in problem solving capability and risk behaviors, the results are presented below.

**Table 3.1.**  
**The distribution normality**

| Variable                              | K-S   | p    |
|---------------------------------------|-------|------|
| Despair                               | .739  | .646 |
| Confidence in problem-solving ability | .785  | .568 |
| Risk behaviors                        | 1.119 | .737 |

From the above table we can see that the distribution of the data is symmetrical in the population ( $KS = .739$ ,  $p > .05$ ) for the despicable variable, ( $KS = .785$ ,  $p > .05$ ) for the personal confidence variable in the solving capacity of problems, and ( $KS = 1.119$ ,  $p > .05$ ) for the variable risk behaviors.

**Table 3.2.**  
**Correlations about despair, confidence in problem-solving ability, and risk behaviors**

|                                       |   | Despair | Confidence in problem-solving ability | Risk behaviors |
|---------------------------------------|---|---------|---------------------------------------|----------------|
| Despair                               | R |         | .197                                  | .262           |
|                                       | P |         | .030                                  | .004           |
| Confidence in problem-solving ability | R | .197    |                                       | .147           |
|                                       | P | .030    |                                       | .105           |
| Risk behaviors                        | R | .262    | .147                                  |                |
|                                       | P | .004    | .105                                  |                |

As can be seen, despondency correlates with risk behaviors ( $r = .262$ ,  $p < .01$ ) and the confidence of problem solving ( $r = .197$ ,  $p < .05$ ), but confidence in problem solving does not correlate with risk behaviors ( $r = .147$ ,  $p > .05$ ).



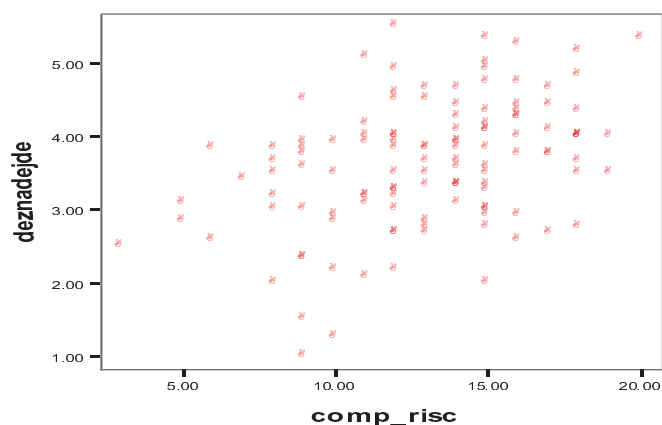


Figure 3.1. The cloud of points of despair variables and risk behaviors.

As can be seen, the cloud of points indicates that there is a relationship between the scores of the two variables, they are grouped in a linear direction, so as the level of despair increases, there is an increase in the frequency of risk behaviors. Persons despairing according to the theory of hopelessness or despair are characterized by negative expectations with regard to their future performance they believe they will not achieve the expected or projected results by themselves I think the results will be negative or aversive and that they do not have the ability or power to influence or modify the unfolding of these events. Despair is closely linked to the attribution of the failure of one's own inability to cope with difficult situations.

We can conclude that people with an internally negative, stable and global negative attribution style have a pessimistic explanatory style that consists of a certain type of explanation given to negative events or failure, namely personal, permanent and general, those who consider failure as something general and permanent come to introduce in the structure of self-beliefs the negative results of the actions performed and less the positive ones. The implications of an internal negative attribution style are aggravated by the association with a pessimistic style. People who have such a style are characterized by negative expectations about the effect of actions undertaken by these people, reacting to problematic situations and disappointments by renunciation, avoidance and denial. In contrast to the pessimistic style, optimism influences people's effort to influence or control the disease by focusing on information about risk factors, optimism being considered as a predictor of active coping in problematic situations.

The obtained results confirm the hypothesis that a thought or negative image about one's own person interacting with a perception of the low control

of problem solving mediates the frequency with which pupils enroll in the behavior of pathogenic behaviors, those who see the evolution of their own person in the future in negative terms of failure to fail or fail and perceived as having a low capacity to control these events tend to adopt more frequent behaviors such as smoking, alcohol consumption, are not concerned about their health status by the quality of the foods consumed . Unlike those who evaluate in negative terms the impossibility of incapacity, those who perceive having the ability to control stressful problems or situations are not defensive, they do not avoid problems and use adaptive coping strategies. People who consider themselves capable of exercising control over what is happening will tend to look for ways to deal with unpleasant events, unlike those who perceive problems as uncontrollable, have a passive and harmless way to react in front of them.

## References

- Breaz A.M. (2011). The Impact of Institutionalization on Delinquent Children. *Specto 2011* Timisoara. ([http://www.ristretti.it/commenti/2011/maggio/pdf1/conferenza\\_romania.pdf](http://www.ristretti.it/commenti/2011/maggio/pdf1/conferenza_romania.pdf)),
- David D. (2006). *Psihologie clinică și psihoterapie*. Iași: Editura Polirom.
- Eaton D., Kann L., Ross J., Harris W., Lim C., Wechsler H., (2006). Youth Risk Behavior Surveillance-United States. *Surveillance Summaries*. Vol 54/ No. SS-5.
- Iamandescu I.B. (2005). *Psihologie medicală*. București: Editura Infomedica.
- Johannes B., Jascha N. (2006). Predicting fruit consumption: Cognition, Intention and Habits. *Journal of Nutrition Education and Behavior*, Vol 38, nr 2, April, 34-56.
- Marian M., Cioară M. (2009). Optimism versus vulnerabilitate emoțională în adolescență. Efecte adaptative ale unui program destinat creșterii nivelului de optimism. *Analele Universității din Oradea, Fascicula Psihologie*, Vol. XV, 78-91.
- Rolison M., Scherman A. (2002). Factors influencing adolescents' decisions to engage in risk-taking behavior. *Adolescence*, 57, 585-596.
- Taylor A., Robin B., Kara L., Kriten E. (2009). Low-carbohydrate weight-lost diets. Effects on cognition and mood. *Appetite* 52, 96-113.