



THE IMPACT OF AGGRESSIVENESS ON COPING MECHANISMS

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Abstract

This research aims to explore the influence of aggressiveness on coping mechanisms and how different types of aggression relate to maladaptive coping mechanisms. It starts from the fact that aggression can influence the quality of individuals' relationships and personal satisfaction, as it may alter their reaction time and behavior. Therefore, we can say that aggression represents a differential factor in human conduct and a catalyst for deviance, from the perspective of social norms. The importance of coping mechanisms, in current research, is given by the similar natures, conceptually, of coping and aggression, both representing a direct action towards the problem. Managing aggression and identifying functional coping mechanisms, as well as dysfunctional ones, represent a subject of interest in light of the influence they have on individuals at a cognitive and behavioral level. This research will focus on the gradual and correlative identification of different types of aggression (physical aggression, fury/anger, hostility) as well as various coping mechanisms, such as cognitive coping and behavioral coping. Aggression and coping will be analyzed according to the gender of the respondents and correlated with each other. This paper encourages further research in the field of aggression psychology and coping mechanisms, underlining the importance of understanding the complexity of human behaviors and the factors that contribute to psychological resilience.

Keywords: aggression, coping mechanisms, adaptive mechanisms, maladaptive mechanisms

1. INTRODUCTION

The idea from which this research started was based on the curiosities and at the same time scientifically unsupported statements, which people have regarding the nature of aggression and its prevalence. Thus, the present research aims to identify the prevalence in terms of aggression and coping mechanisms and at the same time the correlative level between aggression and maladaptive coping mechanisms.

Aggression began to be studied over 50 years ago, when a team of researchers from Yale University published a book, which had as its subject the frustration-aggression hypothesis. Although this book was small, it had a huge impact on the social sciences, arousing a real interest in studying aggression (Berkowitz, 1987).

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Berkowitz (1987) defined aggression as any aggressive behavior (verbal or physical) that intends to harm someone.

Over the years, aggression has been a concept studied in several areas of psychology, being an important concept that has massive practical implications (Barlett & Anderson, 2012).

Aniței (2013) defined aggression as a behavior directed towards another individual to cause harm, an intentional behavior of the author. The concepts of impulsivity and aggression are important not only in psychiatric clinic, but also in everyday life.

Impulsivity is defined as the inability to resist an impulse, drive or temptation, this being harmful to oneself or others (Florin Tudose, Cătălin Tudose & Letiția Dobranici, 2011). Thus, impulsivity is at the basis of aggression. Florin Tudose, Cătălin Tudose and Letiția Dobranici (2011) consider that aggression is any form of behavior directed to harm or injure another person. Over the years, there have been several studies that have focused on researching human aggression and have reached conclusions that present the genetic heredity of aggression.

A meta-analysis of twin studies showed that 50% of the variables of human aggression are attributed to genes (Miles & Carey, 1997). Albert Bandura is the one who formulates the theory of social learning of aggression. According to this theory, aggressive behavior is learned. The model of aggressive behavior taken from the family will affect the good functioning of the individual.

Children who witness domestic violence have the same type of behavior in adulthood, in their own families (Foshee et al., 1999) According to the theories mentioned earlier, aggression is perceived as a direct action on a problem, which presents an active level and at the same time a similarity with the coping mechanisms that have exactly the same purpose, which gave this research the level of interest and similarity of the dimensions analyzed, in the present article.

Coping plays an important role in influencing the psychological and physical well-being of people, when they face negative or stressful life events (Aspinwall & Taylor, 1997).

Coping has been conceptualized, in general, as addressing a direct action to the problem or as actions and cognitions that influence the meaning of the problematic situation and people's emotional reactions to stress (Endler & Parker, 1990; Lazarus & Folkman, 1984). In the specialized literature, a distinction is made between two main functions of coping: cognitive coping, which represents thoughts about the problem or about oneself and behavioral coping, which represents behaviors about the problem or about oneself.

The importance of researching the correlations between various types of aggression and coping mechanisms is given by the similar nature, previously mentioned, of these two concepts, as well as through the prism of behavioral dimensions and the motor sphere in which they are externalized. Both behavioral dimensions, analyzed represent factors that affect the functionality of the individual, both at the intrapersonal and interpersonal level.

2. OBJECTIVE AND HYPOTHESES

2.1. OBJECTIVE

The objective of the current research is to discover the influence of aggression on maladaptive coping mechanisms and the correlative level of the two aforementioned dimensions. Our study focuses on three main aspects: identifying correlations between different forms of aggression and gender, exploring maladaptive coping mechanisms and how they differ between genders, with special attention given to the prevalence of specific behaviors of maladaptive coping, such as Indirect Action, Antisocial Action, and Aggressive Action. In addition, the study examines how various types of aggression, including Fury/Anger and Hostility, correlate with maladaptive coping mechanisms, providing a perspective on the interaction between aggressive traits and dysfunctional strategies for managing stress and emotional challenges.

2.2. HYPOTHESES

H1. We assume that the distribution of ranks of the level of physical aggression in men is different from the distribution of ranks of the level of physical aggression in women.

H2. We assume that there are statistically significant differences between men and women, in terms of maladaptive coping mechanisms (Indirect Action, Antisocial Action, Aggressive Action).

H3. We assume that there are statistically significant correlations between types of aggression (Fury/Anger, Hostility) and maladaptive coping mechanisms (Antisocial Action, Aggressive Action).

3. METHOD

3.1. GROUP OF PARTICIPANTS

The sample investigated consists of 124 respondents, with an average age of 30 years, 50% being men and 50% being women. In terms of the level of education, 58% of respondents have high school studies, and 42% have higher education. In the composition of the sample, from the point of view of marital status, there are 49% respondents who are not in a relationship and 51% respondents who are in a relationship.

3.2. INSTRUMENTS

1. AQ (aggression questionnaire) by Arnold H. Buss and Mark Perri, which aims to measure four dimensions of aggression. This instrument with 29 items measures four aspects of aggression: Physical Aggression, Verbal Aggression,

Fury/Anger, Hostility. At the same time, the questionnaire provides specialists in the field with a scorable measure of the total level of aggression of the respondents. The internal consistency of aq is very high. The cronbach's alpha coefficient had values of 85, 72, 83, and 77 for the pa, va, a, and h scales. The total score had an alpha value of 89.

2. SACS (Strategic Approach to Coping Scale) by Steven E. Hobfoll, Carla L. Dunahoo, Jeannine Monnier, Michael R. Hulsizer & Robert Johnson, which aims to evaluate the behavioral dimension of coping. This instrument with 59 items measures 9 coping mechanisms: Assertive Action, Social Relating, Seeking Social Support, Prudent Action, Instinctive Action, Avoidance, Indirect Action, Antisocial Action, Aggressive Action. The values of the cronbach's alpha coefficients vary in the non-clinical sample between 0.52 and 0.79.

3.3. THE PROCEDURE

The questionnaires were introduced on the Google Forms platform, and the respondents received an access link to complete them. The completion of the questionnaires was done online by the respondents, specifying that both the code of ethics and GDPR legislation were respected. All participants were instructed about the research and consented, being aware of the anonymity of their identity and the interest, along with the strictly statistical processing of the results.

3.4. RESEARCH DESIGN.

For the research design, the following variables were analyzed:

Dependent variables: Physical Aggression, Indirect Action, Antisocial Action, Aggressive Action, Fury/Anger, and Hostility.

Independent variables: gender

The research design follows the following model: $N_{1,2}: O_{1,2}$ Where N (1,2) represents the sample divided by gender; O (1,2) represents the responses to the two instruments used for measurements.

4. RESULTS

The analysis of the data obtained, after measuring different types of aggression (Physical Aggression, Fury/Anger, and Hostility) and coping mechanisms (Indirect Action, Antisocial Action, and Aggressive Action), highlighted the fact that male subjects present a degree of physical aggression 27.77% higher than female subjects. Regarding maladaptive coping mechanisms, male subjects show a greater predisposition, compared to female subjects, to use this type of mechanisms when they encounter a stressor. Regarding the correlative level of types of aggression (Antisocial Action and Aggressive Action) and maladaptive coping mechanisms (Fury/Anger and Hostility); aggression represents a facilitating factor for the appearance of maladaptive coping mechanisms, Fury/Anger represents a factor with a large effect on Antisocial Action, for a number of 124 respondents. The normality

analysis of the variables shows that most variables have a normal distribution, thus parametric and non-parametric statistical tests were used.

4.1. TABLES

H1. We assume that the distribution of ranks of the level of physical aggression in men is different from the distribution of ranks of the level of physical aggression in women.

Table 1 – Results of the Mann-Whitney test for H1

| Ranks | | | | |
|---------------------|--------|-----|-----------|--------------|
| | Gender | N | Mean Rank | Sum of Ranks |
| Physical Aggression | Male | 62 | 70,11 | 4347,00 |
| | Female | 62 | 54,89 | 3403,00 |
| | Total | 124 | | |

| Test Statistics^a | |
|------------------------------------|---------------------|
| | Physical Aggression |
| Mann-Whitney U | 1450,000 |
| Wilcoxon W | 3403,000 |
| Z | -2,363 |
| Asymp. Sig. (2-tailed) | ,018 |

a. Grouping Variable: Gen

The statistical results show that the average rank for men in Physical Aggression, denoted as m_1 , is 70.11, while the average rank for women, denoted as m_2 , is 54.89.

The statistical analysis of these values, where the p-value of 0.018 is less than the standard threshold of 0.05, indicates a significant difference between men and women in terms of the distribution of ranks of physical aggression. Moreover, considering that m_1 is smaller than m_2 , we can conclude that the alternative hypothesis, H1, is confirmed.

The conclusion is supported by the Z value, which does not fall within the standard range of ± 1.96 , having a value of -2.36. This leads us to reject the null hypothesis. In addition, the p-value of 0.018, being smaller than 0.05, reinforces the decision to reject H0.

Therefore, the alternative hypothesis H1 is retained, thus accepting the existence of a difference in the distribution of physical aggression between the two samples analyzed: Men and Women.

H2. We assume that there are statistically significant differences between men and women, in terms of maladaptive coping mechanisms (Indirect Action, Antisocial Action, Aggressive Action).

Table 2 - Results of the t-test for independent samples for H2

| Group Statistics | | | | | | | | | | |
|-------------------|--------|----|-------|----------------|-----------------|--|--|--|--|--|
| | Gen | N | Mean | Std. Deviation | Std. Error Mean | | | | | |
| Indirect Action | Male | 62 | 12,76 | 4,245 | ,539 | | | | | |
| | Female | 62 | 11,13 | 4,123 | ,524 | | | | | |
| Antisocial Action | Male | 62 | 14,16 | 4,484 | ,569 | | | | | |
| | Female | 62 | 12,13 | 4,579 | ,582 | | | | | |
| Aggressive Action | Male | 62 | 15,11 | 4,149 | ,527 | | | | | |
| | Female | 62 | 13,31 | 3,505 | ,445 | | | | | |

| Independent Samples Test | | | | | | | | | | |
|--------------------------|-----------------------------|---|------|------|--------|------------------------------|-----------------|-----------------------|---|-------|
| | | Levene's Test for Equality of Variances | | | | t-test for Equality of Means | | | | |
| | | F | Sig. | t | df | Sig.(2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| Indirect Action | Equal variances assumed | ,180 | ,672 | 2,16 | 122 | ,032 | 1,629 | ,752 | ,141 | 3,117 |
| | Equal variances not assumed | | | 2,16 | 121,89 | ,032 | 1,629 | ,752 | ,141 | 3,117 |
| Antisocial Action | Equal variances assumed | ,011 | ,917 | 2,49 | 122 | ,014 | 2,032 | ,814 | ,421 | 3,643 |
| | Equal variances not assumed | | | 2,49 | 121,94 | ,014 | 2,032 | ,814 | ,421 | 3,643 |
| Aggressive Action | Equal variances assumed | 1,22 | ,271 | 2,61 | 122 | ,010 | 1,806 | ,690 | ,441 | 3,172 |
| | Equal variances not assumed | | | 2,61 | 118,67 | ,010 | 1,806 | ,690 | ,441 | 3,172 |

The interpretation of the results offers us a perspective on different coping mechanisms. Regarding Indirect Action, we observe that the average for men, denoted as m1, is 122.00, while the average for women, m2, is 121.90.

The p-value of 0.032, being below the threshold of 0.05, indicates a significant difference between genders in terms of this maladaptive mechanism. Also, m1 being smaller than m2, leads us to confirm hypothesis H2.

Analyzing Antisocial Action, we find that the average for men, m1, remains 122.00, while the average for women, m2, is 121.95. A p-value of 0.014, again below the limit of 0.05, suggests a significant difference between genders regarding this maladaptive coping mechanism. In addition, m1 being smaller than m2, supports the confirmation of hypothesis H2.

Regarding Aggressive Action, the average for men, m1, is 122.00 compared to the average for women, m2, of 118.68. With a p-value of 0.010, which is below the threshold of 0.05, a significant difference between genders in terms of this maladaptive mechanism is highlighted. In this case too, m1 being smaller than m2, allows us to affirm that H2 is confirmed.

The conclusion that emerges from these data is that men show a higher degree of maladaptive coping mechanisms compared to women.

H3. We assume that there are statistically significant correlations between types of aggression (Fury/Anger, Hostility) and maladaptive coping mechanisms (Antisocial Action, Aggressive Action).

Table 3 - Results of Pearson correlations for H3

| | | Correlations | | | |
|-------------------|---------------------|---------------------|-----------|-------------------|-------------------|
| | | Fury/Anger | Hostility | Antisocial Action | Aggressive Action |
| Fury/Anger | Pearson Correlation | 1 | ,640 | ,486 | ,408 |
| | Sig. (2-tailed) | | ,000 | ,000 | ,000 |
| | N | 124 | 124 | 124 | 124 |
| Hostility | Pearson Correlation | ,640 | 1 | ,507 | ,414 |
| | Sig. (2-tailed) | ,000 | | ,000 | ,000 |
| | N | 124 | 124 | 124 | 124 |
| Antisocial Action | Pearson Correlation | ,486 | ,507 | 1 | ,787 |
| | Sig. (2-tailed) | ,000 | ,000 | | ,000 |
| | N | 124 | 124 | 124 | 124 |
| Aggressive Action | Pearson Correlation | ,408 | ,414 | ,787 | 1 |
| | Sig. (2-tailed) | ,000 | ,000 | ,000 | |
| | N | 124 | 124 | 124 | 124 |

. Correlation is significant at the 0.01 level (2-tailed).

Table 4 - Descriptive analysis for H3 variables

| Descriptive Statistics | | | | | |
|-------------------------------|-----|---------|---------|-------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| Fury/Anger | 124 | 9 | 32 | 19,32 | 5,596 |
| Hostility | 124 | 8 | 39 | 20,31 | 7,321 |
| Antisocial Action | 124 | 5 | 25 | 13,15 | 4,627 |
| Aggressive Action | 124 | 8 | 25 | 14,21 | 3,931 |
| Valid N (listwise) | 124 | | | | |

In our study, we examined the relationship between Fury/Anger and Antisocial Action, where we observed a strong positive correlation, with a coefficient $r=0.640$, indicating a significant link between the two variables. This association is supported by a p-value of 0.001, which is well below the standard threshold of 0.05, thus confirming the statistical significance of the correlation. Moreover, the determination coefficient $d\text{Cohen}=1.20$ suggests that there is a large effect size, in support of the previous statement comes the p-value which is well below the significance threshold, thus demonstrating that the variance of Fury/Anger has both a practical and statistical effect on Antisocial Action.

A similar analysis of the relationship between Fury/Anger and Aggressive Action, for 124 respondents, revealed a good positive correlation, with a coefficient $r=0.408$. This indicates a moderate relationship between the two variables, and the p-value of 0.001 confirms the statistical significance of this correlation. The determination coefficient $d\text{ Cohen}=1.06$ presents a large effect size, in support of the previous statement comes the p-value which is well below the significance threshold, thus demonstrating that the variance of Fury/Anger has both a practical and statistical effect on Aggressive Action.

In addition, we explored the link between Hostility and Antisocial Action, where we discovered a good positive correlation, with a coefficient $r=0.507$, for 124 respondents. This reflects a moderate to strong relationship, and the p-value of 0.001 underlines the statistical significance of the finding. According to the determination coefficient $d\text{ Cohen}=1.17$, Hostility presents a large effect size when correlated with Antisocial Action, the p-value which is well below the significance threshold, thus demonstrating that the variance of Hostility has both a practical and statistical effect on Antisocial Action.

Finally, examining the relationship between Hostility and Aggressive Action, we identified a good positive correlation, with a coefficient $r=0.414$, for the same number of respondents. The p-value of 0.001 indicates a statistical significance, and the determination coefficient $d\text{ Cohen}=1.04$ suggests that there is a large effect size, in support of the previous statement comes the p-value which is well below the significance threshold, thus demonstrating that the variance of Hostility has both a practical and statistical effect on Aggressive Action. The results indicate a statistically and practically significant association between types of aggression and maladaptive coping mechanisms.

The strongest correlation was observed between Fury/Anger and Antisocial Action. In all cases, the very small p-values of 0.001 support the hypothesis that there is a significant relationship between variables. These findings suggest that Fury/Anger and Hostility can be important predictors of maladaptive behaviors, such as Antisocial and Aggressive Actions. However, there are also other factors that contribute to these behaviors, given that $d\text{ Cohen}$ is over 1 in all cases, we have large effect sizes that provide certainty of both statistical and practical effects. However, there is a need to explore other variables that might influence maladaptive coping mechanisms.

5. CONCLUSIONS

The conclusion of our research highlights significant differences between genders in terms of the manifestation of aggression and the use of maladaptive coping mechanisms. The data analyzed suggest that men tend to show a degree of physical aggression 27.77% higher than women and are more prone to resort to maladaptive coping mechanisms in stressful situations.

Given that Cohen's d is over 1 in all cases, we have large effect sizes that provide certainty of both statistical and practical effects. This underlines the role of

aggression as a facilitating factor for the emergence of maladaptive coping mechanisms.

The statistical analysis confirmed the significance of these correlations, with p-values significantly below the standard threshold of 0.05, and revealed a significant difference between men and women in terms of the distribution of ranks of physical aggression. The Z value of -2.36, which does not fall within the standard range of +/- 1.96, leads us to reject the null hypothesis and accept the alternative hypothesis H1, which asserts the existence of a difference between the two samples analyzed.

Also, we observed that men have a greater tendency to adopt Indirect Action and Antisocial Action as coping mechanisms, compared to women. These findings are supported by the statistical results that show significant differences between genders, with men having lower rank averages than women for these behaviors. In conclusion, our study contributes to the existing literature by highlighting gender differences in the manifestation of aggression and the use of maladaptive coping mechanisms.

I would like to mention that recent scientific studies provide significant insights into the impact of aggression and coping mechanisms. One study examined gender differences in coping strategies and their relationship with anxiety during the COVID-19 lockdown. It was found that women experienced higher levels of anxiety and were more likely to use coping strategies such as acceptance, self-distraction, and emotional support compared to men. Men reported higher levels of anxiety when using active coping, while women reported lower levels of anxiety with high acceptance and positive reframing (MDPI, 2023).

Another study focused on the relationship between emotional processes, cognitive regulation strategies, and various forms of aggression (physical, verbal, relational). It was found that anger and hostility are closely related to all forms of aggression, and higher use of maladaptive emotional regulation strategies correlated with higher levels of trait aggression (SpringerLink, 2024).

The results underline the importance of considering gender differences in therapeutic approaches and in prevention and intervention programs for maladaptive behaviors. Also, they pave the way for future research to explore other variables that could influence these behaviors, providing a deeper understanding of the dynamics between aggression and coping mechanisms.

REFERENCES

- Albu, O. B. (2010). *SACS- Scala de aprdare strategică a coping-ului*. Cluj-Napoca: ASCR.
- Aspinwall, L.G., Taylor, S.E. (1997). A stitch in time: self-regulation and proactive coping. *Psychol. Bull.* 121: 417-36.
- Barlett, C.P. și Anderson, C.A. (2012). Direct and indirect relations between the Big 5 personality traits and aggressive and violent behavior. *Personality and Individual Differences*, 5(2), 159-172.
- Berkowitz, L. (1987). Frustrations, Appraisals, and Aversively stimulated aggression. *Aggressive Behavior*, 14, 3-11

Endler, N.S., Parker, J.D.A. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology*, 58, 844-854

Florin Tudose, C. T. (2011). *Tratat de psihopatologie și psihiatrie pentru psihologi*. București: Trei.

Foshee, V.A., Bauman, K.E., & Linder, G.F.(1999). *Family violence and the perpetration of adolescent dating violence: Examining social learning and social control processes*. *Journal of Marriage and the Family*, 61(2), 331-342.

Gâtej, L. M.-R. (2019). *Psihologie și psihopatologie socială*. București: SPER.

Lazarus, R.S., Folkman, S. (1984). *Stress, Appraisal and Coping*. New York: Springer

Mihai Aniței, M. C. (2016). *Tratat de psihologia personalității*. București: Trei.

Miles, D.R. și Carey, G. (1997). Genetic and environmental architecture on human aggression. *Journal of Personality and Social Psychology*, 72(1), 207-217.

MDPI (2023). Abstract. This population-based study investigated gender differences in the use of coping strategies and their relationship to anxiety symptoms during the initial COVID-19 lockdown period in the United States. *International Journal of Environmental Research and Public Health*, 20(2), 993. Retrieved from

<https://www.mdpi.com/1660-4601/20/2/993>

SpringerLink (2024). The study's objective was to assess how emotional processes and the habitual use of maladaptive cognitive emotion regulation strategies are associated with trait aggression. *Current Psychology*. Retrieved from

<https://link.springer.com/article/10.1007/s12144-024-05724-z>

Links accessed on 21.07.2024

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