

Aggressive Behaviors and Depression: What are the linked? A Case Study among Drug Abuser

Syafiq M.S¹, Lukman Z.M.², Nurun Saadah S.³

^{1,2,3}*Faculty of Applied Social Sciences, University Sultan Zainal Abidin, Kuala Nerus, 20300 Terengganu Malaysia.*

Abstract— Research about depression and aggressive behavior always in hot debate. Among drug abuser, the connection is still controversial. Hence, it is important to study the relationship between depression and aggressive behavior as well as the most contributing factor of aggressive behavior caused by depression. This is a quantitative method in which using a survey to complete the study. Data were collected from 200 drug abusers in east coast prison in Malaysia. As a result, the connection between depression and aggressive behavior was high and the most contributing factor was physical aggression. Hence, it is crucial to the prison to take a proactive action to cure the mental health illness or drug abuser.

Keywords— Aggressive Behavior, Depression, Drug Abuser, Malaysia

I. INTRODUCTION

Drug abuse in Malaysia has had an incremental history in spite of desperate measures by the government to prevent such things from happening. From draconian measures of punishment such as the mandatory death sentencing of drug dealers to compassionate care of addicts by the community at large; stemming the tide of addiction has been an uncontrollable phenomenon for all those involved. What's even more worrying is that drug abuse among the younger generation in Malaysia is becoming a grave concern with even children as young as 7 years old getting hooked^{1,2}. The ubiquity and pervasiveness of drugs have been due to the small time drug dealers who operate in the private spaces of the young due to having access to easier means of communication such as the ability to be online and connected through mobile and computing devices. Hence, it is not only the small-time crook that is to be blamed for the ever-rising tide of addiction in this country but the nation as a whole; is responsible to play a significant role in remedying the harm of drug addiction in Malaysia.

Between January 2010 and February 2016, there has been a total of 131,841 drug abuser who is registered³. These are categorized according to three different age groups, based on the largest to lowest number of addicts per category, which are the largest group of drug abuser come from young adults, aged between 20 to 39 years old, amounting to 93,044 people in total. Followed by drug abuser in their adulthood, aged 40 years old and above, amounting to a total of 29,355 people. Finally, youths who are 19 years old and below, totaling 8,732 people. This group, it seems, is alarmingly on the rise. Besides

categorizing addicts according to age, those undergoing treatment at cure and care centers, which are part of the National Anti-Drug Agency (AADK) from 2011 to 2015 totaled to 20,731 people, of which 46% were new cases and 41% relapsed, making those who relapsed a total of 4,838 people. Female abusers also totaled 3,889 people, of which 14% relapsed, whilst 80% of these female abusers, were indeed new cases.

Substance abuse refers to the overindulgence in, or dependence on, addictive substances such as drugs and alcohol. It also refers to underage drinking, tobacco, or illicit and/or prescription and over-the-counter medications^{4,5}. The use and abuse of substances by adolescents have long been matters of great public health concerns as they pose important and difficult problems for the society^{6,7}. The involvement of adolescents in substances abuse, globally, is increasing⁸⁻¹⁰. This is a matter of grave concern as substance abuse causes enormous human suffering in terms of morbidity, mortality and economic loss which in the long run can threaten the very social fabric of almost all communities. Likewise in Malaysia, the current trend of substance abuse among youths is a major national concern and the Government of Malaysia listed Drug Abuse as the nation's Public Enemy Number 1 in 1983.

Research on substance abuse indicates that the roots of most social ills, including substance abuse among youths, usually begin while they are still attending schools¹¹⁻¹³. As they get older and transcend into the adolescence phase of their lives, these students often move on to experimenting with drugs^{14,15}. The adolescence phase is a very important period because it is the time when people are looking for, experimenting with, and establishing their lifestyle, attitudes, concepts, beliefs, and habits that may have long-term influences on their health^{16,17}. Adolescence is a period of exploration and experimentation in which they learn to know more about themselves and about their lives. Therefore, the transition from childhood to adolescence and on to young adulthood can be difficult, particularly for youths with substance use conditions. There is no denying that in today's modern era, there are many attractions outside the school. Popular recreational drugs, free-living lifestyle, multiple external influences and easy access to psychoactive substances are all influences that attract both students and youths alike to substance abuse¹⁸. Such an environment further increases the chances of adolescents being involved in substance abuse, such as glue sniffing, smoking, and drug

misuse¹⁹. This trend is also observable in Malaysia as the number of youths involved in substance abuse is on the rise^{20,21}.

II. LITERATURE REVIEW

2.1 Depression

Depression is a mutual mental disorder that presents with depressed mood, pleasure, reduced energy, low self-worth, disturbed appetite, and poor concentration²². It is a common but serious illness²³. Likewise, depression frequently comes with symptoms of anxiety²⁴. Then, clinical depression, however, is much more serious²⁵. Clinical depression is a medical illness that can interfere significantly with a person's ability to function and can affect anyone of any age, gender, race, ethnicity, education, or socioeconomic status²⁶.

2.2 Aggression

Psychologists and sociologists regard adolescence as a phase of life marked by chaos and distress. During this period of life, adolescents are not just prone to high-risk anti-social activities but they also experience stress and high levels of negative emotions due to biological changes that occur during puberty. Various studies have provided evidence that adolescent phase of life is marked by hassles, negative emotions, and heightened anguish. Aggression is a term widely used in the literature on problem behavior, but it is rarely defined, and it is often not distinguished from "anti-social behavior". The word "aggression" covers a multitude of behaviors from open defiance and hostility to covert anti-social acts such as stealing or lying. Lewis defines human "aggression" as "behaviors by one person intended to cause physical pain, damage or destruction to another".⁴ Other writers have expanded the concept to include "instrumental aggression" which is aimed at securing extraneous rewards, not the pain of the victim, while others still have used the term "hostile aggression" to encompass the aim of inflicting injury on others. Bandura makes the point that such distinctions are misleading as most aggression has some other goal than injury to the victim. He defines "aggression" as "behavior that results in personal injury and in the destruction of property". The injury may be psychological or physical in nature. Many researchers have shown evidence for a relationship between early aggression and later delinquent and anti-social behaviors.

2.3 Type of Aggression

Physical Aggression is in consonance with Myers definition which sees aggression as "Physical or verbal behavior intended to hurt someone. This research will, therefore, be concerned with physical and verbal aggression. Physical Aggression Physical aggression is a hostile form of aggression. Its aim is to cause bodily damage. It includes kicking, molesting, harassing, biting, pushing, torturing, fighting, bullying, vandalism, destruction, and gangsterism, shoving, hair pulling, stabbing, shooting^{27,28}.

Verbal aggression includes acts such as insulting with bad language, displaying anger, threatening, swearing and being sarcastic all in order to cause emotional and psychological pain^{29,30}. Verbal aggression includes such behaviors as threatening, intimidating others and engaging in malicious teasing and name-calling^{31,32}.

Anger is defined as a person's response to a threat or the perception of a threat against an individual or group^{33,34}. The types of threats that tend to trigger an anger response are broad in scope and include both physical threats and psychological threats, or threats to a person's pride or dignity. Anger can also evolve from empathic concern or perceptions of injustice and is related to cognitive factors such as hostility³⁵ and cynicism³⁶. Anger can be adaptive by energizing an individual and heightening cognitive awareness to take action against a threat or perceived threat³⁷.

Hostile aggression takes place when the aggressor's primary intention is to harm the victim because of anger^{38,39}. Hostility is a negative evaluation of persons and things often accompanied by a clear desire to do harm or to agreed them⁴⁰. Besides, hostile can be considered it as a negative attitude that mixes anger and disgust, and it is accompanied by feelings of indignation, disgust, contempt, and resentment towards others; in occasions, it can even become bitterness and violence⁴¹.

III. METHODOLOGY

This research employed quantitative research due to obtaining systematic, complete and synergistic utilization of data⁴²⁻⁴⁵.

3.1 Instrumentation

In this section, the researcher explained further about the instrumentation used in this study. In completing quantitative research, the questionnaire has been employed which adapted and adopted from various studies conducted in developed and developing countries. Thus, in this study, the researcher used the set of questionnaires that have been used in all prisons in Malaysia whereas the standard of these questionnaires has been set up based on Malaysia perspectives, culture, environment, and demographic factors. Therefore, the researcher used the Drug Abuse Screening Test 20 (DAST-20), Depression, Anxiety and Stress Scale (DASS) and Aggressiveness Questionnaire (AQ) for this research to meet the objectives.

The questionnaires have been rearranged in order to conduct the quantitative research. This questionnaire consisted of three sections which are Section A for Demographic; Status, Age, Religion, Level of Education, Children, Job, Race, and Duration. See Table 3.1.

Table 3.1 Demographics

No	Items	Explanation	
1	Status	1	Single
		2	Married
		3	Divorcee

2	Age	1	21-30
		2	31-40
		3	41-50
		4	51 and above
3	Religion	1	Islam
		2	Buddha
		3	Hindu
		4	Others
4	Level of Education	1	SRP-SPM
		2	Diploma
		3	Degree
		4	Master
		5	PhD
5	Children	1	1-3
		2	4-6
		3	7-10
		4	11 and above
6	Job	1	Jobless
		2	Self-Employed
		3	Government Servant
		4	Private
7	Race	1	Malay
		2	Chinese
		3	Indian
		4	Others
8	Duration of Staying in Prison	1	6 Months to 3 Years
		2	4 Years to 6 Years
		3	7 Years to 10 Years
		4	11 Years and above

dependency and to identify the current stage of drug addiction. The answer to each state will be "Yes" or "No". See Table 3.2 for further details on interpretation.

Table 3.2: Screening Score for Drug Dependency

Screening Score	
Interpretation	Score
None	0
Low	1-5
Mild	6-10
Bad	11-15
Worst	16-20

Meanwhile, Section C for DASS that consists of 21 items. In this Section B, the respondents need to answer 0 to 3 to indicate the correct answer. 0 it represents never done before, 1 it represents seldom, 2 it represents frequent and 3 represents always. There are three sub-variables which are stress, anxiety, and depression that can be seen in Table 3.3. Furthermore, the DAST-21 interpretation of data obtained is deliberated in Table 3.4.

Table 3.3: Drug Abuse Screening Test 21

No	Items	Questions
1	Depression	3,5,10,13,16,17,21
2	Stress	1,4,8,11,12,14,18
3	Anxiety	2,7,9,15,20

Table 3.4: Drug Abuse Screening Test 21 (DAST-21)

Interpretation	Depression	Anxiety	Stress
Normal	0-5	0-4	0-7
Light	6-7	5-6	8-9
Mild	8-10	7-8	10-13
Bad	11-14	9-10	14-17
Worst	15 and above	11 and above	18 and above

Lastly, Section C was for AQ that consists of 29 questions that have 5 Likert-scale; 1 = Never represented my behavior; 2 = Seldom represented by behavior; 3 = Once represented by behavior; 4 = Sometimes represented my behavior; 5 = Always represented my behavior. This set of the questionnaire has for dimensions which are physically aggressive, verbal, anger and hostile. Item no. 9 and no. 16 must be recorded which mean the exact answer answered by the respondent must be counted differently. Table 3.5 and Table 3.6 explained details about the dimensions.

Table 3.5: Dimensions of Aggressiveness

Dimension	Question
Physical Aggressive	2,5,8,11,13,*16,22, 25, 29
Verbal Aggressive	4,6,14,21,27
Anger Aggressive	1,9,12,18,19,23,28
Hostile Aggressive	3,7,10,15,17,20,24,26

Table 3.6: Scoring Aggressiveness Questionnaire

Scoring	
Score	Level
1-48	Low
49 – 97	Middle
98 – 145	High

3.2 Research Population and Sampling

This research was conducted in east coast prison in Malaysia because there are 2320 convicts were prisoned. Due to these numbers, it shows that this prison is the most suitable place to conduct a research. However, the prison's director was allowed only 400 convicts to be parted in this study and they will be identified by their identical body numbers.

IV. DATA ANALYSIS

In this section, the researcher explains in details regarding the demographic profile. First of all, the age of the respondents. 109 drug abusers were analyzed with age range between 21-30 years old (54.5%), followed by age range of 31-40 with 75 people (37.5%) and range age of 41-50 years old was 12 people (6%). Lastly, 50 years old and above that involved in this study were only 4 people (2%). See Table 4.1.

Table 4.1: Age

Age	Frequency	Percent(%)
21- 30	109	54.5
31- 40	75	37.5
41-50	12	6.0
50 and Above	4	2.0
Total	200	100

In the next explanation, the researcher explains the religion of the respondent. All the respondents involved in this study were 100% Islam with total respondents were 200 people. Besides Islam, the researcher stated Buddha, Hindu and else. See Table 4.2.

Table 4.2: Religion

Religion	Frequency	Percent (%)
Islam	200	100
Buddha	0	0
Hindu	0	0
Else..(Please indicate)	0	0
Total	200	100

Most of the respondents were married to 164 people (82%) and followed by divorcee with 36 persons (18%). See Table 4.3.

Table 4.3: Marriage Status

Status	Frequency	Percent (%)
Single	0	0
Divorcee	36	18
Married	164	82
Total	200	100

On the next analysis, the researcher explained the level of education. All the respondents possessed only PMR and SPM certificate with 100%.

Table 4.4: Level of Education

Level of Education	Frequency	Percent (%)
PMR – SPM	200	100
Diploma	0	0
Degree	0	0
Master	0	0
PhD	0	0
Total	200	100

In this part, the researcher found out those drug abusers that having 4 to 6 children were 125 persons (62.5%) while drug abusers that having only 1 to 3 children were 59 people (29.5%). Meanwhile, those drug abusers that having 7 to 10 children were only 12 (6%) and 10 children and above were on 4 people (2%).

Table 4.5: Children

Children	Frequency	Percent(%)
1-3	59	29.5
4-6	125	62.5
7-10	12	6.0
10 and above	4	2.0
Total	200	100

Furthermore, the researcher also discovered the previous job of drug abusers and it showed that most of them were jobless with 94 people (47%), followed by working in private sector with 74 people (37%) and lastly, self-employed 32 people (16%). See Table 4.6.

Table 4.6: Job

Job	Frequency	Percent(%)
Jobless	94	47
Self-Employed	32	16
Government Servant	0	0
Private	74	37
Total	200	100

On the next section it about the duration of punishment faced by the drug abusers. Less than 6 months, 72 drugs abusers were analyzed with 36%. Duration of punishment between 7 months to 3 years showed 64 people with 32%. Lastly, 4 years to 6 years, 64 persons with 32% score.

Table 4.7: Duration of Punishment

Duration	Frequency	Percent(%)
Less than 6 Months	72	36
7 Months to 3 Years	64	32
4 Years to 6 Years	64	32
7 Years to 10 Years	0	0
More than 10 Years	0	0
Total	200	100

Lastly, the researcher identified that all the respondents involved in this study were Malay with 200 people and 100% overall. Besides, the researcher also indicates the other races like Chinese and Indian.

Table 4.8: Race

Race	Frequency	Percent(%)
Malay	200	100
Chinese	0	32
Indian	0	32
Others	0	0
Total	200	100

Table 4.9 showed an overall correlation between depression and aggressiveness. Based on the findings obtained, depression was a statistically significant linear relationship with the direction of the relationship is positive and the strength of the relationship was moderate ($r=0.819$, $p<0.01$). Therefore, physical aggression showed most contributing factor causing by depression. See Table 4.10.

Table 4.9: The Relationship between Depression and Aggressiveness

Variables	Aggressiveness
Pearson Correlations	0.819**
Depression Sig (2-tailed)	0.000
N	200

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

Table 4.10: Coefficient of the Relationship between Depression and Aggressive Behaviour; Physical, Anger, Hostile and Verbal

Model	Unstandardized Coefficients	Standardized Coefficients	Beta	T	Sig.
	B	Std. Error			
(Constant)	87.830	6.385		13.756	0.000
1 Physical	0.165	0.063	-0.176	-2.633	0.000
Anger	-0.385	0.043	-0.677	-8.877	0.000
Hostile	0.118	0.032	-0.252	-3.667	0.000
Verbal	0.232	0.053	0.312	4.322	0.000

$$\text{Depression predicted} = 87.830 + 0.165\text{Physical} + (-0.385)\text{Anger} + 0.118\text{Hostile} + 0.232\text{Verbal}$$

V.CONCLUSION

This study has brought to the different level of the dimension of studying drug abuser’s depression and aggressive behavior. The results of this research have made the director and fellow prison officers to be alert on drug abuser’s well-being. Depression is not an easy element can be handled by a person especially to those who are involved directly in drugs. Therefore, it is essential to the counselor, psychologist, and prison officers to help the drug abusers that having depression. In this prison, all the activities are based on four phases; orientation, self-development, technicality and skills, pro-freedom. These four phases have been conducted long ago

and still many drug abusers are having depression. It shows that the practices need to improvise in detail to reducing depression among drug abusers.

VI. RECOMMENDATION

5.1 Extra Counseling Session

In this part, counselor or psychologist needs to play an important role to help drug abusers that having depression in prison. In Malaysia’s prison, there are very details and specifics time and duration of having a counseling session. However, based on the results obtained, the extra counseling session need to be conducted in order to reduce a depression. The extra counseling session does not only work to those who are having depression but also to the others. By having a depression, drug abuser may able to do bad things, such as killing and bullying or even worst is committing suicide. These reasons will make the authorities, counselor, psychologist and prison officer worried about the drug abuser condition. Prior to this, the extra counseling session might help those drug abusers who are in need help to reduce the depression.

5.2 Support Group among Drug Abuser

This kind of approach is actually never been done before in any prison in Malaysia. The involvement of drug abusers themselves in supporting others in reducing depression is remarkable movement. Counselor or psychologist can be a moderator of a small group of drug abusers to listen to their stories, angriness, dissatisfaction or even future planning of themselves. Sometimes, this kind of approachable to help the drug abusers efficiently because they are going through the same problems and issues. They able to talk at the same pace and rhythm, the understanding of each other problem can be easily grasped, and many more. This technique has been conducted a lot in overseas to help them who are in need to counter or cope with misuses of drugs.

5.3 Natural Food Complimentary

In this part, the researcher tries to suggest that drug abusers that having depression might consume natural food such as herbs, vegetables, and fruits. Malaysia is one of the best countries that produce a lot of herb in making better health. Therefore, the consumption of natural food can help those drug abusers to lessen their depression. The presence of the dietitian in the prison can change the diet menu by adding some natural food to maintain the drug abuser’s well-being. This kind of approach does not only help the physical but also can help the mental of drug abuser to be better.

ACKNOWLEDGMENT

Special thanks to East Coast Prison, Malaysia due to undoubtedly helped and contributions towards the fulfillment of this research.

REFERENCES

- [1]. Winstock, A. R. *et al.* Mephedrone, new kid for the chop? *Addiction* (2011).
- [2]. Jones, H. M. & Pilowsky, L. S. Dopamine, and antipsychotic drug action revisited. *British Journal of Psychiatry* (2002).
- [3]. Nen, S., Ibrahim, F., Zakaria, E., Mohamed Sani, M. N. & Saim, N. J. Drug addicts under observation in Malaysia: Towards a comprehensive. *J. Psikol. Malaysia* (2017).
- [4]. Lessenger, J. E. & Feinberg, S. D. Abuse of Prescription and Over-the-Counter Medications. *J. Am. Board Fam. Med.* (2008).
- [5]. Eaddy, J. L. Prescription and Over-the-Counter Medications. in *Principles of Addiction* (2013).
- [6]. Patel, V., Flisher, A. J., Hetrick, S. & McGorry, P. Mental health of young people: a global public-health challenge. *Lancet* (2007).
- [7]. Ebbeling, C. B., Pawlak, D. B. & Ludwig, D. S. Childhood obesity: Public-health crisis, common sense cure. in *Lancet* (2002).
- [8]. Wong, S. S., Zhou, B., Goebert, D. & Hishinuma, E. S. The risk of adolescent suicide across patterns of drug use: A nationally representative study of high school students in the United States from 1999 to 2009. *Soc. Psychiatry Psychiatr. Epidemiol.* (2013).
- [9]. McWhirter, P. T. Enhancing Adolescent Substance Abuse Treatment Engagement. *J. Psychoactive Drugs* (2008).
- [10]. Plüddemann, A., Myers, B. J. & Parry, C. D. H. Surge in treatment admissions related to methamphetamine use in Cape Town, South Africa: Implications for public health. *Drug Alcohol Rev.* (2008).
- [11]. Kamal, M. & Lukman, Z. the Relationship Between Developing Talent Towards Performance Management and Job Satisfaction in Selected Public. *Eprajournals.Com 2-7* (2017).
- [12]. Pompili, M. *et al.* Substance abuse and suicide risk among adolescents. *Eur. Arch. Psychiatry Clin. Neurosci.* (2012).
- [13]. Khasakhala, L. I., Ndeti, D. M. & Mathai, M. Suicidal behavior among youths associated with psychopathology in both parents and youths attending an outpatient psychiatric clinic in Kenya. *Ann. Gen. Psychiatry* (2013).
- [14]. Kaufman, J. H. & Schunn, C. D. Students' perceptions about peer assessment for writing: Their origin and impact on revision work. *Instructional Science* (2011).
- [15]. Ten Cate, O. & Durning, S. Peer teaching in medical education: Twelve reasons to move from theory to practice. *Med. Teach.* (2007).
- [16]. Gunderson, E. A., Ramirez, G., Levine, S. C. & Beilock, S. L. The Role of Parents and Teachers in the Development of Gender-Related Math Attitudes. *Sex Roles* (2012).
- [17]. Torelli, C. J. & Shavitt, S. Culture and Concepts of Power. *J. Pers. Soc. Psychol.* (2010).
- [18]. Liu, H. C. *et al.* Self-harm and its association with internet addiction and internet exposure to suicidal thought in adolescents. *J. Formos. Med. Assoc.* (2017).
- [19]. Loffredo, C. A. *et al.* Substance use by Egyptian youth: Current patterns and potential avenues for prevention. *Subst. Use Misuse* (2015).
- [20]. However, the limitations of these studies are that all of them identified the possible incidence of youth involvement with licit and illicit drugs, Mohamed, M. N., Marican, S., Elias, N. & Don, Y. The pattern of Substance and Drug Misuse Among Youth in Malaysia. *J. Antidadah Malaysia* (2008).
- [21]. Arokiasamy, C. M. V. & Taricone, P. F. Drug rehabilitation in west Malaysia: An overview of its history and development. *Subst. Use Misuse* (1992).
- [22]. Bhowmik, D., Kumar, K. P. S., Srivastava, S., Paswan, S. & Dutta, A. S. Depression - Symptoms, Causes, Medications and Therapies. *The Pharma Innov. J.1*, 32-45 (2012).
- [23]. Hoertnagl, C. M. & Hofer, A. Social cognition in serious mental illness. *Current Opinion in Psychiatry* **27**, 197-202 (2014).
- [24]. Seligman, M. E. P., Schulman, P. & Tryon, A. M. Group prevention of depression and anxiety symptoms. *Behav. Res. Ther.* **45**, 1111-1126 (2007).
- [25]. Hare, D. L., Toukhsati, S. R., Johansson, P. & Jaarsma, T. Depression and cardiovascular disease: A clinical review. *European Heart Journal* **35**, 1365-1372 (2014).
- [26]. Rutledge, T., Reis, V. A., Linke, S. E., Greenberg, B. H. & Mills, P. J. Depression in Heart Failure. A Meta-Analytic Review of Prevalence, Intervention Effects, and Associations With Clinical Outcomes. *Journal of the American College of Cardiology* **48**, 1527-1537 (2006).
- [27]. Shachaf, P. & Hara, N. Beyond vandalism: Wikipedia trolls. *J. Inf. Sci.* (2010).
- [28]. Martin Potthast Bauhaus. Crowdsourcing a wikipedia vandalism corpus. *SIGIR '10 Proc. 33rd Int. ACM SIGIR Conf. Res. Dev. Inf. Retr.* (2010).
- [29]. Sullivan, M. J. L., Bishop, S. R. & Pivik, J. The Pain Catastrophizing Scale: Development and validation. *Psychol. Assess.* (1995).
- [30]. Sullivan, M., Bishop, S. & Pivik, J. The pain catastrophizing scale: development and validation. *Psychol. Assess.* (1995).
- [31]. Craig, W. M. The relationship among bullying, victimization, depression, anxiety, and aggression in elementary school children. *Pers. Individ. Dif.* (1998).
- [32]. Crick, N. R. & Grotpeter, J. K. Relational Aggression, Gender, and Social-Psychological Adjustment. *Child Dev.* (1995).
- [33]. Buss, A. H. & Perry, M. PERSONALITY PROCESSES AND INDIVIDUAL The Aggression Questionnaire. *J. Pers.* (1992).
- [34]. Archer, J. Sex differences in aggression in real-world settings: A meta-analytic review. *Review of General Psychology* (2004).
- [35]. Ramírez, J. M. & Andreu, J. M. Aggression, and some related psychological constructs (anger, hostility, and impulsivity) Some comments from a research project. *Neuroscience and Biobehavioral Reviews* (2006).
- [36]. Nierenberg, A. A., Ghaemi, S. N., Clancy-Colecchi, K., Rosenbaum, J. F. & Fava, M. Cynicism, hostility, and suicidal ideation in depressed outpatients. *J. Nerv. Ment. Dis.* (1996).
- [37]. Goleman, D. What makes a leader? in *Military Leadership: In Pursuit of Excellence* (2018).
- [38]. Bushman, B. J. & Anderson, C. A. Is it time to pull the plug on the hostile versus instrumental aggression dichotomy? *Psychol. Rev.* (2001).
- [39]. Bushman, B. J. & Anderson, C. A. Violent video games and hostile expectations: A test of the general aggression model. *Personal. Soc. Psychol. Bull.* (2002).
- [40]. Berkowitz, L. Frustration-Aggression Hypothesis: Examination and Reformulation. *Psychological Bulletin* (1989).
- [41]. Blackburn, R. & Fawcett, D. The Antisocial Personality Questionnaire: An Inventory for Assessing Personality Deviation in Offender Populations. *Eur. J. Psychol. Assess.* (1999).
- [42]. Hancock, G. R. & Mueller, R. O. *The Reviewer's Guide to Quantitative Methods. Health (San Francisco)* (2010).
- [43]. Bryman, A. *Interviewing in Qualitative Research. Social Research Methods* 468-500 (2012).
- [44]. Pathak, V., Jena, B. & Kalra, S. Qualitative research. *Perspectives in Clinical Research* **4**, 192 (2013).
- [45]. Creswell, J. W. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Research design Qualitative quantitative and mixed methods approach* (2013).