Psychological Distress Mitigation in Brain Tumor Patients Through Aggressive Behavioral Patterns- Field Study on Adults Group-

Nacima AZROU*

Algiers University2 Aboulkacim Saad Allah (Algeria) ; nassima.azrou@univ-alger2.dz / nassima.az@live.fr

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Abstract:

Health plays a pivotal role in maintaining both our mental and physical equilibrium. When health is compromised, especially due to a severe condition like a brain tumor that can be associated with a sense of impending mortality, it can trigger various behavioral responses, including aggressiveness, which is common among affected individuals. Surprisingly, this aggressive behavior can serve a constructive purpose in alleviating the psychological distress caused by the incurable disease. It enables a form of psychological adjustment to the condition and provides an outlet for pent-up negative emotions, ultimately fostering resilience.

Through this research paper we will attempt to answer the following problematic: What are the distinctive psychological reactions and characteristics observed in individuals diagnosed with brain tumors, and how do these responses impact the patient's physical well-being? Does aggressive behavior, as a response to the disease, contribute positively to the patient's adaptation to the diagnosis, or does it heighten stress levels for both the patient and their immediate social circle?

Based on the aforementioned, we carried out practical research by tracking the experiences of individuals with brain tumors. This involved using clinical methods and structured interviews with projective assessments to understand their psychological reactions. We utilized the Rosenzweig test to gauge feelings of frustration and any emerging aggressive inclinations. We then analyzed the data both in-depth and by comparing various aspects to gain a comprehensive view of the findings.

Keywords: Frustration, hostility, brain tumors, psychological distress, behavioral response.

ملخص:

الصحة من أهم مقومات التوازن النفسي والجسدي، واعتلالها تفقد الانسان حالة التوازن العام خاصة لو تعلق الأمر بمرض خطير مثل الورم الدماغي الذي يجسّد صورة الموت الفعلي المسجل في وقت لم يعد مبهما، هذه الصدمة تولد الكثير من الاستجابات السلوكية على غرار العدوانية كردة فعل نمطية عند هذه الفئة، لكن هذا السلوك رغم ما يبدو عليه إلا أنّ له دور فعال وايجابي في تصريف الحصر النفسي الناتج عن الإصابة بالمرض العضال، حيث يساعد على تحقيق التكيّف نسبياً مع وضعية المرض، ومن خلال تصريف الطاقة السلبية يترك المجال لتدعيم خيار المقاومة.

ومن خلال هذ البحث نحاول الإجابة على الإشكالية التالية: بما تتميز الاستجابات النفسية التي تظهر عند المصابين بالأورام الدماغية، وكيف تأثر هذه الاستجابة على الصحة الجسدية للمريض؟ وهل العدوانية كاستجابة سلوكية لها دور في التفاعل الإيجابي مع صدمة المرض أم أنها تزيد من حد توتر المريض والمحيطين به؟

استناداً على ما ورد طرحه، فقد أجرينا هذا البحث الميداني من خلال دراسة تتبعيه لحالات مصابة بأورام دماغية من أجل رصد استجاباتهم النفسية باستخدام المنهج العيادي واعتماد المقابلة الموجهة برائز إسقاطي، واعتمدنا في ذلك على اختبار روزنزويج (Rosenzweig)، لقياس الإحباط وتوجهات العدوانية الناتجة عنه، وتمّ اعتماد التحليل العمودي والأفقي للنتائج كميا وكيفيا.

الكلمات المفتاحية: إحباط، عدوانية، أورام دماغية، حصر نفسي، استجابة سلوكية.

* Der Nacima AZROU

1 – Introduction

Health is a fundamental cornerstone of an individual's comfort, happiness, and the pursuit of life goals. It is an asset that people continually seek to protect. Nevertheless, when someone is diagnosed with a severe or incurable illness, it plunges them into a shocking crisis that disrupts their everyday life and weakens their determination to persevere. This diagnosis represents a tangible encounter with mortality, becoming a certain and anticipated personal event in an increasingly foreseeable future.

The alterations brought about by illness are connected to concerns of reduced functioning and the apprehension that the condition may progress to a life-threatening state. Brain tumors, categorized as severe and incurable illnesses, exemplify this fear. These tumors are perceived as highly perilous because the potential for recovery remains limited, despite advancements in medical science. Various studies have explored disparities in individuals' immune system resilience across different life stages. These investigations have demonstrated that enhancing the immune system's strength at various life phases not only provides protection against cancer but also aids in recuperation from the disease.

A severe illness disrupts the life trajectory and serves as a hindrance to goal attainment, subsequently impacting psychological well-being and mood. The patient assumes the role of a detached observer regarding their body and the transformative changes it undergoes, as they grapple with the condition's constraining influence unfamiliar, deleterious entity that strives to diminish their vitality and capabilities. This matter generates internal anxiety fueled by fear of disability, pain, and death. Studies conducted using the Rorschach test on patients with brain tumors have shown that their answers revolved around the presence of an image of cancer that consumes the body internally, causing the body to split into two parts: a healthy part and a sick part.

Anxiety from losing vital functions managed but the brain often generates a continuous and rising stress in pace; as time goes by Aggressive behaviors, varying from depression, isolation, refusing resistance, and giving up to the disease, rejecting the disease, exterior-hostile behavior, withdrawal and anticipation. In various situations, patients grapple with the necessity to mourn the loss of their once-healthy bodies and adapt to their new reality in a diseased state. To confront the anxiety surrounding their mortality, they employ defense mechanisms that are in sync with their personality and lifestyle. aggressiveness emerges as a notable behavioral response that signifies a rejection of the concepts of illness and death. Following our study conducted in neurosurgery departments in Algiers' hospitals, we observed that individuals with brain tumors often endure feelings of isolation, a loss of self-confidence, and psychological tension. These factors occasionally manifest as verbal or physical outbursts of aggressiveness. The intensity and character of this aggressivity vary from case to case. While aggressivity may be perceived negatively by the general public, psychologists regard it as potentially playing a positive role in releasing pent-up frustration and tension. It also assists in adapting to the challenges posed by the disease, shielding the patient from self-destructive tendencies. By dissipating negative energy, it creates room for reinforcing one's resilience, thereby significantly contributing to fortifying the immune system.

In light of the above, we conducted field research aimed at uncovering the hidden aspects of this subject. Our approach involved leading a comprehensive follow-up study on individuals diagnosed with brain tumors to observe their psychological responses. This examination utilized a clinical framework, incorporating a guided interview model, developed by Suzanne Mazella. Moreover, in order to gauge the manifestations of

aggressivity stemming from frustration, we employed the Rosenzweig test, a projective assessment tool destined to measure forms of hostility resulting from frustration.

The outcomes were subjected to both quantitative and qualitative analyses for each individual case, with subsequent comprehensive discussions encompassing vertical and horizontal analyses.

1.1- Problematic:

Suffering from a severe illness, particularly one that poses a mortal threat, can present a significant barrier to engaging fully in one's social, emotional, and professional pursuits. Brain tumors are amongst the most dangerous illnesses that affect the nervous system - that is considered the center of life or death. A nervous system injury elicits various behavioral responses from the affected individual, which can be directed either inward (self) or outward (surroundings). Brain tumors, characterized by abnormal and uncontrolled cell division, typically manifest within the cranial or central spinal canal, often within the brain itself. Additionally, malignant tumors originating in other organs can potentially metastasize and cause the spread of brain tumors. The symptoms associated with brain tumors vary depending on their location in the brain. Common symptoms include nervous spasms, visual impairments, vomiting, cognitive disturbances, headaches, and challenges in mobility and speech. In advanced stages of the disease, a state of coma may also develop.

Having these tumors causes people to worry about death and an unknown fate, in order to face this inevitable fate, patients try to relieve this psychological confinement and the resulting frustrations through behaviors that are often characterized by aggressivity. The latter may seem negative to some, but in fact, its presence is necessary because it helps discharging feelings of self-destruction. Through this context, it allows the achievement of a degree of adaptation to the disease, and Revidi (P) says, on analyzing aggressivity as a defensive response in resisting the disease: "aggressivity plays a crucial role in facing the disease. According to American theories, the patient's ability to express their aggressivity towards the illness significantly influences the prognosis of their condition. Simply put, the more effectively a patient can direct their aggressivity at the disease, the better their chances of managing its development. One thing is certain: aggressivity seems to enhance the patient's adaptation to their illness by emphasizing the idea of resistance." (Revidi. P, 1994, P05) Cancerous tumors are often associated with death, a perception deeply ingrained in the collective consciousness. Despite some tumors being benign and treatable, many patients and their loved ones hold misconceptions that lead to panic and inappropriate behaviors that intensify when clashing with feelings of loss and fear of death. Shroub. S, offers insights on this matter: “Psychological disorders have multiple causes, the most important of which are: fear of death, experience of pain and suffering, and the potential deterioration of the condition to a critical stage. Moreover, the association of cancerous tumors with the perceived severity of the commonly used treatment methods also plays a crucial role.” (Shroub. S, 1983, P45) Furthermore, the patient's environment is often filled with emotions such as fear, compassion, tension, sorrow, and anxiety, intensifying the patient's emotional turmoil. In addition to the shock of the diagnosis, the patient may carry a sense of guilt towards their surroundings. This combination of emotions and frustrations results in a specific response, which can manifest as either withdrawal and resignation or as aggressive behavior directed towards others. A study conducted by Revidi on the responses of individuals with terminal illnesses reached the following conclusions: "Severe pain lasting more than six months can cause significant personality changes that reach the point of neurotic disorder stemming from a personality with a neurotic core. An accumulation of neurotic symptoms appears in the case of severe

pain, which pushes the patient into isolation and centers around the pain that becomes the only criterion for measuring time. Those around the patient often feel helpless and guilty. This feeling causes aggressiveness in the patient and family relationships become dysfunctional. This also leads to a decline in cognitive and emotional abilities and negativity towards family and social roles, which represent a source of identity and balance." (Revidi. P, 1994, P02)

According to the same study, individuals exhibiting a sadistic defense mechanism are more prone to responding aggressively to life's challenges, seemingly holding others responsible for their ailments. They project the suffering caused by their illness onto others, using aggressivity as a means to vent their anger and draw others into their distress, thereby diminishing their perception of injustice. From this standpoint, aggressivity serves as a tool for alleviating built-up emotional tension and resisting the psychological impact of the disease, playing a role with positive outcomes.

Brain tumors impact a crucial organ in the body, leading to heightened apprehension about potential loss of control, cognitive abilities, or aspects of one's personality. Consequently, the psychological responses to brain tumors can exhibit variation and unpredictability among individuals. In some instances, even when confronted with a severe condition, a person may manage their situation with acceptance and adaptability. Conversely, there are cases where individuals, despite having less dangerous or even benign tumors, respond negatively to the diagnosis, sometimes resorting to withdrawal or rejecting treatment, which can be seen as an indirect form of self-destructive behavior.

Through the aforementioned, we raise the following problematic: What are the distinctive psychological reactions and characteristics observed in individuals diagnosed with brain tumors, and how do these responses impact the patient's physical well-being? Does aggressive behavior, as a response to the disease, contribute positively to the patient's adaptation to the diagnosis, or does it heighten stress levels for both the patient and their immediate social circle?

In order to answer these problematics, we raise the following hypothesis:

- Brain tumor injuries could lead to a hostile aggressive response aims at alleviating the distress resulting from this disease.

- Perhaps this aggressivity has a positive role, given the results it achieved in alleviating stress and internal destructive energy.
- Maybe aggressive reaction to the disease is a self-defense mechanism that helps adapting with the reality of the illness and accept confrontation and resilience which strengthens and psychological system and therefore immunity.

1.2- Definitions:

Before delving further into our research, we must first set forth some definitions on which our study is based.

1. 2. 1- aggressivity:

Linguistic definition: aggressiveness is the tendency to assault, whether verbally or physically. The word (Agressivité) in French is derived from the Latin origin (Agrédir), meaning (Marcher vers), Walking towards. It is the ability to attack and search for battles, and at the same time represents the basic characteristic of self-preservation and securing the basic needs of the individual.

Contextually: Aggressivity is defined as: “An activity led by one individual to purposefully hurt another, whether physically (through bodily injury) or morally through sarcasm, harassment or hurtful antics”. (Https://almanalmagazine.com/ on 09-7-2023 at 22:30 PM)

According to Darwish "aggressivity is when one person initiates behavior, either verbally or physically, towards another individual. This behavior can be prompted by emotions like anger, frustration, or self-defense, and it may also be driven by a desire for revenge or personal gain. Ultimately, it results in causing various forms of harm, both physical and psychological, to the other party." (Darwish, 1993, P. 329)

According to L Mallaval In psychoanalysis, aggressivity is defined as a tendency to engage in behavior, whether real or imagined, aimed at attacking or harming a living being or anything that obstructs immediate satisfaction. However, aggressivity is not solely negative; it can also signify fighting spirit, vitality, and a fundamental drive for adaptation in one's environment, making it necessary and useful. When a person lacks aggressivity, it can be concerning, much like a passive child who fails to defend themselves. Many encyclopedias distinguish violence from aggressivity, defining violence as an intense, extreme, and brutal force devoid of a specific purpose, while aggressivity typically has a clear objective (Mallaval. M. L, 2009, P33).

According to Kadem Wali Agha: "aggressiveness is a form of self-defense before a possible or actual threat Obstacles that prohibit the satisfaction of motives lead to frustration, and that state in itself is considered a painful state that the organism seeks to select. In this way, surrender sometime makes its way through where aggressivity could take" (Wali Agha. K, 1981, p200)

According to Freud, human aggressivity is: "Energy and instinctive drives within an individual can increase and become compressed. If this energy is not released through self-purification, it may lead to two mechanisms: Catharsis through expressing aggressivity in socially acceptable ways, called Sublimation, or Displacement, which redirects it towards an alternative, socially acceptable goal. Failing to manage this energy can be harmful" (An analytical look at human aggression and destructive tendencies, https://www.baytalhikma2.org/self-destructive-tendencies-of-humanity on 09-7-2023 at 22h35)

According to Rosenzweig: "aggressivity is the typical response to frustration and arises as a defense mechanism when an individual's desires or needs cannot be satisfied. This aggressivity response can manifest in three directions: aggressivity directed toward external objects, aggressivity directed toward the self (internally), and attenuated aggressivity". (Rosenzweig, 1976, p. 12).

Aggressivity, therefore, serves as a means to release stress and psychological anxiety generated by life's pressures, leading to a state of painful frustration.

1. 2. 2- Frustration:

Linguistic definition: It is mentioned in the comprehensive dictionary of Almaany (in Arabic): frustration: Noun, frustration: Infinitive: frustrated, plural: frustrations V. to frustrate They frustrated the enemy. By invalidating their plan and preventing its implementation

He felt frustrated: With failure and decline, it is: The obstruction of directed activity intended toward a specific goal, whether through cessation, the threat of cessation, or insinuations of inevitable failure, which induces a sense of sadness and despair consequent to the unattained objectives. (https://www.almaany.com/ar/dict/ar-ar/ on 13-09-2023 at 20h50)

Contextually: "Frustration is the emotional response that arises within an individual when they can't satisfy their desire In such instances, individuals typically react emotionally, manifesting expressions of anger, anxiety, or dysphoria.

This emotional state encompasses both the tangible circumstances that lead to the unmet desire and the accompanying emotional experience arising from the

situation".(https://ar.sainte-anastasie.org/articles/psicologa/qu-es-la-frustracin-y-cmo-afecta-a-nuestra-vida.html on 13-09-2023 at 20h50)

Frustration is also known as a: "A cluster of distressing psychological sentiments that emerges within an individual due to a continuous lack of success and repeated failures across various situations, coupled with an inability to realize personal aspirations. Frustration may come about when an individual grapples with the inability to devise solutions to personal or societal challenges, culminating in feelings of inertia and a reluctance to take action". (https://khutabaa.com/ar/article/الإحباط-واليأس on 13-09-2023 at 20:50 PM)

Frustration signifies a condition in which an individual experiences a sense of thwarted motivation and altered behavior. The impediment giving rise to frustration can stem from either external or internal factors. In the case of external sources, these obstacles may manifest as material, physical, or social elements within the environment where the individual exhibits behavior. When the obstacle is internal, it often relates to the individual's perception of their own inadequacy in abilities, self-confidence, or their anticipation of potential failure. It is a psychological state wherein behavior aimed at a specific purpose or goal is impeded. It involves the individual's realization or anticipation of an obstacle that obstructs the fulfillment of a desire, which is accompanied by a sense of perceived threat. The impact of frustration often results in significant psychological distress. Among the prevalent outcomes stemming from frustration is aggressive behavior, which may compel individuals to surrender or succumb to despair. Particularly in severe cases, individuals may resort to what are known as "primary defense means," "subconscious defense means,"or psychological defense mechanisms as coping strategies" (https://arab-ency.com.sy/ency/details/765/1 on September 13, 2023, at 8:30 PM) (Quote by action).

Rosenzweig describes frustration as "a psychological condition arising when an individual encounters challenging obstacles or experiences unfulfilled urgent needs or desires. These obstacles create pressure, leading to heightened tension and triggering a state of psychological conflict. These obstacles may originate internally or externally, taking active or passive forms. Regarding responses to frustration, there are distinct categories: some responses manifest as outward-directed aggression, others as inward-directed behavior, and a third category entirely denies the existence of frustration" (Pichot.P, Danjon. 1966, p. 12).

1. 2. 3- Brain Tumors

The tumor is known as "Ecrevisse," "crabe," or "cancer" in Latin and is referred to as "cancer" or "cancerous tumor" in Arabic. Specifically, a brain cancerous tumor initiates and progresses within the brain and exists in two primary forms: either as a benign (cystic) tumor or a malignant tumor.

A brain tumor, referred to as "Brain Tumoral" in English, is characterized as a mass of abnormal cell accumulation. These tumors can originate within the brain, termed primary brain tumors, or spread to the brain from other parts of the body, known as secondary or metastatic brain tumors. Brain tumors fall into the category of rare tumors, and the level of risk and the prognosis for recovery depend on several factors. These factors include the type of brain tumor, the patient's overall health condition, the tumor's stage, and various other considerations. (https://altibbi.com/ on September 13, 2023, at 8:50 PM)

Tumors develop due to irregular cell growth and can emerge in various parts of the brain or spinal cord, collectively forming the central nervous system (CNS). They can be benign (non-cancerous) or malignant (cancerous). Benign tumors grow within the brain

and spinal cord, applying pressure to nearby areas, rarely spreading to other tissues but potentially recurring. Malignant tumors in the brain and spinal cord tend to grow rapidly and are more prone to spreading to neighboring brain tissues. (https://web.archive.org/web/20150425064027/http://www.cancer.gov/cancertopics/pdq/treatmet/adultbrain/Patient/page1/AllPages consulted on September 15, 2023 at 23:00)

1.3- Theoretical approaches to frustration and aggressivity

The concept of aggressivity has captivated researchers investigating human behavior due to its multifaceted role in psychological, social, and biological realms. Throughout life, individuals grapple with various frustrations and obstacles that disrupt their emotional equilibrium, often leading to the utilization of aggressivity as a means to alleviate psychological tension and adapt to new situations. This behavior has been scrutinized as a common response to psychological frustration, perceived both as a learned behavior and as an inherent instinct in humans. Furthermore, divergent viewpoints have categorized aggressivity as a pathological behavior and as a foundational element in human personality development. As researchers delve into understanding the driving forces behind aggressivity, a multitude of theoretical approaches have emerged to interpret and analyze this complex behavior, from which we mention:

1.3.1- Instinctive theory:

Advocates of the instinctive theory, such as William Conrad, Adler, Sigmund Freud, McDougall, and Lorenz, posit that humans harbor an inherent inclination toward aggressivity. McDougal highlights that aggressivity predominantly arises from a fighter instinct fueled by anger. Between 1915 and 1920, Freud examined how aggressivity shapes personality development, framing it as an innate instinct. He proposed that it manifests as a clash between the death instinct and the life instinct, where accumulated death tendencies seek expression either outwardly or inwardly. Freud suggested that humans, steered by unconscious influences, incline towards self-destruction through the death instinct. The interplay between life energy (libido) and maternal relationships refines these inclinations, directing them outwardly. Outward aggressivity is seen as a secondary phenomenon, used for self-preservation through defense mechanisms. Freud further theorized that aggressivity is a complex amalgamation of sadistic sexual instincts, emerging from the intricate interplay of aggressivity and sexuality. The mechanism of conversion plays a pivotal role in redirecting intense emotions from their original source of frustration, transforming, for instance, animosity towards parental authority into resentment towards figures like teachers, schools, or societal norms.

Adler. A, (1908-1910) aligns with Freud's viewpoint, recognizing aggressivity as an innate instinct termed " will power." He associates aggressivity with feelings of inferiority or social inadequacy. Ethologist Lorenz (1966-1977) views aggressive behavior as a result of the fighting instinct, an inherent expression in both humans and various animals. This instinct continually manifests within organisms at consistent rates, leading to its gradual accumulation over time. Lorenz posits two factors contributing to aggressivity: the buildup of instinctive energy and the stimuli that provoke it (Abdel-Qawi Ali, 1995, p. 287).

“Melanie Klein regards aggressivity as an innate characteristic that emerges in children within their intimate relationship with their mothers. Within this bond, the child experiences simultaneous feelings of love and hate. Aggressivity is seen as a defensive reaction against the primary object of affection, perceived as persecuted and threatened. According to Klein, this attraction and defensive aggressivity begin from birth. In contrast, followers of the neo-Freudian trend view aggressivity as a behavioral response that

manifests across various developmental stages" (Kazim and Wali Agha, 1981, p. 235). (Quote by action).

According to Lorenz, "if an individual refrains from engaging in aggressive behavior, the specific energy within the mind will accumulate under central control up to a certain extent. Once this energy surpasses a particular threshold, it manifests in the form of automatic aggression towards others" (Desouqi. M. M, 2012, p. 52).

1.3.2- Aggressive behavior according to the behavioral approach

Behaviorists propose that aggression is a learned behavior resulting from conditioning and reinforcement. Two primary types of conditioning are outlined:

-Respondent Conditioning: Researched by Pavlov, this type of conditioning asserts that behavior is shaped in response to a preceding stimulus.

-Operant Conditioning: Studied by Skinner, operant conditioning suggests that behavior arises as an action in the environment, leading to alterations within it. The subsequent consequences of this behavior influence its probability of recurrence. If a behavior is reinforced, the likelihood of its repetition increases. Conversely, if it is not reinforced or is punished, the probability of its occurrence decreases. According to this conditioning, aggressive behavior persists when it is followed by reward.

1.3.3- Simulation Learning Theory:

Psychologist Albert Bandura proposes that aggressive behavior is often acquired through imitation of aggressive models such as parents, teachers, or admired figures. However, the learning of this behavior hinges on the consequences—whether it is rewarded or punished (Abdulqawi Ali, 1995, p. 291).

1.3.4- Trait Theory:

" J.H. Eysenck, a pioneer of this theory, considers aggressivity as a personality trait, noting individual differences in this characteristic. Utilizing factor analysis, Eysenck presented empirical evidence supporting his viewpoint. He posited that all individuals possess distinct nervous systems; some individuals are easily aroused, while others are less excitable. Easily irritable personalities are prone to disturbance, and these individuals may exhibit tendencies towards aggressivity or criminal behavior" (Ali Fayed, 1996, pp. 149-150).

1.3.5- Frustration-Aggression Theory:

"The frustration-aggression theory stands as one of the most renowned explanations for aggressive behavior. It was proposed by a team of psychology researchers from Yale University in 1939, including John Dollard, Neil Miller, Leonard Doob, Hubert Mowrer, and Robert Sears. According to this theory, frustration arises from environmental conditions that hinder an individual from satisfying their motives, leading to an emotional state of deprivation or psychological conflict. Frustration obstructs goal attainment, thus stimulating an urge to attack those perceived as causing the frustration" (Abdel Salam Zahran, 2013, p. 6).

"The theory posits that awareness of frustration signals danger and the potential threat of being deprived of basic needs essential for survival. Proponents of this theory argue that whenever an organism experiences frustration, it triggers an aggressive response. Additionally, they assert that whenever there is an aggressive response, it always indicates exposure to frustration and is a direct result of it" (Kazim Wali Agha, 1981, p. 235).

In essence, the frustration-aggression theory rests upon two primary principles.

First, it asserts that all aggressive behaviors stem from a sense of frustration. Furthermore, the degree of aggression directly relates to the intensity of unmet needs, with aggression increasing as frustration levels rise.

Second, the theory suggests that as frustration mounts, there's a greater tendency toward aggressive responses, meaning that the intensity of aggressive behavior is directly proportional to the amount of frustration experienced.

Scientist Rosenzweig aligns with this theory, contending that frustrations are catalysts for the emergence of aggression. He showcased this idea by devising a test to gauge aggression resulting from frustration.

According to Rosenzweig, aggressivity is a common response to frustration, as obstacles generate pressure that elevates tension, plunging an individual into a state of psychological conflict. In response to this conflict, Rosenzweig outlines three patterns of aggressive behavior:

1. Externalized aggressivity: Directed towards an external target through projection or substitution, allowing the individual to transfer their weaknesses onto another person.

2. Internalized aggressivity: Manifests as self-blame or internal-directed aggressive behavior, with suicide considered one of the most extreme outcomes.

3. Subdued aggressivity: Exhibited by individuals who cannot openly express their aggression. They don't experience internal aggressivity, employing avoidance as a defense mechanism against confronting their aggression.

1.4- Relationship between Frustration and Aggression

The innate human drive for self-realization often encounters obstacles, and when these hurdles persist, they provoke diverse forms of aggressive behavioral responses. Frustration emerges as a result of facing barriers that impede the fulfillment of personal needs. In situations where these obstacles appear insurmountable, individuals may perceive themselves as failing, leading to a state of heightened frustration. The intensity of these frustrating circumstances varies based on individual needs, desires, goals, expectations, and personal awareness levels, significantly influencing how individuals experience and respond to frustration.

Dollard (J) and Miller were among the early proponents of the idea that aggressive behavior stems from a state of frustration, propounding the theory of "frustration and aggression" in 1939. Their theory suggested that frustration could lead to rebellion, and subsequent expansions incorporated other motives such as pressure and disappointment. Their studies indicated that aggression consistently signifies frustration and that its occurrence reinforces an individual's inclination toward violent or aggressive responses, whether physical or moral. Notably, the intensity of the desire for aggressive behavior varies with the degree of frustration experienced. Moreover, halting aggressive behavior amidst frustration can instigate further frustration, augmenting the individual's tendency towards aggression. Instances of directing aggression inwardly, towards oneself, may occur if the inhibitions against outward aggression are stronger. The expression of aggressive behavior towards the source of frustration is seen as a release of psychological energies, potentially reducing other hostile responses within the frustrating situation. Field studies further confirm a diverse range of reactions to frustration, influenced by factors including the urgency and significance of the frustrated desire, an individual's capacity to endure frustration, past experiences, and their perception of the frustrating situation (Faqih Al-Eid, 2004, pp. 40-41). (Quote by action).

Other studies have also shown the idea that aggressivity is a self-regulating mechanism emerging from frustration, and its reduction correlates with a decrease in

aggressive tendencies. Additionally, mitigating aggressivity has been found to alleviate feelings of pressure and confinement. Consequently, aggressive behavior is perceived as a positive release of pent-up energy stemming from accumulated frustrations.

1.5- Types of Aggressive behavior

Aggressive behavior manifests in various forms, categorized across different levels as follows:

1.5.1- Aggressivity Based on its Observable Form

- **Aggressivity Directed Towards Others**: This form of aggression is overt and seeks to harm individuals or damage their belongings, whether through physical actions or verbal assaults. The relationship between aggression directed outwardly towards others and inwardly towards oneself aligns with Freud's concepts of sadism and masochism (Taha Abdel Azim Hussein, 2008, p. 94).

- **Aggressivity Directed Towards Self**: In some cases, aggressivity is directed inwardly towards oneself, intending self-harm through actions like tearing clothes, slapping one's face, or pulling hair.

Al-Issawi suggests that "self-directed aggressivity might be attributed to a feeling of guilt, evoking a need for self-punishment. This behavior could also emerge from a fear of the attacker's reaction, causing an individual to internalize their aggressivity and direct it towards themselves rather than confronting the initial aggressor" (Al-Issawi. Ab. R, 1997, p. 85).

- **Transformational Aggressivity or Displacement** This form of aggressivity, also recognized as substituted aggressive behavior, entails redirecting aggressive sentiments towards an alternative subject when direct expression of aggressivity towards the original stimulus is impractical or restricted, often due to certain limitations. This redirection usually occurs if an alternative target is available and if there is an expectation of minimal negative consequences or reactions.

- **Random Aggressivity**: In this type of aggressivity, individuals express their aggressive tendencies towards unclear or unspecified targets. This behavior is commonly observed in individuals who lack a sense of social deterrence, a defining trait of psychopathic personalities.

1.5.2- Aggressivity through style :

- **Verbal Aggressivity:** This form of aggressivity involves verbal or symbolic responses that cause psychological and social harm, inflicting pain through verbal behaviors like insults. Verbal aggressivity can be directed towards oneself or others, resulting in emotional harm (Adel Shukri M. K, 2011, p. 47).

- **Physical Aggressivity:** Termed as physical aggression, this type involves causing physical harm to oneself or others, such as hitting or kicking, often arising from intense bursts of anger (Al-Qamsh. M. N, and Al-Maaytah. Kh, 2008, p. 95).

- **Symbolic Aggressivity:** This behavior entails an individual displaying contempt or disdain towards another or something symbolizing such behavior, like intentionally avoiding eye contact or refraining from returning greetings. Imad Abdel Rahim refers to this behavior as "expressive or symbolic aggressivity, manifested in stylistic gestures such as facial expressions or looking at others with disdain" (Azaguloul. I. Ab. R, 2006, p. 68)

1.5.3-Aggressivity in terms of reception:

- **Direct Aggressivity:** This form of aggressivity involves behavior directly targeted at the source of anger or frustration, expressed in various physical or verbal manners. The individual might attempt to confront the origin of frustration head-on or redirect their aggression inward towards themselves (Awad. A. M, 1999, p. 46).

- **Indirect Aggressivity:** "Indirect aggressivity refers to aggressive and neurotic behaviors expressed in a projecting manner towards oneself or others, either implicitly or imaginatively. This behavior encompasses avenues of animosity, deceit, and intimidation" (Adel Shukri M. K, 2011, p. 48)

1.6- Roles of aggressive behavior :

Aggressive behavior serves various functions, among which include reducing anxiety and tensions, defending against perceived physical or moral threats, confronting sources of pain and frustration that hinder the fulfillment of needs, seeking attention, and exerting control over others, particularly notable in children. Additionally, the inclination to provoke punishment as a means to assuage feelings of guilt arising from a sense of being distinct from the group can prompt aggressive actions directed at the group itself (Bahija. O, 2018, p. 356).

"Aggressivity can function as an adaptive behavior when employed as a method to articulate specific social demands or to protect the individual and their possessions. It can also serve as a means to release accumulated tensions or as a strategy to resolve conflicts and overcome obstacles hindering the attainment of legitimate goals. Moreover, aggressivity might function as a tool for social control, involving punitive actions " (Mukhaimer. I, 2012, p. 74).

2- Field Study:

2.1- Limitations and Sample of Study:

The limitations of this study primarily encompass exploring the basis of aggressive responses as common reactions to frustration among individuals diagnosed with brain tumors. The sample size was confined to six adult cases deliberately selected from hospital centers located in Algiers.

2.2- Study Methodology: For this study, we employed a clinical descriptive approach utilizing case studies. The methodology included conducting interviews employing Rosenzwing's frustration and aggression scales, along with utilizing a structured observation network and analyzing medical records.

2.3- Study tools: In this study, we implemented various survey and measurement techniques, which included the following:

2.3.1- Rosenzweig Test: The Rosenzweig's Illustrated Frustration Test is a projective assessment that combines words and pictures. It is designed to identify patterns in the behavioral responses of individuals when faced with frustrating situations. Initially published in 1935 under the title "Testing Frustration Using Pictures," the test underwent revision in 1948. The updated versions catered to different age groups: teenagers aged 12 to 18 years, children aged 4 to 13 years, and adults aged 18 years and above.

This test comprises 24 scenarios depicted in a cartoon series format, featuring two main characters. One character presents a frustrating situation, while the other character responds to it. Each page of the test booklet contains four situations where the frustrated character articulates the scenario in words, which the subject reads and responds to. The characters' features were deliberately overlooked to prevent any influence that could bias the results. The test was administered individually or collectively following provided instructions, with a designated time frame of 15 minutes for completion.The evaluation and

unpacking of results are based on various response types determined by the dominant obstacle's nature, ego defense mechanisms, and the urgency of needs. Nine response categories, related to the orientation of aggression, are tabulated for comparison with the Group Conformity Rating (GCR). Ratings of one point or half a point are assigned based on whether a response contains one or two symbols, respectively. The cumulative score helps outline the response profile's characteristics, followed by identifying the typical response pattern and its tendency. Subsequent to statistical evaluation, an analysis focuses on the numerical scores attained.

2.3.2- Case Study via Clinical Interview: Our approach involved conducting a case study using a clinical interview guided by a projective rubric. Direct observation was also employed to comprehensively monitor and analyze all behavioral responses.

3- Results and Discussion

The analysis was carried out using both horizontal and vertical methods. The horizontal method involved studying each case independently. Simultaneously, the vertical method encompassed aggregating the results of all cases and engaging in discussions to confirm or refute the proposed hypotheses. Additionally, quantitative statistical evaluation was utilized to assess responses.

3.1- Cases study presentation: The results of the cases study were as follows:

- **Case N°1**

- Patient Background: Ahmed, aged 50, is married and a father of six children. He possesses an average level of education. Ahmed experienced symptoms of a brain tumor in the right temporal lobe, including ringing sounds in the right ear and increased cerebral pressure (H.I.C), leading to the necessity of surgical intervention. During the initial interview, Ahmed exhibited anxiety but actively participated in the test. However, he attempted to divert from the topic to avoid the frustrating situation. He also complained about various aspects of his surroundings, even those unrelated to his medical condition.

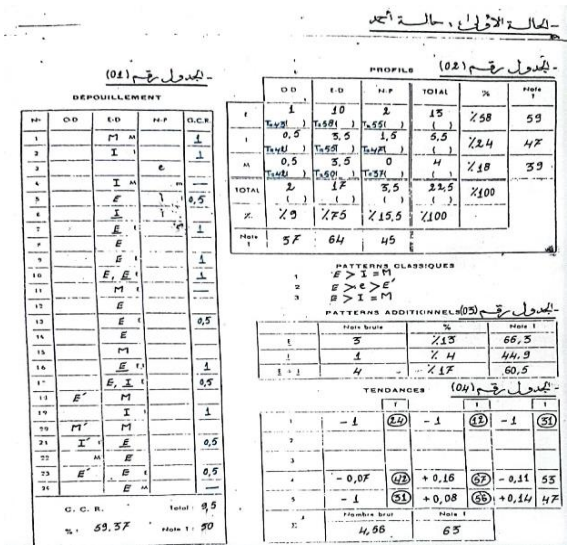


Figure N°1: Results of the first case

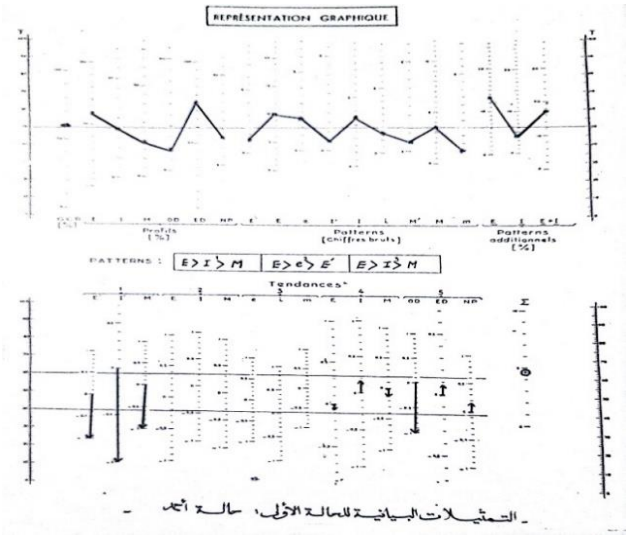


Figure N°2: Graphical representations of the results

-Analysis: In Table N°1, the results display a significant identity index with the group, totaling 59.37%. This suggests the subject's struggle to adapt to the social environment by directing aggressive responses towards unrelated topics, serving as an outward release of tension. Table N°2 outlines a trend of external aggression at 58%, contrasting with internal aggression at 24% and reduced aggression at 18%. Clinical observation highlighted a

prevalence of reprimands, blame, and hostility towards external situations, alongside a high rate of ego defense (ED) = 75.5%, signifying a weakened ego in the face of frustration. Urgent needs were only at 15.5%, indicating a limited problem-solving capacity in frustrating situations. The dominant obstacle was at a low 9%, suggesting the subject's tendency to confront obstructing circumstances through ego defense rather than finding effective solutions. Psychological profile analysis supported these findings, revealing a dominance of outward-directed aggression across employed models. This indicates a reliance on ego defense rather than rational problem-solving. Analysis of tendencies indicated a mere 3 tendencies, signifying difficulty in adapting to frustrating situations, suppressing the superego, and exhibiting ego fragility. Consequently, the subject resorts to outward-directed aggression to cope with frustration.

- **Case N°2**

- **Patient Background**: Subject (Z). (M), aged 47, married with four children, holds a university degree. He was diagnosed with a pituitary gland tumor following symptoms of headaches, difficulty concentrating and thinking, as well as experiencing anxiety and nightmares. Initial interviews revealed a response from the subject. However, upon commencing the test, signs of anxiety and tension became evident. He frequently expressed concerns about potential mental or personality impairments that he feared might arise.

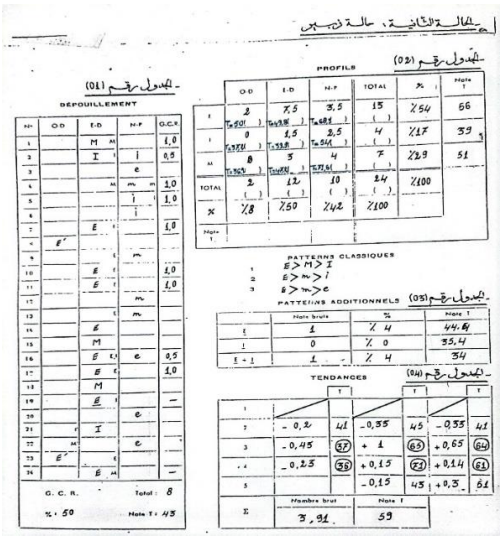


Figure N°3: Results of the second case

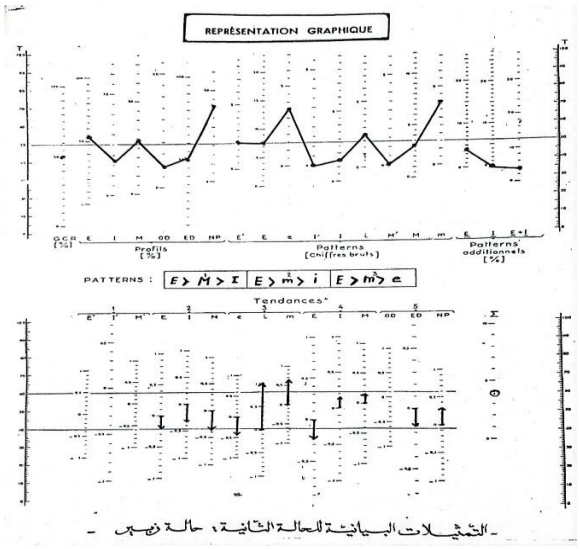


Figure N°4: Graphical representations of the results

-Analysis: Table N°1 indicates a conformity index of 50%, suggesting an average agreement rate and an adequate adaptation to the social environment. In the characteristics table, external aggression was notably higher at 54% compared to reduced aggression, which stood at 29%. Internal aggression accounted for 17%, signifying a tendency to direct aggression outward. Examination of responses indicated proportions of ego defenses (ED) at 50%, urgent need (NP) at 42%, and dominant obstacle at 08%. The prevalence of outward-directed aggression and a reliance on ego defenses suggest a strategy to shield the ego from potential threats. Additionally, an analysis of both classic and additional models revealed a consistently high value of outward-directed aggression, indicating a tendency to externalize frustrations rather than taking responsibility. Table N°4 depicts four trends, including six significant T values and five non-significant T values, suggesting a propensity to manage dominant obstacles amidst recurring frustrations. This implies that

the subject resorts to outward-directed aggression based on ego defense mechanisms when confronted with frustrations.

➢ **Case N°3**

- **Patient Background:** Subject F. A, 22 years old, is a third-year high school student, single, and has a twin sister and two brothers. She was diagnosed with an astrocytoma-type brain tumor after experiencing persistent headaches and sleep disturbances. Following the diagnosis, it was confirmed that surgery was necessary. Initially expressing a calm demeanor about her concerns, she displayed signs of aggression when the test commenced. She vocalized her frustration, particularly regarding her injury during the baccalaureate exams, which coincided with her twin sister's success. She openly questioned why she was facing these challenges at this crucial point in her life's journey. Expressing hostility toward her sister and family, she was upset about them hiding the truth about her illness, unaware that she knew the reality.

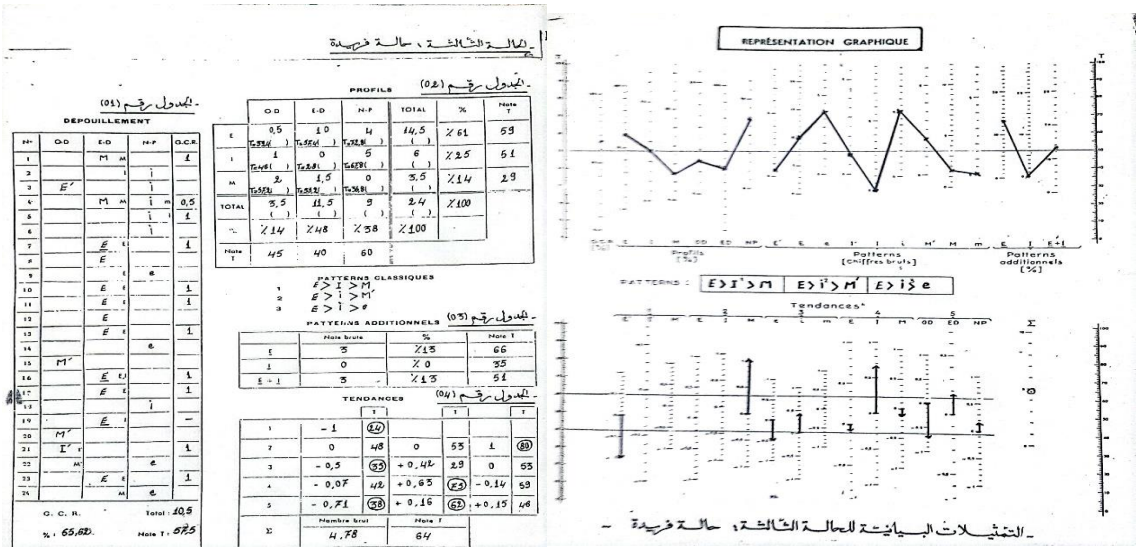


Figure N° 5: Results of the third case **Figure N°6**: Graphical representations of the results

-Analysis

Table N°1 demonstrates a GCR index of 66%, signifying a notable challenge in adapting to the social environment. The features table presents a dominant outward-directed aggression at 61%, while inward-directed aggression is at 25%, and reduced aggression stands at 14%. The outward-directed aggression stems from an unwillingness to accept the health circumstances and blames others, particularly the family, for this situation. The subject employs ego defense mechanisms at a rate of 48% to safeguard a threatened and vulnerable ego. Urgent needs register at 38%, indicating susceptibility to frustrating situations despite attempted resistance. Examination of both classic and additional models reveals a prevalence of outward-directed aggression (E) across the three classic models and a confirmed absence of inward-directed aggression values. This suggests a lack of self-blame or responsibility-taking amidst frustration, manifesting as an overt release of aggression towards others. The trend table showcases6 significant standard T values, underscoring the subject's struggle to adapt to her reality, prompting frustration expressed through outward-directed aggression. This form of sadistic defense projects the aggression instigated by the illness onto others, serving as a mechanism to alleviate internal tension for psychological balance.

➢ **Case N°4**

- **Patient Background**: Subject K.S., aged 46, is a widow and mother of seven children. She is a housewife with an average level of education and has been diagnosed

with a rapidly progressing meningioma. Symptoms manifested as high cerebral pressure (HIC), and the decision for surgery was gradually made, with only the initial operation performed at the time of our meeting. The subject showed willingness during the interview and test explanation. However, during the test, evident signs of anxiety emerged due to the correlation between the test content and the challenging events she encountered in her life. Additionally, her body language, including hand movements and clenched fists, indicated visible tension.

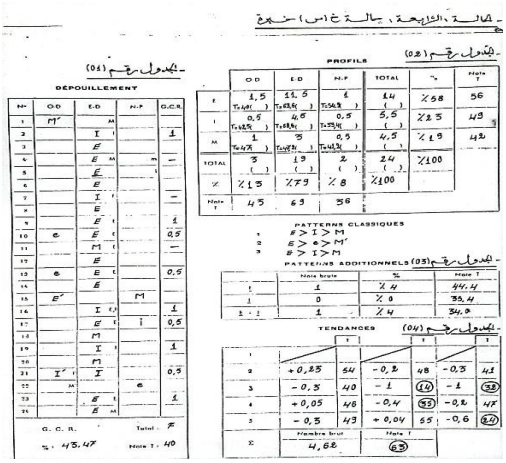


Figure N°7: Results of the fourth case

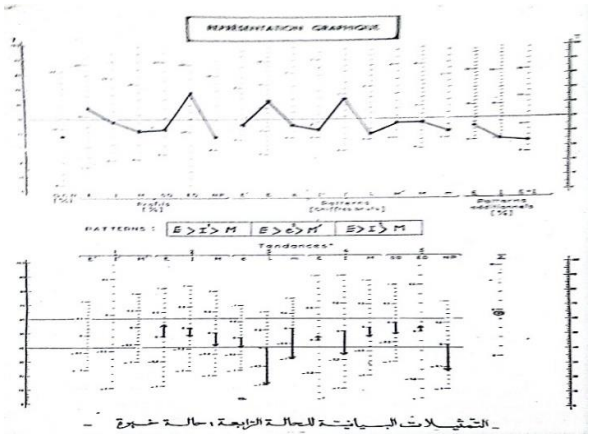


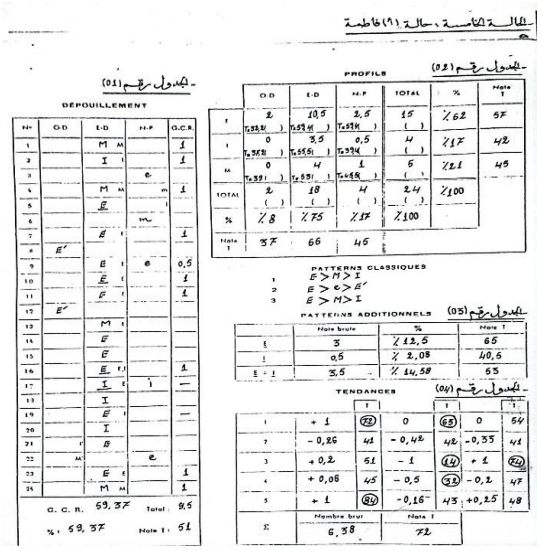
Figure N°8: Graphical representations of the results

-Analysis

In Table N°1, the GCR averaged at 43.75%, suggesting moderate adaptation to the standard. The subject exhibited higher outward-directed aggression at 58%, while inward-directed aggression stood at 23%, and minimized aggression at 19%. Interestingly, she associated characters in the test with people she knew, displaying hostility toward them. Ego defense scored high at 79%, while urgent needs were at 13%, and the dominant obstacle at 8%. This suggests the subject frequently defended herself, denying any responsibility for her actions and providing justifications in experimental situations. Analyzing the classical and additional models confirmed higher outward-directed aggression than inward or reduced aggression. The additional models showed E = 4% and I = 0%, revealing a tendency to avoid taking responsibility rationally and projecting weaknesses onto others. The trend table depicted 4 trends and the absence of Trend No. 1, implying adaptation to test situations. However, while five standard values were significant, eight lacked significances, indicating readiness to face frustrations without guilt, projecting them onto authoritative figures to protect the ego.

- **Case N° 5:**

- Patient Background: Subject A.F., aged 48, married and a mother of eight, is a homemaker with a primary education level. She was diagnosed with a meningioma and was recommended surgical treatment in stages. We observed that she remained remarkably calm and cooperative during our interactions.



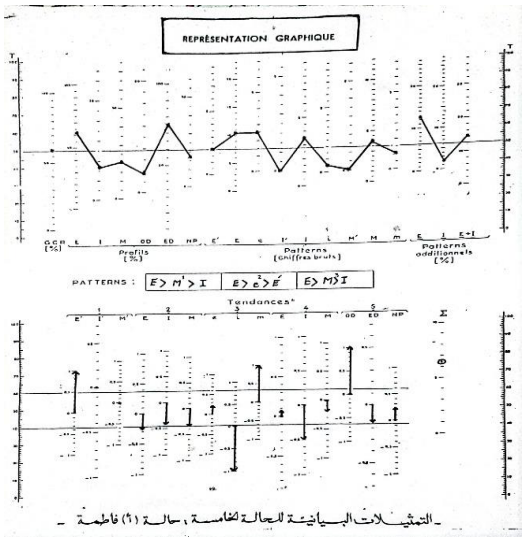


Figure N°9: Results of the fifth case **Figure N°10**: Graphical representations of the results

-Analysis

In the results table, a high GCR of 59.31% was observed, indicating the subject's difficulty in adapting to her social environment. As per the characteristics table, outward-directed aggression was prominent at 62%, while inward-directed aggression stood at 17%, and attenuated aggression at 21%. The response quality heavily relied on ego defense (75%), surpassing urgent need (17%) and dominant obstacle (8%). Classical models emphasized the dominance of outward-directed aggression over inward-directed and attenuated aggression, supported by the features table. In the additional models, the value for E was notably high at 12.5% compared to I=2.08%, This implies that the subject tends to handle her frustrations by projecting aggression outward rather than addressing them in a rational manner. The trend table revealed the existence of five behavioral tendencies, of which only 6 versus 9 standard values were statistically significant, indicating the subject's struggle with adaptation.

- **Case N°6:**

- **Patient Background:** Subject A.R., 27-year-old female, single, healthcare worker. Had undergone surgery for a brain tumor in her temporal lobe a year ago. Despite her declining health condition, where she necessitated assistance with writing during the test, she exhibited a calm and cooperative demeanor. Overall, she did not appear nervous despite her seemingly deteriorating health condition.

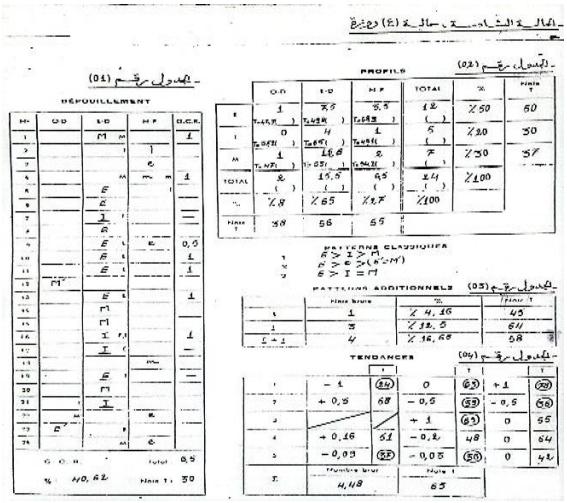


Figure N°11: Results of the sixth case

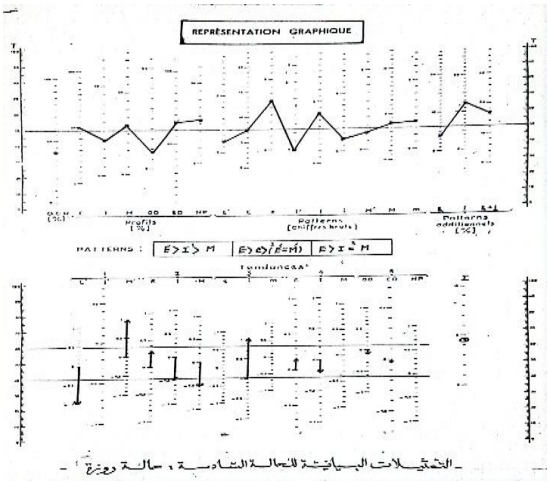


Figure N°12: Graphical representations of the results

-Analysis

Based on the results table, the GCR stood at 40.62%, suggesting the subject's adaptation within the social environment. Analysis of the features table displayed outward-directed aggression at 50%, reduced aggression at 30%, and inward-directed responses at 20%. The subject predominantly relied on ego defense mechanisms, accounting for 65% of her responses, while displaying a 27% urgency level and an 8% dominance of obstacles. These outcomes reflect the subject's coping strategy—employing external aggression to defend her ego and restore balance when confronting personal threats. The classical and additional models reinforce this pattern, with a higher emphasis on E (outward aggression) over self-directed aggression. Additional model figures depict I = 12.5% and E = 4.16%, indicating the subject's inclination to rationally resolve conflicts within experimental scenarios. The subject demonstrated a substantial degree of adaptation to the test situations, reflected in a significant percentage. Regarding the trends, the subject exhibited all five trends, with 8 statistically significant T-values compared to 6 statistically non-significant T-values. This pattern indicates a commendable adaptation to frustrating situations. Overall, the subject displayed a positive demeanor, effectively alleviating psychological distress. The utilization of outward-directed aggression served as means to mitigate frustrations while employing rationality and appropriate defenses to protect the threatened ego.

3.1- General discussions on case study results:

After conducting quantitative and qualitative analyses of the cases, it is evident that some individuals successfully adapted to their social environment, with conformity rates ranging between 40.62% and 43.75% among these cases.

The cases that did not achieve adaptation exhibited conformity rates ranging from 59.37% to 66%. Their failure to adapt could be attributed to their response patterns, wherein they replicated the frustrating situations presented in the experiments and effectively utilized projection. This mechanism aided in alleviating the psychological distress and internal tension stemming from recurrent frustrations they experienced.

The lack of adaptation in other cases stemmed from fragile egos, low self-esteem, and feelings of inferiority resulting from their health conditions, hindering their ability to alleviate internal tension effectively. Regarding the direction of aggression, all examined cases exhibited outward-directed aggressive behavior, ranging between 50% and 75%. The rates of reduced aggressivity, in contrast, were low, ranging between 14% and 30%. As for

self-directed aggressivity, it was 20% found in one case. Regarding the quality of response, all cases relied on ego defense to a large extent. The low percentage of dominant obstacles suggests a weak ego and diminished rationality, hindering effective problem-solving and the confrontation of frustrating situations. Anxiety and fear of losing mental and cognitive abilities affect the body image, which represents a support for the ego, causing a deep narcissistic wound. The patient is therefore compelled to grieve the loss of a healthy body while inhabiting an ailing one, thereby accounting for the elevated levels of outward-directed aggression. This substantiates the credibility of our initial hypothesis.

The defensive mechanisms observed stem from a rejection of the illness and the steadfast belief in living through a transient and unsettling dream that will eventually conclude. Aggressivity directed toward external issues results from a sadistic defense by shifting blame onto others and denying responsibility for what is happening. While unsettling, the sadistic defense still plays a positive role in alleviating anxiety resulting from frustration, aiding in adaptation to the new circumstances and preparing for future challenges. This adaptive response also contributes significantly to supporting immune defenses, as evidenced by medical studies.

The above findings support the validity of the second research hypothesis. Contracting an incurable disease leads to significant frustration, prompting individuals to resort to defense mechanisms aligned with their personality traits. Outward-directed aggressivity, while accompanied by feelings of inferiority and heightened sensitivity, played a positive role. However, these feelings also contributed to generating mistrust and doubt in their social circles, thereby intensifying the expressed aggressivity in varied forms.

4- Conclusion

Frustration becomes a source of significant psychological pressure that drives individuals to adopt stereotypical behaviors aligned with their personality. Aggressivity, in its various forms, emerges as a primary behavioral response to heightened frustration, particularly when triggered by severe illnesses such as brain tumors. The concept of death, once abstract and distant, becomes tangible and personal, amplifying psychological pressure and anxiety. This anxiety often manifests as outward aggression towards others, serving to reject reality or involve others in the internal distress. Despite external appearances suggesting disruption, this behavior functions as a positive release of negative energy stemming from accumulated frustrations, disappointments, and anxiety.

Releasing anxiety and frustration through aggressive behavior contributes to achieving a certain level of balance and adaptation, even in challenging and severe situations. This behavioral approach aids individuals dealing with serious illnesses to readjust to their circumstances. By channeling their anger and anxiety outwards through aggressive behavior, patients become better prepared to confront their condition positively, rather than internalizing feelings of hurt and regret, or succumbing to the fear of death. Scientific evidence indicates that maintaining positive psychological energy enhances the body's immune response and its ability to resist diseases effectively.

Hence, we can conclude that aggressive behavior in these cases plays a positive role by reinstating a degree of internal equilibrium and channeling psychological energy towards facing the disease. Consequently, the connection between frustration and aggression in patients with brain tumors is directly linked and beneficial when directed outwardly or lessened. Conversely, inward-directed aggression proves less beneficial due to its self-destructive nature.

In conclusion, we suggest several recommendations for future research in this area:

- Investigating methods to offer continuous psychological support for patients with terminal illnesses until they attain internal equilibrium.
- Developing comprehensive treatment programs that merge physical and psychological care for these individuals.
- Expanding the breadth of research in this field and advocating for increased focus on the psychological aspect within medical treatment.
- Educating families and communities and raising awareness about these behavioral responses, emphasizing the importance of understanding, and managing such behaviors as a crucial form of support.

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