

Department of Economics and Business

Course of Marketing

Mental health and consumer behavior: a crisis for Maslow's hierarchy of needs

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INTRODUCTION

The goal of this thesis is to analyze how consumer behavior is influenced after a change in the physiological needs of the Maslow hierarchy of needs due to consumer's mental health. The mental disorders this analysis focuses in particular on are the two most diffused: anxiety disorder and depression, with a special section dedicated to the case of eating disorders.

There is a lack of literature talking about the connections and the relations between these three topics. This thesis is an experiment to combine all of them and point out the complicated pattern that lies under consumer behavior theory and Maslow's pyramid in presence of mental disorders.

Chapter One will explore the world of mental health and mental disorders, focusing in particular on the anxiety disorder, depression and eating disorders. It will illustrate the influence of these disorders have on people's lives –from the buying habits to the labor outcomes– and needs.

Chapter Two will explain the concept of consumer behavior, highlighting the importance of mood states and personality traits and their links with mental disorders, showing their influences on people's buying behavior.

Chapter Three will illustrate the Maslowian theory of the hierarchy of human needs showing the role of needs for people's growth and how their distortion is linked to mental disorders: the hierarchy is in crisis.

Chapter Four will draw the conclusions of the thesis and, explaining the importance of marketing in the field of mental health, will suggest the use of AI as a powerful tool to help marketers develop optimal strategies for the consumers affected by mental disorders.

Furthermore, insights from the consequences of COVID-19 are provided in every chapter.

Nowadays there is a growing common acknowledgement that mental health is an issue that should be particularly taken into consideration given the amount of influence that it has on people's lives.

It can be easily proven that usually, when people are not at their best, their physiological needs like eating and drinking might come less. This is particularly relevant in the life of people affected by mental health issues since their well-being is altered for long periods of time. What is important to consider is that healthy or not, people are always part of an economic environment and, as such, they always interact with each other and with economic entities. These interactions are the keys of analysis of marketing strategies.

Maslow's hierarchy of needs is a well-known theory of human motivation that states that individuals have a hierarchy of needs that must be met in order to obtain self-actualization. Mental health and consumer behavior are two important areas that can have a significant impact on an individual's ability to meet their needs and progress up the hierarchy. Mental health problems can interfere with an individual's ability to meet his/her physiological needs, safety needs, and belongingness and love needs. Consumer behavior can also have an impact on an individual's ability to meet his/her needs, particularly his/her esteem needs.

So how does the necessity of “feeling good enough to fulfill one’s physiological needs” influence people’s consumer behavior? How can we explain that the esteem needs and self-actualization needs, because of their influence on our mental health, need to be shifted down from almost the top of Maslow’s pyramid to become the very base of it?

Chapter One: MENTAL HEALTH and MENTAL DISORDERS

Introduction

Mental health refers to the state of a person's psychological, emotional, and social well-being. It encompasses an individual's ability to manage thoughts, feelings, and behaviors, to cope with stress and challenges, maintain healthy relationships, and function effectively in daily life.

Before digging deeper in the discussion, it is necessary to make a distinction between mental health and mental disorders. Mental health is a broad concept that includes mental disorders as well as psychological disabilities and other mental states associated with significant distress, impairment in functioning, or risk of self-harm.

Mental health is crucial to our overall health and quality of life because mental disorders involve significant disturbances in thinking, emotional regulation, and behavior. According to the World Health Organization, 1 in every 8 people in the world has a mental disorder (World Health Organization, 2022). Although effective prevention and treatments exist, it has been seen that the number of people developing mental disorders is growing and this increase is not only related to most people still not having access to effective care. Mental disorders are very complex and can develop in anyone. Since they are triggered not only by biological factors but also by environmental and social ones, everyone exposed to adverse circumstances can develop them more easily. This is the case –for example– of the significant increase in the number of people with mental disorders after the spread of Covid-19 in 2020 (World Health Organization, 2022).

1.1. Types of disorders

There are different mental health disorders that can affect people, and they can vary in severity and duration. World Health Organization's list of the most important disorders includes anxiety disorders, mood disorders, post-traumatic stress disorder, personality disorders, schizophrenia, eating disorders, conduct disorders, substance use disorder, neurodevelopmental disorders (World Health Organization, 2022).

Anxiety disorders can be of different types, but they are all characterized by an excessive and persistent fear or worry that can interfere with daily life. Although anxiety is a normal emotion people with anxiety disorders experience excessive and irrational fears or worries that can interfere with their daily activities.

Mood disorders are characterized by significant changes in mood, energy, and motivation that can impact a person's ability to function. They are more commonly known as depression, bipolar disorder, and dysthymia. Depression is a common mood disorder that affects millions of people worldwide and its symptoms include persistent feelings of sadness, loss of interest in activities, and changes in appetite and sleep. Bipolar disorder is a mood disorder that causes extreme mood swings between depression and mania.

Post-traumatic stress disorder (PTSD) develops after an exposure to extremely threatening and horrific events. People re-experience the event in the present with intrusive memories, nightmares or flashbacks and have a feeling of constant threat that persists for several weeks causing significant impairment in functioning.

Personality disorders are characterized by long-standing patterns of behavior and thought that can cause significant distress and difficulty in relationships due to the difficulty to regulate emotions. People facing these conditions are diagnosed with borderline personality disorder, narcissistic personality disorder, and antisocial personality disorder.

Schizophrenia is a severe mental disorder that affects a person's ability to think, feel, and behave clearly due to hallucinations, persistent delusions, disorganized speech and behavior, lack of motivation, extreme agitation as well as other symptoms. It is estimated that people with schizophrenia have a life expectancy 10-20 years below average population.

Eating Disorders are serious mental illnesses that can cause significant physical and emotional harm and involve abnormal eating, food weight and body shape preoccupation. There are many types of eating disorders, the most common ones are anorexia nervosa and bulimia nervosa. Anorexia nervosa is an eating disorder characterized by an intense fear of gaining weight and a distorted body image, while bulimia nervosa is characterized by binge eating followed by purging.

Conduct disorders, like the disruptive behavior and dissocial disorders, consist in persistent behavioral problems like defiance or disobedience behaviors that violate basic rights of others or rules and laws.

Substance use disorders consist in a problematic pattern of substance use and addiction that can lead to significant impairment and negative consequences like in the case of alcoholism and drug addiction.

Neurodevelopmental disorders involve significant difficulties in the acquisition and execution of specific intellectual, motor, language, or social functions. The two most common neurodevelopmental disorders are attention deficit hyperactivity disorder (ADHD) and autism spectrum disorder (ASD).

All these disorders are treatable and people with these conditions usually live a normal life thanks to both medication and the proper psychological treatment. It has been seen that professional care and support can make a significant difference in managing symptoms and improving overall mental health (World Health Organization, 2022).

1.2. Mental disorders importance today

Learning about mental disorders and the importance of mental health has become increasingly important in today's society for several reasons. Although there has been a lot of progress in the cure and support in the field, mental disorders prevention is still something hard to do, especially because mental health is not something people speak openly about, it's often a taboo subject and there's a significant stigma associated with it. Luckily, in the last years the increasing concern about mental disorders has made people take them more into consideration and more willing to understand such disorders to help prevent their development, for example, by promoting healthy habits, coping mechanisms, early intervention, and a safe and understanding environment.

According to the World Health Organization (World Health Organization, 2022), it is estimated that one in four people globally are experiencing a mental health disorder at some point in their life. As mental disorders are very common, it is essential to have a better understanding of mental health issues in order to be able to provide support to those who may be struggling with them.

Struggling with a mental disorder severely impacts a person's life at all ages and in different ways. For the individual, by the physical point of view there is an increased risk for chronic diseases, decreased immune function, and decreased life expectancy. However, the impact also hits his/her family and communities. Socially speaking, these disorders can lead to social isolation, job loss, academic poor performance, socialization issues, emotional regulation problems, homelessness, and even suicide. By the economic standpoint, the impact of mental health is extremely relevant. According to the World Health Organization, mental health disorders cost the global economy more than one trillion dollars annually in lost productivity (Krych, Scott & White Clinic Hospital, 1989).

Taking into account these disorders pervasiveness and impact on an individual's quality of life, on society and economy, it becomes clear that learning more about them is necessary to reduce the stigma surrounding mental health, encourage people to seek help, improve economic productivity, and, most of all, the overall well-being thanks to the identification of symptoms and provision of appropriate treatment to help individuals lead healthier and happier lives. An example of this is the case of substance abuse addiction. It has been seen that the social cost of addictive behaviors in both personal expenditures and costs to the public

are enormous. Identification and intervention of these behaviors on people may result in beneficial effects to the individual, his/her family, and to society as a whole as well (Krych, Scott & White Clinic Hospital, 1989).

1.3. Anxiety disorder

Anxiety is one of the most diffused mental health disorders. According to the World Health Organization 2019 data, 301 million people, including 58 million children and adolescents, were affected by it and after the spread of Covid-19 in 2020 there has been an increase of 26% in cases of anxiety disorders.

There are various types of anxiety disorder, the most common ones are generalized anxiety disorder (GAD), panic disorder, social anxiety disorder, separation anxiety disorder and specific phobias. They often co-occurs with other mental health disorders such as depression, substance use disorders, and eating disorders.

Anxiety disorder is characterized by excessive fear, apprehension, worry and other physical disturbances such as sweating, rapid heart rate, trembling, muscle tension, headaches, and gastrointestinal problems. All these symptoms can make the affected people lose their ability to work, maintain relationships, and engage in daily activities. It can also lead to social isolation, decreased productivity, and a decrease in overall quality of life.

Even the buying habits of the ones affected by anxiety disorder are influenced. Some individuals avoid shopping, leading to decreased spending and potential negative impacts on the economy, while others may engage in compulsive buying or hoarding to alleviate their feelings of anxiety or to control their environment; their careless overspending alters their financial well-being by making them accumulate debt. It can also affect the individual's ability to work and maintain relationships, which can lead to financial problems and strained relationships due to social withdrawal and isolation (World Health Organization, 2022).

1.3 (a): How does anxiety disorder influence our physical needs?

Anxiety disorder can have a significant impact on our physical needs in several ways.

The changes in appetite between overeating and loss of appetite make individual turn to food as a coping mechanism, leading to weight gain and potential health problems, or make them lose their appetite and experience weight loss and nutrient deficiencies. The appetite is also influenced by the digestive problems such as diarrhea, constipation, and abdominal pain caused by anxiety.

The sleep disturbances, that lead to insomnia or oversleeping, can further worsen symptoms of anxiety starting a vicious cycle by augmenting the sense of fatigue and body aches, muscle tension, trembling and

rapid heartbeat. Overall tiredness also weakens the immune system, leading to an increased susceptibility to illnesses such as colds and flu.

It is important to highlight that everyone experiences similar symptoms when feeling anxious, but with an anxiety disorder these symptoms are prolonged in time and stronger.

1.4. Depression

Together with anxiety disorder, depression is one of the most diffused mental health disorders. According to the World Health Organization 2019 data, 280 million people of which 23 million children and adolescents were affected by it and after the spread of Covid-19 in 2020 there has been an increase of 28% in cases of depressive disorders.

This mood disorder is characterized by persistent feelings of sadness, of excessive guilt or low self-worth, hopelessness about the future, suicidal and death thoughts, and a loss of pleasure or interest in activities that were once enjoyable. Depression can also cause physical symptoms, such as fatigue and lack of energy, poor concentration, changes in appetite and weight, and difficulty in sleeping.

Because of all these symptoms, depression can have a significant impact on an individual's life in many ways. It causes social withdrawal and isolation, it affects the individual's ability to work and its engagement in daily activities; decreased productivity and difficulty in maintaining relationships can lead to financial problems and strained relationships, causing an overall decrease in quality of life.

As a consequence, depression also influences buying habits of people in different ways. Some individuals spend everything they have to fill the void they feel inside which is good for the economy but bad for them; others avoid shopping, which can lead to a decrease in spending and potentially negative impacts on the economy (World Health Organization, 2022).

1.4 (a): How does depression influence our physical needs?

Further to the impact on people's social and economic life, depression also has a significant impact on physical needs.

The alternance in changes in appetite between overeating and loss of appetite make an individual turn to food as a coping mechanism, leading to weight gain and potential health problems, or make her/him lose appetite and experience weight loss and nutrient deficiencies.

The sleep disturbances that lead to insomnia or oversleeping can further worsen symptoms of depression, starting a vicious cycle by augmenting the sense of fatigue and body aches.

The individual's ability to practice self-care, personal hygiene, exercise, and medication adherence is also influenced and this can lead to further physical health problems and worsen symptoms of depression.

Even sexual function is altered. Depression leads to a decreased libido, difficulty achieving orgasm, and other sexual dysfunctions.

In general, it can be said that people suddenly lose the ability to feel any kind of pleasure, either sexual, food, sleep or care related, and this worsen their condition.

1.5. Eating disorders

Eating disorders are psychological problems marked by significant and ongoing disturbances in eating patterns and the uncomfortable thoughts and emotions that go along with them. They can lead to extremely severe conditions that have an impact on social, psychological, and physical function.

When all eating disorders are considered, they affect up to 5% of people and are most common in adolescence and early adulthood. A few, particularly bulimia nervosa and anorexia nervosa, are more prevalent in women. In 2019, 14 million people experienced eating disorders including almost 3 million children and adolescents (World Health Organization, 2022).

Eating disorders are frequently linked to obsessions with food, weight, or body shape as well as anxiety related to eating or the results of consuming particular foods, dietary restrictions or avoiding particular foods, binge eating, purging by vomiting or abusing laxatives, or compulsive exercise. These actions may become compelled in ways that resemble addiction.

The most prevalent eating disorders are binge eating disorder, bulimia nervosa, anorexia nervosa, avoidant restricted food intake disorder, and other specific feeding and eating disorders. Most frequently, mood and anxiety disorders, obsessive-compulsive disorder, and alcohol and substance use disorders co-occur with eating disorders.

Treatment should address any dietary, behavioral, psychological, or other medical issues that may be present. The latter can include heart and digestive issues as well as other potentially fatal illnesses, as well as the effects of starvation or of purging practices. Treatment resistance, denial of an eating or weight issue, or concern about altering eating habits are all frequent. However, people with eating disorders can restart

healthy eating habits and regain their emotional and psychological well-being with the right medical attention (American Psychiatric Association, 2023).

1.5 (a): Buying habits of people with eating disorders

Individuals with eating disorders may exhibit certain buying habits because of their illness.

In the cases of restrictive eating behaviors, they may avoid buying certain foods, particularly those perceived as “unhealthy” or “fattening”, as part of their restrictive eating behaviors. They may also avoid going to certain restaurants or grocery stores that trigger anxiety or disordered thoughts around food.

In contrast, individuals with binge eating disorder may hoard or stockpile food, especially during periods of intense hunger or cravings, and may engage in compulsive buying of food as a way to alleviate anxiety or to prepare for future binges. This behavior can lead to financial problems and feelings of guilt or shame.

Some may become obsessive about reading food labels and tracking their calorie intake, even when it is not necessary for their health. They may also avoid social situations that involve food, such as parties or restaurants, to avoid triggering disordered thoughts and behaviors.

It is important to highlight that eating disorders are complex mental health disorders that involve much more than just buying habits.

1.6. Labor market outcomes for people with mental disorders

It is well established that mental diseases significantly affect outcomes in the job market, not only because they are very incapacitating but also because they especially affect the highest-level social and cognitive processes of people.

The employment rate and mean wage of people with mental disorders is lower than that of people without disabilities or people with physical illnesses. On average, people with mental disorders have 7.5 percent lower hourly wages than individuals without. The offer wage differential for employees with anxiety disorders is over three times higher than for employees with mood disorders; however, a far bigger percentage of the disparity with people without disabilities is made up of an unexplained component, stigma (Baldwin & Marcus, 2007).

Poor labor market results are related, in part, to the link between mental illnesses and deficiencies in higher-order social and cognitive abilities crucial for professional success and higher wages. However, since the early 1990s, drugs have been created that are better at controlling the clinical symptoms of mental disorders without the disabling side effects of earlier medications, allowing many people with even the most severe mental disorders to hold competitive jobs. Nonetheless, employment and wage rates for those with mental

problems have not considerably increased in comparison to those without such disorders (Baldwin & Marcus, 2007).

Significant disparities between employees with and without mental disorders in functional constraints and traits that affect the ideal trade-off between work and leisure are blamed for the variation in employment rates. People with mental disorders are significantly more likely to report social limitations, cognitive limitations, and other types of functional limitations than people without mental disorders. They are also significantly more likely to report coexisting chronic physical conditions or substance use disorders. This explains, in part, the employment rate differential (Baldwin & Marcus, 2007).

Apart from these factors affecting wage and employment rates, research repeatedly demonstrates that mental illnesses cause intense stigma. People with mental problems are rated as having the lowest employability levels in examinations of employer attitudes toward people with disabilities. There is also circumstantial evidence linking stigma to subpar performance in a highly competitive job. Therefore, people who have mental illnesses may experience stigma in their job applications and when it comes to their pay once they start working. For instance, due to both the symptoms of their condition, which may still make it difficult for them to form social connections even when they take medications to treat them, and the side effects of that medication, people with schizophrenia and other psychotic disorders are likely to be the most obviously different from people without mental problems. Such obvious discrepancies are frequent causes of stigma. Furthermore, when a mental disorder first appears when people are getting ready to enter the workforce, a lifetime disadvantage in the job market may result from the condition if it prevents the person from forming social networks or professional attitudes and actions that are appropriate. In this situation, job placement services, training programs, or employment coaching may be some effective interventions.

Work not only provides self-worth, socializing, income, and health insurance, but it also helps with recuperation and rehabilitation. An already burdened population is made worse by the unexplained differential component, which represent worse labor market results for people with mental problems than anticipated. (Baldwin & Marcus, 2007).

Chapter two: CONSUMER BEHAVIOR

Introduction

The first studies about consumer behavior go back to after World War II. Prior to that time, production and consumption were matched according to the available amount of money and sociology and psychology theories were used to understand the mechanisms behind purchasing decisions. Marketing practitioners and social scientists began to study the dynamics of consumer behavior using different means, the formers were pragmatic and focused on attitudes and demographics while the latter were more scientifically oriented.

The study of human behavior is multidisciplinary, drawing from various fields. General psychology provides the fundamental concepts for analyzing individual behavior, while social psychology adds an interpersonal behavioral perspective. Sociology, cultural and social anthropology offer valuable frameworks for understanding group and human interaction, as consumer behavior is influenced by these factors. Philosophy helps in analyzing the underlying reasons for people's behavior, and economics addresses the choices people make in allocating scarce resources (Johnson, Edna Beeman & D.S.W, 1990).

Consumer behavior theories have been influenced by various concepts such as "motives," which gave rise to the field of motivation research in the early 1950s and was advocated by Ernest Dichter. Learning theory or behaviorism, commonly associated with I. Pavlov and B.F. Skinner, suggests that the consumer experiences an internal drive to act, responding to internal or external cues that inform a response to satisfy the drive. Such responses are positively or negatively reinforced, depending on the outcome.

Psychoanalytic theory contributed ideas related to individual development and personality structure, including the unconscious and drive theory as motivational factors. Gestalt theory focused on the individual in their environment, emphasizing their perception of that environment. Social psychology has focused on cognitive theory, studying the organization of values, attitudes, and information stored in an individual's memory. Festinger's theory of cognitive dissonance focuses on the tension that arises from contradictory information and hypothetically motivates change to re-establish harmony. Reference group theory, social class theory, and the sociology of the family emphasize the influence of others on people's behavior (Johnson, Edna Beeman & D.S.W, 1990).

2.1. Consumer behavior theory

Consumer behavior theory focuses on consumer activities and consumption analysis about how individuals make their purchase decisions based on the resources and items that are available to satisfy their needs.

According to Engel, Kollat and Blackwell, consumer behavior is “the acts of individuals directly involved in obtaining and using economic goods and services, including the decision process that precede and determine these acts” (Engel, Kollat & Blackwell, 1973). Basically, consumer behavior is made of all “what, where, how often, and under what conditions” the consumer uses in the purchasing process.

Consumer behavior theory is focused on the process through which consumers make purchases rather than the purchasing act itself; the process is complex and includes before and after variables. It takes into consideration the context within which the behavior happens, considering individual, social and institutional variables.

The approaches to study consumer behavior theory are divided into two categories: distributive approach and decision-process approach (Johnson, Edna Beeman & D.S.W, 1990).

The distributive approach focuses on behavioral outcomes and sees behavior as an act rather than as a process. It attempts to predict the relations among various independent variables and consumer decision-making outcomes. It's not an expensive method but it doesn't provide information deep enough to develop meaningful marketing strategies. It doesn't include the psychological components of consumer behavior, the "why" that connects variables (Johnson, Edna Beeman & D.S.W, 1990).

The decision-process model provides an integrative-comprehensive approach. It attempts to describe how a decision is made and assesses the impact of various influences on the purchase process, focusing on the procedure an individual uses in reaching a decision. It provides a more extensive information that may be helpful in the product development and marketing approach definition (Johnson, Edna Beeman & D.S.W, 1990).

It is important to keep in mind that no framework can completely account for the multitude and variety of complex interactions that may be involved in any purchasing decision (Johnson, Beeman & D.S.W, 1990).

2.2. Variables influencing the decision process

Many variables influence the purchasing decision process, from individual characteristics to social and situational influences. The attributes that define individuals include their motives, values, personalities, and lifestyles.

Motives and their influence on consumer behavior are described in chapter 2.3.

Values are defined as enduring beliefs that determine a person's preference for a particular mode of behavior or state of existence over an opposite one. Personal values can be classified as instrumental or terminal. Instrumental values are traits such as ambitious, helpful, independent, and self-controlled, while terminal values include freedom, happiness, self-respect, and a comfortable life. Values are acquired through socialization and acculturation and are transmitted across generations and groups, mainly by families, religious institutions, and schools. Early-life experiences can also influence values.

Lifestyle is a crucial concept that differentiates people with similar demographic characteristics. Lifestyle is defined as the patterns of behavior, time, and money spent by individuals to pursue and express their personal goals. People with similar incomes can have different lifestyles, reflecting their unique values, motives, and personalities. The study of lifestyle has led to the development of psychographics, a research technique that measures lifestyle in quantitative terms (Johnson, Edna Beeman & D.S.W, 1990).

Personality is a complex concept that lacks a precise definition but, from a consumer behavior standpoint, can be understood as the general behavioral patterns of an individual, representing his/her consistent responses to external stimuli. There are various personality theories, summarized in chapter 2.5. Among them, trait and factor theories of personality are commonly used in the study of consumer behavior¹. Although numerous studies have been conducted, there is still ambiguity in understanding the relationship between personality and consumer behavior, as shown in chapter 2.3.

Social influences, including culture, family, and reference groups, play a significant role in shaping human decision-making. Culture is a critical determinant of decision-making, as it provides values, ideas, attitudes, and other meaningful symbols that humans use to communicate, interpret, and evaluate as members of society. Culture includes personality types, religion, and learned patterns of behavior, feelings, and reactions that are passed down from generation to generation. It also encompasses material elements, such as artifacts. Family is the primary transmitter of culture, although school and religion also play a strong role. Reference groups, such as social class, race, ethnicity, and friendship groups, also contribute to cultural mediation. Culture teaches individuals how to respond to specific situations by providing solutions to recurring problems that become part of the person's response set (Johnson, Edna Beeman & D.S.W, 1990).

Cultural values are widely held beliefs or sentiments that are important to the community's identity or well-being. American culture emphasizes individualism, equality, progress, achievement, efficiency, practicality, mastery of the environment, religion, humanitarianism, youth and romance, materialism, hedonism, and social interaction and conformity (Johnson, Edna Beeman & D.S.W, 1990).

Subcultures also exist within the larger culture, and they bring with them core values and patterns that contribute additional influences on the decision process. Social class, defined as relatively permanent and homogeneous divisions in society, also has a significant impact on decision-making.

Reference groups are interacting aggregations of people that influence an individual's self-conception, attitudes, and behavior by acting as reference points for that individual. Reference groups perform several

¹ Trait theories suggest that individuals possess relatively stable behavioral tendencies that differ in degree and can be useful in characterizing personalities. Factor theories use factor analysis to identify traits or factors from the interrelationship between various personality measures across a large number of individuals.

functions, including acting as vehicles of socialization, influencing attitudes and perceptions, maintaining adherence to group norms, and establishing and maintaining an individual's self-concept (Johnson, Beeman & D.S.W, 1990).

2.3. Consumer psychology and marketing

Marketing research aims to increase the knowledge of consumers to gain perceptive and competitive advantage to better predict consumers' needs and desires as marketing strategies are extremely linked to consumer motivation and behavior.

As seen in chapter 2.1, consumer behavior is a complex field that focuses on the whole consumption process, involving the issues that influence the consumer before, during and after the purchase. Almost all the activities individuals take part to are related to consumption and are personally affected by the purchasing issues; for this reason, it is extremely important to understand the individual behavioral pattern using consumer psychology. The goal is to combine psychological theories and marketing strategies to comprehend consumer's psychology starting from the consequences of the internal influences and the marketing stimulus on the individual's mind.

Following this approach, the internal elements (variables) influencing consumer behavior are individual's perception, learning, memory, motives, personality, emotions, and attitudes (Vainikka, 2015). The last five are described in the following chapters.

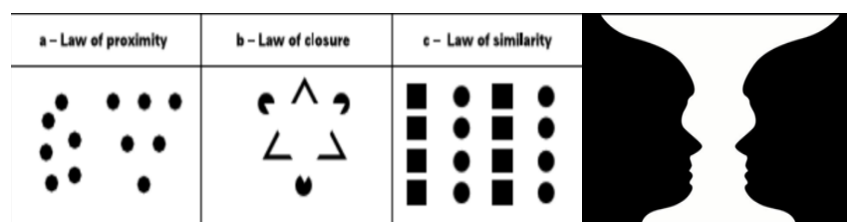
2.3 (a): Influence of perception on consumer behavior

Perceptions begin when the consumer is exposed to the marketing stimuli. After the exposure there are attention and interpretation. Stimuli are interpreted differently from person to person based on their needs and experiences. For an effective marketing communication, it is necessary to understand the nature of perception. One of the factors that determines how much exposure to a certain stimulus an individual can handle is the experience. Media exposure is the most common type of exposure, and it makes consumers able to selectively avoid exposure to advertising. This makes exposure to advertising less effective than before. Another factor that influences exposure is the adaptation that makes the consumer familiar with a certain stimulus because he/she is exposed to it for a prolonged period (Vainikka, 2015).

Between XIX and XX century some psychologists started to study perception and wrote the so-called Gestalt theories. The purpose of these theories was to organize perception according to four laws: law of proximity, law of closure, law of similarity and figure ground principle [**Figure 1**]. According to the law of proximity, the stimuli placed close to each other are perceived as grouped together. This law is used by merchandisers to place clothing items together so that the consumer can see them and eventually buy the whole outfit. The

law of closure states that when one looks at a complex arrangement of visual elements, one tends to look for a single, recognizable pattern. It makes people fill in the blanks of an image of an object with missing parts due to prior exposure to the object and familiarity with it. This technique is used in marketing advertising and encourages consumers to perceive and process information in an attractive way. The Law of similarity makes people group objects together due to their similarity and explains why consumers directly associate certain products to certain brands. The Figure Ground Principle makes people perceive items being separate from other surrounding stimuli by having a distinctive form. If the object of the stimulus is familiar, the individual will recognize it as separate from the “ground”.

Figure 1: Law of proximity, Law of closure, Law of similarity, Figure Ground Principle, (adapted from Jansson-Boyd & Catherine, 2019)



In more general terms, the perception of stimuli depends on the attention the exposed consumer gives to them, and on their interpretation.

Attention, the second element of perception, refers to the degree to which consumers pay attention to a stimulus within the range of exposure. Since consumers are constantly bombarded with stimuli the promotion of attention is becoming particularly challenging because they have become highly selective with the stimuli to pay attention to. Something that has a strong influence on consumer attention is the level of arousal related to a stimulus. When individuals are moderately aroused their attention increases and their cognitive ability allows them to retain more information. The environment surrounding the individual can be fundamental in influencing the arousal level, for this reason consumers choose to focus their attention on what they visually select via perception. This can happen not only visually but through all senses. This explains why, for example, it has been seen that color is an element that contributes to the level of attention consumers pay to a stimulus (Vainikka, 2015).

Interpretation of a stimulus, the third and final element of its perception, consists in the assignment of meaning that individuals assign to a specific sensory stimulus. Meanings of interpretations can be semantic or psychological. Semantic meanings are the relations between words and phrases while psychological ones are influenced by individual’s experiences, expectations and context. Cognitive interpretation is the process through which consumers categorize stimuli based on their meanings based on their beliefs and culture. If

there is also an emotional response triggered by the stimulus there is an affective interpretation. Emotional responses are extremely important due to their subjectivity since they come from preference and past experiences of the consumer (Vainikka, 2015).

Individuals base their perception and interpretation on their personal needs, desires experiences and expectations. Marketers need to know more about individual characteristics in order to understand what characteristics make people different, including traits (both physiological and psychological), learning and knowledge and expectations (Vainikka, 2015).

2.3 (b): Influence of motivation on consumer behavior

Motivation is the process that leads to certain behaviors by explaining why consumers act in a specific way. It has three features: direction, effort and persistence. Direction consists in what the individual aims to achieve, effort is the amount of energy she/he put to achieve goal, and persistence is the amount of time she/he is willing to sacrifice to achieve it. The feature lying under them is the need that is activated when there is a discrepancy between a desired state of being and the actual state. The stronger the need, the more the arousal occurs and takes the name of “drive”. As the drive grows the urgency of response becomes greater. The function of the drive is to energize the behavior in order to lead the response to a particular stimulus. If the response is reinforced or rewarded, a particular habit is learned while if the responses are unrewarded or inappropriate, it is eliminated or extinguished. Any stimulus may become a drive if it reaches a sufficient intensity. Some stimuli are linked to the psychological process necessary to survival while others are acquired in time (Vainikka, 2015).

Needs and motives have a big influence on the perception of what is relevant to consumers as well as their feelings and emotions. Over the years psychologists developed two approaches to study the theory of Motivation. The first approach is the Maslow’s Hierarchy of Needs, the second is McGuire’s Psychological Motives: they will be analyzed in the next chapter.

2.3 (c): Influence of personality on consumer behavior

As will be seen in chapters 2.4 and 2.5, personality is a fundamental element that drives individuals to accomplish their goals in different situations. Since every individual is different from the others, some trait theories have been developed in order to help marketers create an effective advertising by segmenting customers based on their personality differences. The most used theory is the Five Factor Model introduced in chapter 2.4. The five core traits of the model manifest in certain behaviors due to different situations [Table 1] (Vainikka, 2015).

Table 1: Five Factor Model of Personality

CORE TRAIT	MANIFESTATION
Extroversion	Prefers to be in a large group rather than alone, talkative, bold
Instability	Moody, temperamental, touchy
Agreeableness	Sympathetic, kind, polite
Openness to experience	Imaginative, appreciation of art, find novel solutions
Conscientiousness	Careful, precise, efficient

Another theory commonly used is the Single Trait approach. It is used to identify a limited part of consumer behavior to understand the related motivations that cause certain behaviors. There are three traits labelled as “needs”: Consumer Ethnocentrism, Need for Cognition and Need for Uniqueness. Consumer Ethnocentrism refers to the bias opinion that some individuals have towards foreign products. Need for Cognition refers to the level of engagement and thinking that individuals enjoy in different situations. Need for Uniqueness describes the inclination of individuals to be different from others. Women tend to have higher levels of Need for Cognition than men, which is important for media targeting. Deliberate scarcity is a marketing strategy that appeals to individuals with a Need for Uniqueness by limiting the amount of product manufactured to create a sense of uniqueness (Vainikka, 2015).

2.3 (d): Influence of emotions on consumer behavior

Emotions are strong uncontrollable feelings that affect behavior. When consumer needs are not satisfied negative emotions come up and vice versa. Emotions have an extremely important role in marketing because if positive emotions are associated with a particular product or activity consumers are more likely to purchase it again leading to consumer satisfaction and brand loyalty. When consumers are particularly emotional these effects are heightened and more intense. Another aspect related with emotions is behavior. Certain behaviors are associated with specific emotions. A specific emotion is identified as a feeling and the aspect of satisfaction or dissatisfaction is the affect related with it. For marketers creating association between products and emotions will increase the likelihood that consumers will buy them. A commonly used technique is the emotional branding which allows companies to engage with consumers on a more personal level. This type of advertisement enhances arousal making the impact of the stimuli on consumers stronger (Vainikka, 2015).

Insight: Emotions vs. mood states and consumer behavior

Moods and emotions are distinguishable, as emotions tend to be more intense, attention-grabbing, and linked to a specific behavior. People are typically conscious of their emotions and the impact they have, which can divert their focus towards the source of the emotion and interrupt their current actions. On the other hand, people may or may not be conscious of their mood and its impact, which can affect their attentional processes but seldom interfere with their ongoing behavior (Gardner, 1985).

Moods are individual's subjective perceptions of their feeling states, making them a subcategory of feeling states. The term "mood" is used to describe transient feeling states that are unique to specific times and situations and can be distinguished from those that are comparatively stable and enduring (Gardner, 1985).

Positive moods can increase the likelihood of performing a range of behaviors, including kindness towards oneself and others. Some positive moods may also increase the likelihood of behaviors associated with positive outcomes, while decreasing the likelihood of those associated with negative outcomes. The effects of negative moods on behavior may be more complex, with diverse factors contributing to their effects. Negative mood states may be more heterogeneous than positive mood states, and the processes that terminate negative moods may compete with automatic tendencies towards mood-congruent behavior (Gardner, 1985).

The link between mood states and behavior can be direct, involving associations between mood states and behaviors in memory. These associations may be learned through repeated experiences, socialization, or acculturation. Alternatively, the link can be indirect, with mood states influencing expectations, evaluations, and judgments, which in turn impact behavior. Positive moods can increase the likelihood of performing a behavior by increasing positive associations and leading to more positive evaluations of that behavior (Gardner, 1985).

The relationship between mood states and affective responses and judgments can be seen as both direct and indirect. A direct link may involve associations in memory between mood states and affective reactions, where an affective reaction can be considered a conditioned response. Alternatively, the association between positive mood inducers and favorable evaluations can be viewed as indirect and influenced by information processing. This perspective suggests that the effects of positive mood can be mediated by cognitive activity such as information retrieval (Gardner, 1985).

Concerning the marketing actions to implement based on this information, it is important to keep in mind what follows [Figure 2].

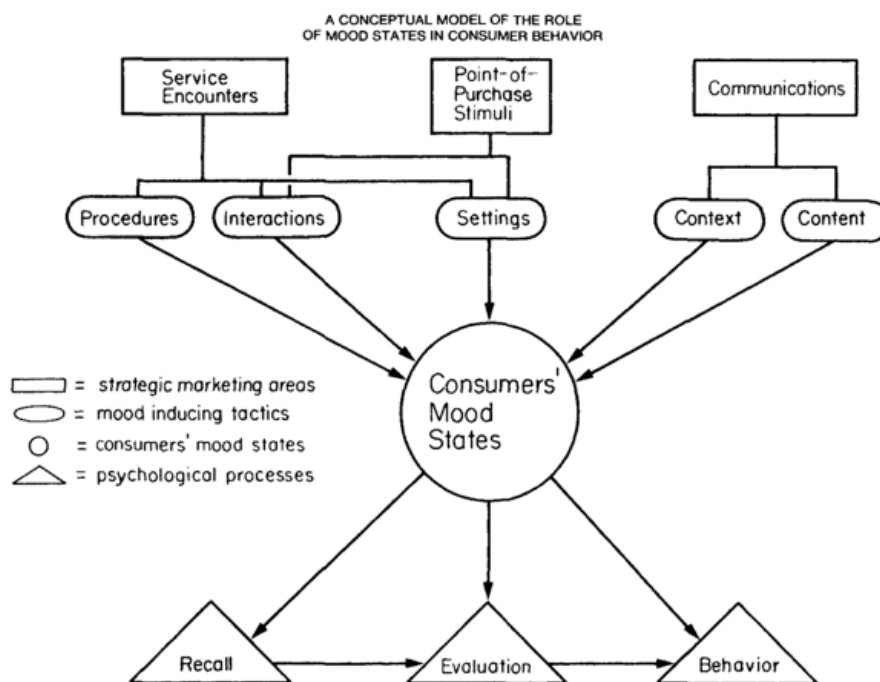
Mood states can have important effects on consumer behavior in the service sector, but more research is needed to understand the extent of these effects. There are numerous opportunities for mood induction during service encounters, such as through settings, procedures, and interactions with service providers. Mood induction that is contiguous to the service encounter can increase the likelihood of its effects on transactions. Service providers can also adjust their tactics to suit consumers' mood states, given their personal contact (Gardner, 1985).

The effects of mood states on point-of-purchase behavior can be significant and important for marketing strategies, but further research is needed to examine the strength of these effects. Physical settings and interactions with store personnel can be powerful mood inducers that influence decision making. To fully understand the effects of point-of-purchase moods, research is needed to examine basic decisions such as whether to shop, what to shop for, and whether to shop alone or with others. Anticipation of a positive or negative shopping experience may also mediate the behavioral effects of mood states (Gardner, 1985).

There is limited evidence to support the claim that context-induced moods can significantly affect consumer response to advertising (Gardner, 1985).

Advertisements can affect consumer moods, but the impact of these effects may depend on the advertiser's purpose, product, and target audience (Gardner, 1985).

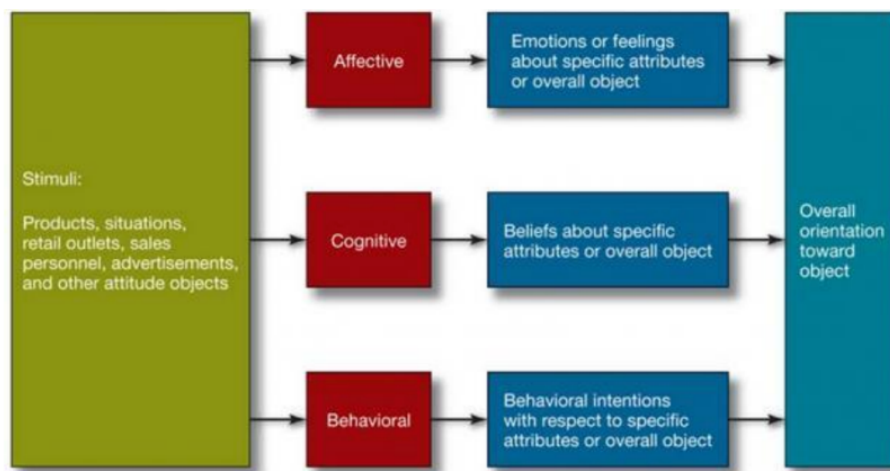
Figure 2: Role of mood states in consumer behavior (adapted from Gardner, 1985)



2.3 (e): Influence of attitudes on consumer behavior

Attitudes are evaluations made over time about people, objects and ideas and they have a strong personal identity based on individual's experiences. They are useful to marketers because they can easily lead consumers to specific products or services of their preference. Attitudes are classified according to the ABC model of Attitudes [Figure 3] and consist of three main elements: Affective (A), Behavioral (B), Cognitive (C) (Vainikka, 2015).

Figure 3: The ABC model of Attitudes (adapted from Hawkins, D & Mothersbaugh, 2010)



Affects are the emotional responses of consumers based on the way they feel about an object, the Behavioral component focuses on how the consumer is willing to act with respect to an object, and the Cognitive element describes the beliefs the consumer has about the object. This model emphasizes the interconnections between knowing, doing, and feeling (Vainikka, 2015).

Attitudes are not created at birth; they are developed in time. Consumers have different levels of commitment to attitudes. In general, it is safe to say that there is a more likelihood that a consumer will consider a certain product or brand if it brings him a strong positivity. Attitude involvement has three levels: Compliance, Identification, and Internalization. Compliance is the lowest level and involves forming an attitude to gain rewards or avoid punishment. This attitude is flexible and can change depending on the situation. Identification is the second level, where an individual changes their attitude to match that of a person or group. Advertisements can influence consumers at this level. Internalization is the highest level of attitude commitment, where attitudes become part of an individual's value system and are difficult to change. Internal attitudes are important to an individual, and there is a level of credibility involved with them (Vainikka, 2015).

A functional theory of attitudes was developed by the psychologist Daniel Katz, and it explains how attitudes facilitate social behavior. Attitudes serve a function for each individual and are determined by their motives. There are four main functions: Utilitarian, Knowledge, Value-expressive, and Ego-defensive. The Utilitarian function is linked to reward and punishment and encourages individuals to achieve goals. The Knowledge

function helps individuals understand their environment and categorize information. The Value-expressive function expresses a consumer's values and self-concept. The Ego-defensive function protects an individual from external threats. These functions can explain the different ways attitudes serve multiple purposes in a consumer-driven society. However, the model does not describe all types of attitudes (Vainikka, 2015).

The Cognitive Dissonance Theory suggests that individuals strive for consistency between their behavior and attitude and can explain attitude changes and attitude-behavior discrepancy. This theory focuses on situations where there are inconsistencies between two cognitive elements, which creates discomfort and encourages individuals to make changes to avoid feeling uneasy. Post-purchase dissonance can occur when a consumer justifies their purchase with statements of dissonance, such as “I don't need this product” and “I deserve this product”. Marketers should focus on building strong brand attitudes to provide purchase-decision reassurance for consumers (Vainikka, 2015).

Marketers often try to change consumer behavior by altering fundamental attitude elements. However, it is important for them to do so in a way that is ethical and socially responsible. To successfully change attitudes, marketers need to develop persuasive messages and strategies that address all three components of the ABC model.

To change the Cognitive component [**Table 2**] there are four strategies that can be implemented: Change Beliefs, Shift Importance, Add Beliefs and Change Ideal. The aim is to change a consumer's beliefs so that it affects their behavior and subsequently leads to an attitude change (Vainikka, 2015).

Table 2: How to change the Cognitive component

Change Beliefs	Shift Importance	Add Beliefs	Change Ideal
<ul style="list-style-type: none"> • Shifting beliefs of performance 	<ul style="list-style-type: none"> • Enhanced evaluative factors 	<ul style="list-style-type: none"> • Add new beliefs to belief structure 	<ul style="list-style-type: none"> • Change perception of the brand
<ul style="list-style-type: none"> • Providing facts about performance 	<ul style="list-style-type: none"> • Strong product attributes 	<ul style="list-style-type: none"> • Improve product features 	<ul style="list-style-type: none"> • Incorporating elements that are important to target market

To change the Affective component, marketers use three change approaches to increase affect: classical conditioning, affect toward an ad/website, and mere exposure. Classical conditioning works by associating a brand with a stimulus such as a catchy song or visual advertisement. Advertisements and websites can modify the affective component of an attitude by using invigorating design, celebrity appeal, sensory content, or humor. Negative emotions can also be used in marketing, such as in charity campaigns. Mere exposure involves bombarding consumers with advertising to increase familiarity and liking of the brand.

Marketers use these approaches to increase consumption without making alterations to beliefs. Given that the main aim of a business is to influence consumers without directly changing their beliefs and behavior, one way to achieve this is by making changes to the affective component of a consumer's attitude.

Behavioral change can occur before or in contrast to changes in cognitive and affective components of attitude. For marketers to succeed in behavioral changes their two main focuses should be based upon influencing consumers purchase products simultaneously making them feel rewarded. Operant conditioning can be used to influence consumer behavior through rewards such as loyalty cards, samples, discounts, or vouchers. These strategies can lead to increased learning and potentially change attitudes towards the product (Vainikka, 2015).

2.4. The importance of personality

“Personality is defined as the individual’s distinctive and enduring dispositions that cause characteristic patterns of interaction with environment” (Armstrong et al., 2014). The five main factors of personality – openness, conscientiousness, extraversion, agreeableness, and neuroticism – have been used in a model called the Big Five Personality Model [Table 3] that is used to map individual’s personality. The five factors are all divided into lower dimensions called facets (Liu et al., 2017).

Table 3: Big Five Personalities model and Facets (adapted from Liu et al., 2017).

Big Five Personality	Facets
Openness	<ul style="list-style-type: none"> ▪ Adventurousness ▪ Artistic interests ▪ Emotionality ▪ Imagination ▪ Intellect ▪ Liberalism
Conscientiousness	<ul style="list-style-type: none"> ▪ Achievement striving ▪ Cautiousness ▪ Dutifulness ▪ Orderliness ▪ Self-discipline ▪ Self-efficacy
Extraversion	<ul style="list-style-type: none"> ▪ Activity level ▪ Assertiveness ▪ Cheerfulness ▪ Excitement

	<ul style="list-style-type: none"> ▪ Seeking ▪ Friendliness ▪ Gregariousness
Agreeableness	<ul style="list-style-type: none"> ▪ Altruism ▪ Cooperation ▪ Modesty ▪ Morality ▪ Sympathy ▪ Trust
Neuroticism	<ul style="list-style-type: none"> ▪ Anger ▪ Anxiety ▪ Depression ▪ Immoderation ▪ Self-consciousness ▪ Vulnerability

It has been seen that personality traits contribute to human behaviors, especially in the consumption of goods and services. Various studies show the correlation between purchasing behavior and personality traits.

“Verplanken and Herabadi investigated how impulse buying tendency is influenced by personality. They found that the impulse buying behavior is correlated with extraversion, negatively with conscientiousness. Agreeableness and neuroticism were unrelated to impulse buying tendency (Liu et al., 2017).

Barkhi, Reza, and Wallace studied online purchase intent using personality traits. They found that 3 of the big five factors, neuroticism, openness, and agreeableness, have significant influences on the willingness to buy online. Their results implied that people tend to make shopping decision with emotion rather than reasoning (Liu et al., 2017).

Boudreaux and Palmer also indicated that individual personality types have great influence on determining consumer attitudes and intentions to purchase.

Matzler, Bidmon and Grabner-Kräuter specifically studied two personality traits openness and extraversion. They empirically confirm the link between these two traits and perceived hedonic values of products (which is related to brand effect). The relationship of personality and purchasing behavior has been investigated across a numerous products and services (Liu et al., 2017).

While testing individual’s preferences concerning organic foods, Chen, Mei-Fang indicated that an individual’s personality traits play an important role in establishing personal food choice criteria. Several

studies have suggested that food-related personality traits play an important role when predict the likelihood of future food consumption (Liu et al., 2017).

Schlegelmilch, Bohlen, and Diamantopoulos explored the relationship between personality variables and pro-environmental purchasing behavior. He showed that consumers' overall environmental consciousness has a positive impact on green purchasing decision. For products with strongly symbolic meanings, such as wine, consumer's purchasing decision will be strongly affected by specifically perceptions of personality. Among all the survey-based studies, Yang et al. proposed one of the very few studies relying on derived personality to predict brand preferences. They showed that personality traits have played a very important role in brand preference prediction (Liu et al., 2017).

Liu et al. proved personality's impact on consumer behaviors across different product categories, and suggested the use of derived personality traits, as an alternative to traditional demographic factors, in consumption predictions" (Liu et al., 2017).

The predictive power of an individual's personality traits on behavior "is hypothesized to differ depending on the degree to which the external environment inhibits a person's freedom to behave in idiosyncratic ways" (Barrick et al., 1993).

In the study "KnowMe and ShareMe: Understanding Automatically Discovered Personality Traits from Social Media and User Sharing Preferences" done by the IBM research-Almaden the previous cited proposition is demonstrated (Gou, Zhou & Yang, 2013). They focused mainly on two variables, namely consumer income and needs, to test the effect of their interaction on the association relationship between personality traits and consumer behavior. They discovered that the effect of people's personality on their product purchase is more predominant when they have less income. This study furtherly showed that consumer purchasing behavior is a multifaceted phenomenon that can be influenced by various factors including personal preferences, social norms, cultural background, marketing, and many more (Liu et al., 2017).

The complexity behind purchasing decisions is further compounded when individual choices are aggregated, and these decisions can vary significantly among people faced with the same purchase decision. An explanation for this variation could be that individuals with higher incomes tend to possess a larger number of products already, and as a result, the aggregated effects of their purchase decisions could potentially lessen the impact of their personality on their buying choices (Liu et al., 2017).

They based their observation across growth and deficiency needs. They saw that the more growth needs are satisfied, the more people want to pursue them. Compared to individuals with lower incomes, those with middle or high incomes have greater resources available to fulfill their growth needs. However, as these needs continue to expand, there may be additional needs that arise. At a certain point, a person's personality

may no longer be the dominant factor in influencing their purchasing behavior. Previous research on consumer behavior has emphasized that individuals with lower incomes tend to place greater emphasis on price and performance when evaluating products and making purchase decisions. This is often due to their limited mobility, which restricts their exposure to the symbolic meanings associated with consumption and results in a greater reliance on functional attributes of consumer goods. Nevertheless, our findings suggest that individuals with limited resources are still able to consider the symbolic aspects of products to a significant extent (Liu et al., 2017).

Overall, the experiment showed that there is both a significant situational effect of income on the relationship between personality and consumption behavior and on the interaction between income and needs. Personality is a decisive power on consumer behavior and varies significantly among different income levels but not significantly between consumer needs. At the same time, also income and needs have a significant effect on the association between individual's personality and consumption behavior (Liu et al., 2017).

2.5. Theories on personality & consumer behavior: their application to the study of consumer behavior

Personality psychologists have developed theories to explain the sources and development of consistency in behavior patterns and intrapersonal process. The personality theories can be grouped into six major categories: the psychodynamic theory, the traits theory, the behavioral theory, the biological theory, the humanistic theory, the socio-cognitive theory.

The psychodynamic theory of psychology believes that human personality is formed through the interplay of instinctual drives and unconscious forces within the individual. This theory asserts that our behavior is largely influenced by unconscious motivations, and that various parts of the unconscious mind are in constant conflict. It also suggests that our behaviors can be traced back to our childhood experiences. This field of study encompasses the psychoanalytic theory by Sigmund Freud and the Neo-Freudian theories developed by his followers (Udo-Imeh, Awara & Esseini, 2015).

Trait theory proposes that personality is composed of measurable characteristics (traits) that are relatively stable and pre-dispositional in nature. As every person has a unique combination of traits, their behavior is expected to be consistent over time and across situations. Trait theory is quantitative in nature, distinguishing it from psychoanalytic and Neo-Freudian theories which tend to be qualitative. Trait theorists argue that people differ in the extent to which they possess certain traits such as materialism or aggressiveness. The personality psychologists that developed the "Big Five Personality" framework in the 1980s belonged to this current (Udo-Imeh, Awara & Esseini, 2015).

The behavioral theory asserts that an individual's personality is the result of the interplay between individual factors and environmental influences. This theory rejects the notion that inner mental states are the basis of personality and instead focuses on observable and measurable external events. According to behaviorists, the human mind is a blank slate at birth. Personality is acquired through classical or operant conditioning, and it is shaped by reinforcement in the form of rewards and punishments (Udo-Imeh, Awara & Esseini, 2015).

The humanistic theory states that people are fundamentally good, accountable for their behavior, and possess an inherent desire for personal growth and fulfillment in life. This approach takes a comprehensive and subjective view of human existence, focusing on issues of creativity, free will, and human potential. Humanistic personality researchers have downplayed the scientific approach to studying human personality, instead placing emphasis on qualitative research methods that are better suited to capturing the subjective, conscious experiences of individuals. Abraham Maslow is the most famous figure in the field of humanistic psychology. His paradigm involves a pyramid of needs arranged in a hierarchical manner, with lower needs taking priority over higher ones. Individuals are motivated to fulfill their lower-level needs before being driven to meet their higher-level needs (Udo-Imeh, Awara & Esseini, 2015).

The socio-cognitive theory is an extension of the behavioral theory. According to it, people learn social behavior primarily through observation and cognitive processing of information, rather than through direct experience (Udo-Imeh, Awara & Esseini, 2015).

Personality theories have been applied to the study of consumer behavior with different degrees of success. The psychoanalytic theory, neo-Freudian theory, and the trait theory have been particularly relevant to consumer behavior analysts. Some scholars and researchers have found these theories useful in explaining and predicting consumer buying behavior, leading to their application in product development, market segmentation, and marketing communication (Udo-Imeh, Awara & Esseini, 2015).

Researchers have found a positive correlation between hedonic buying motives and three of the Big Five personality traits. Consumers who scored high on these traits were more likely to seek excitement, fun, and enjoyment in their online shopping experiences. This aligns with some earlier studies that connect hedonic buying with impulsive purchases based on emotions of pleasure and excitement (Udo-Imeh, Awara & Esseini, 2015).

It was also discovered that understanding personality traits is crucial in the development and launch of new products. Marketers can identify consumer innovators, who are open to new ideas and willing to try new

market offerings, by assessing traits such as innovativeness, dogmatism, need for uniqueness, and variety-seeking. It was shown that consumer innovativeness is a critical success factor in brand extension strategy and that the need for uniqueness is linked to the purchase of unconventional products and brands (Udo-Imeh, Awara & Essein, 2015).

Cognitive theory has found application in marketing communication, as different consumer segments have varying needs for product-related information. Understanding personality has also been useful in the study of consumer ethnocentrism, where consumers' responses to foreign-made products depend on their levels of preference for their own ethnic group. The Consumer Ethnocentrism Scale (CETSCALE) is used by international marketers to gauge the level of acceptance of products, services, and promotional appeals to foreign consumers (Udo-Imeh, Awara & Essein, 2015).

Finally, psychodynamic theory has been valuable in motivational research, uncovering deeper meanings of products and services to consumers, particularly those with sensual undertones. This has helped in the development of successful products, services, and promotional messages (Udo-Imeh, Awara & Essein, 2015).

Marketers have attributed human-like personality traits to brands, creating a unique connection between consumers and different brands. This personification of brands enables marketers to influence consumers' responses, preferences, tastes, and loyalties, leading to significant profits. Numerous studies demonstrate that consumers tend to purchase brands that mirror their personalities. As a result, marketers often associate product and service images with those of the consumers (Udo-Imeh, Awara & Essein, 2015).

Other research was, however, unable to find a significant relationship between personality and consumer behavior. The lack of relationship has been attributed to several factors. One key issue is that much of the knowledge on personality is borrowed from the field of psychology, which is based on a medical or clinical model. This showed that many personality tests are not easily applicable to the study of consumer behavior (Udo-Imeh, Awara & Essein, 2015).

2.6. Psychological factors and consumer behavior during COVID-19

Psychological factors impact consumer behavior differently, particularly during dramatic contexts such as disease outbreaks or natural disasters. Panic buying is a phenomenon that occurs when both fear and panic intervene and influence behavior, making people to buy more products than usual. Fear and anxiety originating from perceived feelings of insecurity and instability drive these behavioral changes. Stress is also

a crucial factor in influencing consumer behavior, with stress levels generally leading consumers to save money and spend strategically on products perceived as necessities (Di Crosta et al., 2021).

According to a study by Di Crosta and others (Di Crosta et al., 2021), the impact of perceived stress due to the COVID-19 pandemic on consumer behavior shows that the likelihood of purchasing quantities of food larger than usual increased with higher levels of perceived stress. Differentiating between necessity and non-necessity products can help to better understand consumer behavior in response to stressful situations (Di Crosta et al., 2021).

Personality traits, negative emotions, perception of economic stability, and self-justifications were found to be key factors influencing consumer behavior towards necessities, while conscientiousness, openness, depression, perceived economic stability, and self-justifications were found to impact consumer behavior towards non-necessities. Research suggested that fear and anxiety, triggered by the COVID-19 crisis and perceived economic instability, played a significant role in predicting changes in consumer behavior towards necessities, consistent with previous research. Individuals may resort to buying necessities products as a remedial response to reduce negative emotions and regain control and certainty during times of crisis. However, no significant effects were found on non-necessities, which could be due to individuals seeking compensatory strategies to improve their negative emotional states. The study also suggests that changes in consumer behavior during crises can be viewed as self-protective behaviors to manage negative affective states, such as depression. People with higher levels of depressive symptoms may be drawn towards non-necessities products, such as products for fun or entertainment, as a means of satisfying compensatory strategies (Di Crosta et al., 2021).

In general, the COVID-19 pandemic had a significant influence on consumer behavior, resulting in heightened spending levels and a greater psychological need to purchase both necessities and non-necessities products. Additionally, various psychological factors were found to be predictive of these changes in consumer behavior, with notable differences observed between consumer behavior towards necessities and non-necessities regarding some psychological predictors (Di Crosta et al., 2021).

2.7. Personality Models and Personality Disorders

In the study of personality, it has been seen that the most effective models used to capture and understand the personality psychopathology are the Five Factor Model and the Personality Psychopathology Five. Given the importance of personality on each individual, some further research has been made in order to

understand the correlation between personality psychopathology and personality disorders (Bagby et al., 2008).

The Five Factor Model (FFM), introduced in chapter 2.4, employs personality scales to evaluate a range of personality traits. Within this framework, neuroticism refers to an individual's inclination to encounter psychological distress, exemplified by anxiety, anger, or other negative emotions. Extraversion denotes an individual's level of sociability, liveliness, and cheerfulness. Openness signifies an individual's aesthetic sensitivity, intellectual curiosity, desire for variety, and non-dogmatic attitudes. Agreeableness measures an individual's level of trust, altruism, and sympathy. Finally, conscientiousness denotes an individual's disciplined pursuit of goals and strict adherence to principles (Bagby et al., 2008).

The Personality Psychopathology Five (PSY-5) is a dedicated personality model where aggressiveness is characterized by a combative drive to achieve goals and encompasses a cognitive system that promotes aggression, the pursuit of power, social dominance, and grandiose thinking. Psychoticism refers to an inability to accurately perceive oneself, others, and the external world, resulting in a disconnection from reality, including unconventional beliefs or atypical sensory and perceptual experiences. Disconstraint reflects a tendency to behave with less regard for traditional social norms, including impulsive actions and a willingness to engage in risky behaviors with little concern for the consequences. Negative emotionality/neuroticism represents a general inclination to experience a broad range of negative emotions, such as anxiety, depression, nervousness, and guilt, which can result in psychological distress. Lastly, introversion/low positive emotionality reflects a reduced capacity for pleasure and a lack of interest in social experiences (Bagby et al., 2008).

Although the two models use different methodologies, they are similar because they both have domains for neuroticism/negative emotionality and extraversion/positive emotionality. However, they differ in significant ways. The PSY-5 domains of aggressiveness and disconstraint are not the same as the FFM domains of low agreeableness and low conscientiousness, respectively. High scorers on disconstraint tend to be risk-takers, impulsive, and easily bored, while low scorers on conscientiousness are disorganized and lackadaisical. High scorers on aggressiveness use offensive and instrumental aggression and enjoy being forcefully intimidating, while low scorers on agreeableness are antagonistic and competitive. The FFM does not have a direct counterpart for psychoticism, which captures aspects of personality pathology not covered by the FFM. Similarly, the PSY-5 does not have a direct counterpart for openness (Bagby et al., 2008).

A study by Bagby and others (Bagby et al., 2008) found that the two models have comparable performance, but with some differences in predictive strengths for specific personality disorders. The PSY-5 was more

effective than the FFM in predicting the symptom counts of paranoid, schizotypal, antisocial, and narcissistic disorders. On the other hand, the FFM was more effective than the PSY-5 in predicting borderline, avoidant, and dependent disorders. Overall, each model has relative predictive strengths with respect to specific personality disorders at the domain level (Bagby et al., 2008). However, the symptoms of certain personality disorders can be largely explained by both normal and abnormal dimensional personality traits (Bagby et al., 2008).

Due to the nature of personality disorders even though the two models cover a broad range of psychopathology, the prevalence of specific diagnoses is biased toward mood disorders, particularly major depressive disorder. As a result, it could be argued that the associations found between personality disorders and mood disorders may have been influenced by temporary "state effects" related to the mood disorder symptoms (Bagby et al., 2008).

2.7 (a): Links between personality traits and mental disorders

Relations between personality traits and mental disorders are robust and the individual differences may be relevant to understand the most severe expression of psychopathology like in the case of comorbidity – occurrence of two or more personality disorders in an individual (Krueger et al., 1996; Wright & Simms, 2015).

In recent years, numerous studies confirmed that there are many links between diagnoses of mental disorders and the Big Five personalities traits. Moreover, the Big Five model has allowed the differentiation of disorders. A common feature is that each disorder is characterized by the presence of a high negative emotionality which was found to be related with all the metastructural dimensions of mental disorders (externalizing, internalizing and psychoticism). This metastructure of psychopathology allowed the understanding of mental disorders and related personality traits and provided an empirical basis for the classification of mental disorders. This means that the combination of mental disorders and pathological traits can be combined within the same structural framework (Krueger et al., 1996; Wright & Simms, 2015).

2.8. Anxiety, depression, and consumer behavior

Understanding the psychological foundations of consumers is crucial to understanding the Post-Modern culture, also known as the Consumption culture. Because brands are nowadays competing for customers rather than consumers who are competing for products. Understanding the psychological circumstances of consumers in their target markets seems vital for companies when this situation is taken into account along with Post-Modern consumer behaviors (Elgün, Karabıyık, Kaleci, 2021).

Researchers investigated how customers' levels of depression and anxiety affected how they consumed, especially during the Covid-19 pandemic. Anxiety and depression were chosen by researchers because they

were the most observed disorders – as already seen in Chapter 1– and it was later confirmed that for both the pandemics led to a significant increase in the number of diagnoses (Elgün, Karabıyık, Kaleci, 2021).

The most common consequences of these two mental disorders on consumer behavior are panic buying and compulsive buying. It has been seen that the act of purchasing can relieve the negative emotional states, and this is further heightened in people affected by anxiety disorder and depression because their mental state makes them more exposed to negative mood and emotions (Elgün, Karabıyık, Kaleci, 2021).

Compulsive buying is a chronic purchasing behavior defined by an implacable want to buy things again but never more than is necessary for storage. It is pathologic, cyclical, and the result of several sources of negative emotions (see Chapter 2.8 (a) for more).

Panic buying is the result of dread brought on by a disruptive occurrence. This kind of buying behavior is commonly event-induced and takes place during catastrophes, calamities, and public health emergencies, creating a sharp spike in purchasing, also more than necessary for storage. It is typically connected to the purchase of necessities and men are reported to panic buy more frequently than women (Lins et al., 2021).

Panic buying is a phenomenon that emerges due to the fundamental human need to be in control of one's life. When people are not in control of their lives, they tend to search for some aspect they can have control over. To regain some control over the situation, several people resort to purchasing items more than what they need. This has been proven true for people affected by anxiety disorder but not for people with depression. Perhaps physical symptoms of depression like fatigue and indisposition make it harder to carry out regular daily tasks, which prevents persons with high levels of depression from engaging in panic buying behaviors (Elgün, Karabıyık, Kaleci, 2021).

The studies show that anxiety and stress are significant predictors of panic buying, indicating that higher levels of both can cause larger levels of panic buying. Therefore, it can be assumed that anxiety is what causes panic buying and that panic buying occurs as a response to reduce anxiety (Elgün, Karabıyık, Kaleci, 2021).

Panic buying can result in a shortage of necessities, the depletion of resources, and eventually food waste when it happens in a huge community that is experiencing anxiety and dread collectively which makes this kind of consumer behavior into a maladaptive behavior (Lins et al., 2021).

The psychological science demonstrates that large degrees of panic buying can also be detrimental since individuals can lose control of their expenses and this along with loss of income, can lead to financial problems. Financial worries have a bad effect on people's mental health, and in order to deal with the stressful circumstances and the growing anxiety, it might result in a never-ending cycle of shopping in order to feel better (Lins et al., 2021). It has been seen that these extreme and irrational consumption behaviors

that produce depression and pessimism after consumption are particularly evident in the e-commerce environment (Huang, 2022).

Although some studies found that depression might not affect consumer behavior resulting in panic buying, it has been seen that it has a strong influence in consumption patterns. Studies' findings demonstrate that changes in consumers' levels of depression do not affect their behavior as a whole. However, a strong association has been shown between the severity of depression and price focusing (Elgün, Karabıyık, Kaleci, 2021).

It is observed that individuals with depression frequently postpone health-related purchasing decisions and avoid purchasing behavior due to stress and regret in technological products due to product risks resulting from purchasing (Elgün, Karabıyık, Kaleci, 2021).

Since a depressed person may suffer variances in the relationships he or she establishes with brands, in addition to experiencing major differences in those relationships with his or her social environment. Both the brands that wish to sell their items and the customers who generate the demand should be aware of this circumstance (Elgün, Karabıyık, Kaleci, 2021).

Different consumer purchasing styles result from varying depression levels. The explanation for this is that sadness significantly affects people's causal processes as a cognitive process as well as their effort-demanding decisions, according to research in psychology. Research also shows that emotional shifts have a significant impact on both low- and high-participation decisions (Elgün, Karabıyık, Kaleci, 2021).

Consumer habits and depression do not significantly correlate on a cumulative basis. However, it was shown that there were some relationships. Perfectionism was not associated with depression, but there was a low-level association between brand-fashion focus and depression, a high-level association between price focus and depression, and finally, a moderate association between thoughtless shopping and depression. According to these results, depressed people tend to make and do more price-focused purchases. Consumers should not be surprised if their expectations for the goods differ from those set by the industry if their levels of despair rise. It makes more sense to concentrate on prices instead (Elgün, Karabıyık, Kaleci, 2021).

Consumers are shopping more hastily as depression levels rise and the decline in a depressed person's interest in their surroundings can be used to explain this condition.

Consumers with higher levels of sadness have been found to pay more attention to prices, thus businesses should reassess their pricing practices. These results suggest that brands with high price policies can anticipate a decline in sales. Brands should also consider the mild link between irresponsible purchasing and depression because a skilled marketing strategy can make good use of the rise in irresponsible shopping behavior brought on by depression (Elgün, Karabıyık, Kaleci, 2021).

2.8 (a): *Impulsive behaviors, compulsive buying and eating disorders*

Impulsive buying is referred to making unplanned, abrupt, on-the-spot purchases while experiencing strong urges, pleasant emotions, and enthusiasm. There is strong evidence that supports persistent individual differences in customers' propensity to make impulsive purchases. For instance, it has been shown that personality has a significant role in the inclination to make impulsive purchases in general. The Big Five personality traits and several other well-known measures of individual differences and personality were all significantly linked the overall impulse purchase tendency. The typical high impulse profile is the one of an individual, either male or female, that has low levels of conscientiousness, autonomy, personal need for structure, and need to evaluate, but high levels of extraversion and action orientation (Verplanken, Herabadi, Perry & Silvera, 2007).

When considering the immediate purchase context, impulsive buying appears to satisfy hedonic goals. On a cognitive level, it has been demonstrated that impulsive purchasers are more motivated by hedonic than by utilitarian factors when making purchases. At an affective level, the shopping experiences of impulsive purchasers appeared to be influenced by pleasurable and high-arousal emotions like excitement. However, non-impulsive purchasers did not feel any emotions at all, and they primarily made purchases based on utilitarian factors (Verplanken, Herabadi, Perry & Silvera, 2007).

It was discovered that impulsive purchase has “darker motives” underneath its outward appearance, especially in people who have a propensity for doing so and can be dangerous due to the habituation linked to it. For these people, impulsive buying may serve as a self-control technique to lessen unpleasant emotions, particularly when these emotions have a structural base like a lack of living up to standards or low self-esteem. This is the case, for example, of people affected by anxiety disorder and eating disorders.

Impulsive eating is linked to impulsive consumer behavior. Snacking is the most prevalent impulsive consumption behavior associated with eating disorders. Frequent snacking of high calorie, fatty, and/or sweet food items between meals can be deemed as unhealthy, even though the degree to which snacking is harmful to a person's health depends on factors like the type and number of snacks consumed, the intake of other food, and the total energy balance. Such snacking has been linked to issues with weight control and may accompany a decrease in the consumption of nutritious foods like fruits and vegetables. Unhealthy snacks, particularly those that are fatty and sweet, are readily available and frequently presented in ways that encourage a quick snack (Verplanken, Herabadi, Perry & Silvera, 2007).

There is evidence to support the idea that stress is linked to snacking and can even cause it. For instance, a carefully planned and executed laboratory experiment revealed that stress increased the intake of fatty and sweet snacks among emotional eaters (i.e., people with a general tendency to eat more when anxious or emotionally aroused), while no such effect was present for other food categories. Daily problems are associated with between-meal snacking, especially for external eaters (those who eat in reaction to external

food stimuli rather than internal hunger cues). Other studies support a psycho-physiological explanation for the link between consuming sugary, high-fat snacks and tension or a low mood by indicating that snacks may have a palliating effect (Verplanken, Herabadi, Perry & Silvera, 2007).

Snacking has also been linked to eating disorders, including obesity and bulimia nervosa, which, as a great deal of empirical research has demonstrated, is linked to low self-esteem and emotional instability. Overall, the predisposition for snacking and eating disorders appears to be a response to unfavorable psychological states that are linked to relatively enduring elements like stress and/or low self-esteem. This pattern is illustrated by impulsive purchasing, which may be fueled by negative emotions and low self-esteem.

Given that the likelihood of developing eating disorders is predicted to be directly correlated with low self-esteem, the relationships between self-esteem and consumer style and health-related factors exist and are strong, not only because unhealthy eating starts with unhealthy shopping (Verplanken, Herabadi, Perry & Silvera, 2007).

Low or moderate frequency impulsive purchases and unhealthy snacking are benign and enjoyable behaviors that appear to be motivated by hedonistic desires. However, when they occur frequently, these habits may be detrimental and, in the worst-case scenario, self-destructive. The propensity to make impulsive purchases was discovered to be closely linked to the practice of snacking and the inclination to make impulsive purchases was discovered to be closely linked to low self-esteem and the dispositional negative affect that goes along with it. This finding alone is unexpected because impulsive purchasing is typically connected with and even defined in terms of excitement and pleasure and does not, at least on the shopping floor, involve negative emotions (Verplanken, Herabadi, Perry & Silvera, 2007).

On the other side, it was discovered that a strong snacking habit was linked to more severe eating problems, which are linked to low self-esteem. Research points to a pattern in which a person's consumption preferences are correlated with unhealthy eating habits, which are ingrained in or fueled by low self-esteem and dispositional depressive mood. When under emotional stress, people may lose some self-control and engage in behaviors that they anticipate would provide them immediate pleasure or satisfaction. Snacking on food and making impulsive purchases both fall into the category of actions that provide momentary pleasure. Thus, attempting to deal with the emotional anguish brought on by poor self-esteem may be the reason behind impulsive buying and the impulsive acquisition and consumption of snack foods (Davenport, Houston & Griffiths, 2012).

Studies also report that this type of behavior, along with such as excessive eating and compulsive buying (the so-called "Mall disorders") appear to be increasing, particularly among women. While men are more likely to be addicted to drugs, gambling and sex, women are more likely to suffer from "mall disorders" such as eating and shopping. For instance, the eating patterns of overweight Americans show that men prefer to overeat in happy social situations while women tend to binge eat when they feel lonely or unhappy.

Since food is essential to our survival, it serves as the main incentive. However, it is because of this reward that highly attractive foods like sugar have the potential to become addictive, which makes overeating an addictive behavior (Davenport, Houston & Griffiths, 2012).

The dopamine reward center is assumed to be the mechanism by which reward sensitivity regulates approach behavior. People who are extremely sensitive to reward are more likely to notice incentive signals in their environment, such as food, which leads them to pursue these rewards more frequently and to react more quickly and forcefully. According to research, reward sensitivity has been linked to increased food cravings, body weight, binge eating, and a preference for foods high in fat. These findings provide a potential justification for why only some people overeat while everyone has access to the process of rewarding themselves, especially when that process involves food (Davenport, Houston & Griffiths, 2012).

Research shows that refined food addicts notably report eating when they feel anxious, which has been related to an insatiable demand for food and emotional eating. It was discovered that as a binge eating episode progressed, women receiving treatment for eating disorders reported feeling less nervous. According to this research, persons who are really worried are more inclined to turn to food for comfort, which can result in overeating, and when this comfort is not accessible, they become even more anxious.

Even though eating may provide this reward or relief, it may train impulsive people to react rapidly and inappropriately to similar experiences in the future, such as hunger when experiencing anxiety. This may help to explain why obese persons frequently relapse after making repeated attempts to reduce their caloric consumption and lose weight (Davenport, Houston & Griffiths, 2012).

Various populations with excessive eating habits, such as restricted eaters, bulimic patients, and binge eaters, have been linked to associations between self-esteem and these behaviors. An explanation for this is that people with low self-esteem have fewer expectations for their own performance, which makes it harder for them to resist obstacles and temptations to stick to their diets. Another explanation is that people with poor self-esteem rely more on external cues, such as how food appears, than on internal cues, such as hunger, which indicates reward sensitivity and leads to overeating in dieters with low self-esteem. In this case, low self-esteem coupled with reward sensitivity and its additional linkages to impulsivity and anxiety seem to exhibit a destructive model of influence on behavior, one feature further magnifying the next resulting to persistent overeating (Davenport, Houston & Griffiths, 2012).

An aspect related to eating disorders and consumption behavior is the so-called “eating guilt”.

Since most faiths have normative views on what to eat, when to eat, and how much to eat, eating is intimately linked to morality in most societies (Sukhdial & Boush, 2004).

In addition to this, consumer guilt is defined as “an emotional state characterized by penitence, regret, self-blame, and self-punishment experienced following a violation of internalized standards of proper behavior or

when contemplating a future violation” (Huhmann & Brotherton, 1997). Therefore, guilt can result from either doing something against one's standards (guilt by commission) or from failing to take action in accordance with one's standards (guilt by omission). The idea of removing guilt through atoning for one's wrongdoings is also essential to the concept of guilt. Guilt-inducing messaging can be used to persuade customers to make amends for their wrongdoings by buying particular products (Sukhdial & Boush, 2004). Making amends, the importance of one's physical beauty to one's self-esteem, and a focus on one's health were all consequences of guilt (Sukhdial & Boush, 2004).

According to theory, guilt motivates both men and women to seek restitution. (i.e., by exercising or eating less at the next meal). Additionally, guilt seems to influence both men and women's obsession with health. For both men and women, the negative emotions that come with guilt play a significant mediating role in how guilt affects self-esteem. That is to say, there was no direct relationship between guilt as judged by statements including both cognitive and emotional assessments.

It has also been seen that men tended to feel greater eating guilt if they were more concerned with healthy food, while women were more likely to feel bad if they were preoccupied with their attractiveness (Sukhdial & Boush, 2004).

Another compulsive behavior apart from binge eating and snacking, that has also been linked to binge eating as a strategy to change a range of unfavorable emotions through instant pleasure, is compulsive buying. This reward gives shopping its addictive potential, much like with other addictive behaviors. It reinforces the behavior through pleasure, attention, and praise, which fuels the repetitive and compulsive processes. The primary motivation for compulsive shoppers is to reward themselves through the act of buying rather than to acquire or use their possessions. Such a pattern of behavior can be harmful (Davenport, Houston & Griffiths, 2012).

The affected individuals, however, might not initially perceive the behavior as a problem. In fact, at first it may be perceived as offering a quick, maybe impulsive, relief from anxiety or emotional pain, and people may not be aware of the detrimental effects that will later occur. We find it vital to repeat the eating behavior in order to survive. But even though it's not, shopping shows how the same reward may be obtained just by acting in a certain way (Davenport, Houston & Griffiths, 2012).

The majority of consumers consider their purchasing habits to be standard, regular activities. For compulsive shoppers, it's an overwhelming drive to buy that they are unable to control. Despite efforts to control it, this want can take over life and have bad effects like debt. For them and their families, this may result in additional financial difficulties as well as psychological issues like worry and anxiety, which may encourage them to keep up their bad habits by using shopping as a source of solace. Compulsive buyers have been reported to regularly experience anxiety reactions to both internal and exterior stimuli, similar to excessive

eaters. Shopping binges are often employed as a response to these emotions. These binges have been discovered to provide rapid relief from stress and anxiety. However, with time, a compulsive buyer might start to perceive their behavior as a “loss of control”, which would further exacerbate their anxiety and dissatisfaction. This could make you feel like you “need” to purchase more to recapture those emotions. There have also been reports of low self-esteem in populations with compulsive shopping. According to some theories, obsessive behaviors, especially compulsive shopping, are an effort to temporarily alleviate these negative self-esteem issues by leveraging the pleasure received from shopping as validation. Therefore, the goods purchased have no immediate impact on the buyer. The act of purchasing itself produces reward, which boosts self-esteem and relieves tension that may have developed if the urge to purchase had not been satiated (Davenport, Houston & Griffiths, 2012).

Research findings show that reward sensitivity and cognitive anxiety are useful predictors of compulsive eating and compulsive shopping behavior. As a result, people who are highly reward sensitive and/or exhibit high cognitive anxiety are more likely to overeat or have compulsive buying tendencies. As a result, behavior reduced as compulsive buying scores increased and each predictor variable increased as well. For this reason, low compulsive buying behavior was connected with high social desirability or somatic anxiety scores (Davenport, Houston & Griffiths, 2012).

Food is naturally gratifying, giving the eater pleasure, and encouraging them to repeat the essential eating behavior in order to survive. Therefore, even though everyone has access to this incentive, some people eat excessively because they have heightened sensitivity to rewards of this kind (Davenport, Houston & Griffiths, 2012).

This same biological justification in terms of reinforcement, through rewards producing pleasure, can be used to explain the findings of high reward sensitivity correlating with high buying behavior. Due to the pleasure experienced from numerous possible reinforcers, including attention and praise, the behavior of buying is gratifying. Again, those with high sensitivity experience these rewards more strongly, leading to high frequency behavior. Purchasing behavior is repeated not to amass possessions but to replicate the pleasurable feelings experienced during the behavior (Davenport, Houston & Griffiths, 2012).

However, research indicates that somatic anxiety increases as compulsive buying behavior declines, suggesting that a person with somatic anxiety is less likely to engage in compulsive buying behavior.

The development of excessive behaviors as a release or coping mechanism for such features could be prevented by cognitive-behavioral treatment of excessive behaviors, such as focusing on anxiety or self-esteem. Though these characteristics might not be the primary cause of excessive behavior, they do seem to increase the likelihood, therefore they might be used as early warning indications before excessive behavior turns into hazardous addictions (Davenport, Houston & Griffiths, 2012).

Chapter Three: MASLOW'S HIERARCHY OF NEEDS

Introduction

Maslow's Hierarchy of Needs is a theory of human motivation written by Abraham Maslow in 1943. It is a five-tier model of human needs, which states that individuals have different types of needs, and that these needs are arranged in a hierarchical order.

For Maslow, needs are the basic building blocks of human motivation and well-being, and fulfilling these needs is essential for personal growth and fulfillment. These needs are organized into a hierarchy, ranging from the most basic physiological needs to higher-level needs such as self-actualization.

The needs are classified in the following way:

1. **Physiological needs:** these are the most basic needs that individuals require for survival, such as food, water, shelter, and sleep.
2. **Safety needs:** once physiological needs are met, individuals require safety and security to feel protected from danger, harm, or threat. This includes personal safety, financial security, and stability in relationships.
3. **Love and belonging needs:** after safety needs are fulfilled, individuals seek love and a sense of belonging, which includes forming intimate relationships, social connections, and feeling part of a community or group.
4. **Esteem needs:** individuals who have satisfied their lower-level needs begin to seek self-esteem, self-respect, and recognition from others, which include feelings of confidence, competence, achievement, and respect from others.
5. **Self-actualization needs:** once all lower-level needs are fulfilled, individuals may seek to realize their full potential by pursuing personal growth, creativity, and purpose.

Maslow believed that individuals must first fulfill their lower-level needs before they can progress to higher-level needs. For example, an individual cannot fulfill his/her social needs without first having his/her physiological and safety needs met. Similarly, an individual cannot fulfill his/her esteem needs without first having his/her social needs met.

Maslow also believed that once an individual's basic needs are met, an individual becomes motivated to achieve higher-level needs. For example, an individual who has fulfilled his/her physiological and safety needs may become motivated to fulfill his/her love and belonging needs. Maslow argued that fulfilling these higher-level needs was essential for personal growth and self-actualization.

Maslow's hierarchy of needs has been influential in psychology, particularly in the field of humanistic psychology. Humanistic psychologists emphasize the importance of individual growth and self-actualization and view individuals as inherently good and capable of achieving their full potential.

While Maslow's hierarchy of needs has been influential in psychology, it has also received criticism from various perspectives.

Maslow's hierarchy of needs is based on the experiences of individuals in Western, individualistic societies. It may not be universally applicable to people from different cultures or social backgrounds, who may prioritize different needs, generating a cultural bias.

The hierarchy is a simplified model of human motivation that does not capture the complexity of individual needs and motivations. For example, some individuals may prioritize different needs at different times or have unique needs that are not captured by the hierarchy.

Some researchers have questioned the empirical support for the hierarchy. Some studies have found that people do not always follow the order of needs proposed by Maslow and that individuals can sometimes prioritize higher-level needs before lower-level needs are fulfilled leading to a lack of empirical support.

Some critics also argue that Maslow's hierarchy places too much emphasis on individual needs and overlooks the importance of the order in which the needs are organized.

Although some criticisms have been made to Maslow's hierarchy of needs, it remains a widely recognized and influential theory of human motivation.

3.1. Needs

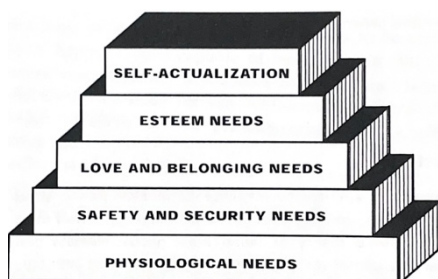
Individuals have fundamental human needs, the deprivation of which can lead to physical and psychological suffering, as demonstrated in a body of social science literature. While the exact nature of these needs is not universally agreed upon, there is growing acceptance that needs may be a primary element of social science research. Coate and Rosati (Coate & Rosati, 1988) define a need as any requirement for survival, health, or basic liberties. Meeting these needs is crucial for the physical and mental growth and development of individuals as human beings (Oleson, 2004).

Abraham Maslow aimed at unifying the fragmented theories of human behavior that were developed by Freud, Adler, Jung, Levy, Fromm, Horney, and Golstein. He believed that humans are inherently driven towards growth, health, and self-actualization, unlike previous psychologists who primarily studied people with deficiencies. Maslow examined psychologically healthy individuals to determine the factors that contribute to their well-being. His theory of human motivation emphasized the concept of needs and described humans as constantly desiring creatures with unfulfilled needs. These needs are organized in a

hierarchical manner, with lower-level needs being fulfilled before higher level needs can be pursued (Oleson, 2004).

There are several theories of human development, such as Maslow's hierarchy of needs [Figure 4], that involve a hierarchy of needs that individuals must fulfill as they progress through life. At the lowest level of Maslow's hierarchy are physiological needs, such as food, water, and shelter. Once these basic needs are satisfied, safety and security needs become predominant. People seek social needs like belonging, companionship, and social acceptability. After fulfilling these needs, individuals generally want to be more than just a member of their group and seek self-respect, self-esteem, and the respect or esteem of others. Satisfaction of the esteem needs leads to feelings of self-confidence, power, worth, adequacy, and other feelings of usefulness. Once all the lower needs of the hierarchy have been satisfied, people become motivated to fulfill their potential, a process called self-actualization. This involves the need to become fully self-realized and to achieve one's potential to the greatest extent possible. Self-actualization requires the desire to become what we are capable of becoming or making our behavior consistent with what we are. Maslow contends that if we have met the other four basic needs, the need for self-actualization is 'potent' enough to serve as our primary motivator for all behavior. Sumerlin identified 11 optimal functioning features common in Maslow's descriptions of a self-actualizing person, such as autonomy, purpose in life, openness to experience, and self-acceptance (Oleson, 2004).

Figure 4: Maslow's hierarchy of human needs (Adapted from Oleson, 2004)



3.2. How to measure Maslow's hierarchy of needs

Maslow proposed six broad classes or types of needs which motivate human behavior. The clusters of needs (in ascending order) are (a) physiological needs (e.g., food, water, air); (b) safety and security needs (e.g., need for order and routine, a safe environment); (c) belongingness and love needs (e.g., need for group acceptance and affiliation); (d) esteem needs (for self and from others); (e) self-actualization needs (e.g., need for beauty, peace, self-fulfillment); and (f) self-transcendence needs (e.g., need for a community of humankind rather than individual or national ascendancy) (Williams, 1989).

Maslow proposed that these needs are experienced in the order stated and are grouped in his nested hierarchy. Furthermore, he posed that as the needs of a lower level are met to an ever-greater extent, the

needs of a higher level become apparent. Therefore, one need not fully satisfy (100%) all the needs of a level before the wants of the following level become realized. In accordance with Maslow, “As for the emergence of a new need after satisfaction of the prepotent need, this emergence is not a sudden, saltatory phenomenon, but rather a gradual emergence by slow degrees from nothingness” (Maslow, 1970).

The fact that the lower needs are nested within and stronger than the higher-level demands suggests that they are more fundamental and permanent. The fundamental needs never disappear; rather, they are transcended; they continue to drive us, just not in the same capacity. Therefore, even though one kind of need might be the main driver of motivation, other needs might be driving behavior at the same time (Oleson, 2004).

Maslow's theoretical framework has broad ramifications for corporate settings, clinical interventions, and personality study. However, the application of this method (outside the business sphere) has been gradual, largely because it is challenging to accurately predict what will inspire a particular person.

The field of clinical and personality psychology has seen far fewer attempts to evaluate Maslow's hierarchy. One of the first measures of safety, belonging, and esteem was a sentence completion test created by Aronoff (1971). In addition to material from many other sources, responses to this sentence completion exam were used by Haymes and Green (1982) to create the Needsort, a more objective paper and pencil measure.

The lowest three levels of the hierarchy (i.e., the physiologic, safety, and belonging levels) are covered by subscales in this measure, which is intended for use with children, called “The Need Satisfaction Schedule”, a measurement tool which evaluates the hierarchy's bottom four levels (Oleson, 2004).

Studies were made in order to support Maslow's claim that psychological functioning and adjustment are connected to the satisfaction of basic needs. A measurement that enables the study of Maslow's hierarchy beyond the evaluation of pleasure was also offered thanks to which it is now possible to analyze the level of relevance of a need in order to identify whether a certain class of needs is actually driving a person's motivation (if not, the level of pleasure becomes irrelevant). Likewise, it is possible to gauge how important a need is. Theoretically, a need may be significant, but it only occupies one's thoughts when it goes unmet. As a result, the degree of salience measures how preoccupied a person is with a group of demands (Oleson, 2004).

This tool is called the “Maslow Hierarchy of Needs Positioning Tool” and it has the following subscales for each of the three levels: (a) need gratification, (b) need importance, (c) need salience, and (d) self-concept (i.e., how much one is like a prototypical person at each level), the Maslowian Assessment Survey (MAS) taps the safety, belonging, and esteem levels of the hierarchy (Oleson, 2004).

In terms of validity evidence, safety self-concept correlated adversely with self-esteem, dominance, and desirability and favorably with depression and neuroticism. Self-concept of belonging was positively connected to neuroticism, sadness, social recognition, and affiliation and negatively related to self-esteem and autonomy. Self-acceptance, autonomy, dominance, and (inconsistently across studies) desirability were all positively correlated with an esteem level self-concept. Degree of need gratification was discovered to be positively correlated with self-esteem and adversely correlated with neuroticism and sadness across all three levels of the hierarchy (Oleson, 2004).

3.3. Maslow & Consumer behavior

To better understand financial behavior and serve individuals and families, it would be beneficial for financial counselors and educators to have research findings about money attitudes and needs.

Understanding that human needs prompt behavior, counselors and educators can focus on addressing both psychological and physiological needs, such as acceptance, respect, and physical comfort, to facilitate learning. Although no empirical research has connected money attitudes with individuals' needs, studies aimed to fill this gap (Oleson, 2004).

Social scientists diverge from the assumption made by economists that decision making about money is rational and uniform. In economics, uniform behavior implies that all individuals have the same attitudes, values, and beliefs towards money and its usage. However, numerous empirical studies indicate that people exhibit diverse attitudes, feelings, and behaviors concerning money. According to Goldberg and Lewis, "To some, money is the root of all evil. To others, the lack of money is perceived to be the basis of all their troubles. Any attempt to make sense of the confusing and paradoxical attitudes that people have toward money is a monumental undertaking. It seems that for some people money is the most important thing in the world. Yet they pretend it is the least important. The worship of money and the condemnation of money exist side by side, sometimes even in the same individual. When people are bombarded with two opposing philosophies or ideologies, it might seem logical that they would accept one and reject the other. But the human mind is extremely flexible. At different times it can accept completely opposing points of view and somehow juggle them so that the contradictions are not readily apparent" (Goldberg & Lewis, 1978).

According to social scientists, people have diverse attitudes towards money, with varying meanings attributed to it, such as good, evil, envy, respect, power, achievement, freedom, and security. Due to the different backgrounds and socialization experiences of individuals, it is difficult to identify a single meaning of money. Researchers have relied on individual traits to explain patterns in money attitudes and behavior, aiming to identify personality traits that explain differences beyond economic and demographic variables. Studies have shown successful predictions of differences in money attitudes by age, education level, occupation, and gender. Wernimont and Fitzpatrick found that individuals who prioritize extrinsic aspects of life tend to view money as more significant, while those who value intrinsic aspects view money as less

important and not indicative of success. Extrinsic goals, such as financial success, are typically pursued as a means to an end, while intrinsic goals, such as self-acceptance, align with human growth and actualization tendencies and satisfy inherent psychological needs (Oleson, 2004).

In conclusion, studies results confirmed the expected link between attitudes towards money, gender, and human needs. Generally, as people move up the levels of Maslow's hierarchy of needs, it seems that money loses its significance. Perhaps the developmental and cognitive growth associated with the higher stages of needs, as hypothesized by Maslow, plays a role in people's decreasing interest in money during the later stages of needs [groups four (esteem) and five (self-actualization)].

3.4. Maslow and Self-Actualization

As explained in the previous chapters, the original hierarchy of needs proposed by Maslow includes five needs: physiological, safety, love and belonging, esteem, and self-actualization. Maslow later expanded on self-actualization to include four additional needs: cognitive, aesthetic, self-actualization, and self-transcendence (Maslow, 1973). He referred to the latter four needs as "being needs" or B-needs, and the first five needs as "deficient needs" or D-needs. According to Maslow, mentally healthy individuals progress through a process of growth motivation, moving from D-needs to B-needs. As individuals move up this hierarchy, they experience greater fulfillment, shift their focus from self-interest to selflessness, and become more dedicated to causes beyond themselves and their families. Maslow believed that the drive toward self-actualization is beneficial to society, leading to increased solidarity, compassion, care, problem-solving, and altruism (D'Souza & Gurin, 2016).

Other psychological and philosophical theories support Maslow's concept of the path to self-actualization, suggesting that individuals are inherently selfish and must gradually transition toward selflessness and compassion to create a thriving society. These theories are here briefly explored and linked to Maslow's theory of self-actualization to confirm the significance of his work (D'Souza & Gurin, 2016).

The theories include the Hindu stages of life (Kakar, 1968), Erikson's theory of psychosocial development (Erikson & Erikson, 1998), Freud's theory of the id, ego, and superego (Freud, 1957), the ancient Jewish tradition's concept of human progression (Sacks, 2005), and Kohlberg's stages of moral development (Kohlberg, 1981).

These theories are connected to Maslow's theory of self-actualization in the sense that the course of our lives is influenced by both biological factors and social circumstances, as well as the choices we make of our own free will. As a result, each individual is confronted with the possibility of getting stuck in certain deficient

needs, but also has the chance to develop into a self-actualized and altruistic human being (D’Souza & Gurin, 2016).

3.5. Maslow & Social Emotional Wellbeing

Although Maslow introduced his hierarchy of needs in the 1940s, he continued to refine it, and some experts have created versions that more accurately represent his later thoughts. Koltko-Rivera's version is an example of this, as shown in **Table 4** (Gorman, 2010).

Table 4: Maslow's Hierarchy of Needs (Adapted from Koltko-Rivera, 2006)

Motivational level	Description of person at this level
6 Self-transcendence	Seeks to further a cause beyond the self and to experience a communion beyond the boundaries of self through peak experience
5 Self-actualization	Seeks fulfilment of personal potential
4 Esteem needs	Seeks esteem through recognition or achievement
3 Belongingness and love needs	Seeks affiliation with a group
2 Safety needs	Seeks security through order and law
1 Physiological (survival) needs	Seeks to obtain the basic necessities of life

Zalenski and Raspa's explanation of a person at each level provides an idea of how these needs can be met, with culture playing an increasingly important role. Safety needs, for example, are partly determined by law and order, with society defining what is an acceptable way of ensuring safety based on cultural values and beliefs. The need for Belongingness and Love is met through affiliation with a group, influenced by cultural values and beliefs about what is acceptable to the group. Esteem needs are achieved through recognition or accomplishment, both of which require meeting or exceeding societal expectations based on cultural values and beliefs. Self-actualization and Self-transcendence, the higher-level needs, require cultural demands to be met to demonstrate achievement (Zalenski & Raspa, 2006).

The term “social and emotional wellbeing” (SEWB) has been used in Australia since the 1980s to encourage a more holistic view of mental health, incorporating broader socio-historical and personal choices. Garvey defines mental health as “a state of emotional and social wellbeing in which individuals can cope with the normal stresses of life and achieve their potential” (Garvey, 2008). It can be argued that an individual's level of SEWB corresponds to the level of needs achieved on Maslow's hierarchy. To achieve a higher level of SEWB, one must fulfill lower-level needs, including the higher-level needs. While remaining in a constant

state of self-actualization is not necessary, it is essential to achieve it at times to reach one's potential. **Table 5** shows the characteristics associated with each level of SEWB related to meeting the needs of the corresponding level in Maslow's hierarchy (Gorman, 2010).

Table 5: Comparison of Motivational Level, Description of the Person, and Characteristics of the SWEB level (Adapted from Gorman, 2010)

Motivational level	Description of person at this level	Characteristics of person at this level of SWEB
6 Self-transcendence	Seeks to further a cause beyond the self and to experience a communion beyond the boundaries of self through peak experience ("Abraham Maslow, His Theory & Contribution to Psychology") ("Abraham Maslow, His Theory & Contribution to Psychology")	Is concerned about others and strives to contribute to the good of the community either locally or more globally
5 Self-actualization	Seeks fulfilment of personal potential	Has a sense of their ability to achieve further goals and a sense of what they want to strive for
4 Esteem needs	Seeks esteem through recognition or achievement	Has a realistic positive opinion of themselves and their ability to gain respect and recognition from others
3 Belongingness and love needs	Seeks affiliation with a group	Is confident in their relationships or in their ability to form caring relationships. Is able to identify with a group or groups
2 Safety needs	Seeks security through order and law	Feels safe and confident that they will not be harmed
1 Physiological (survival) needs	Seeks to obtain the basic necessities of life	Has all of the survival needs met. Feels confident that they will continue to be met.

3.5 (a): Culture & Social and Emotional Wellbeing

Culture describes the attitudes, actions, rules, standards, values, and objectives that characterize a people's way of life. It encompasses things like language, norms, customs, and behavioral standards as well as social norms, dietary restrictions, and communication styles. It offers the framework within which it is possible to interpret the world and make lifestyle choices. A person may define his/her own identities, establishing who he/she is and what his/her roles are, thanks to it (Gorman & Best, 2005). It gives everybody the opportunity to develop his/her culturally enriched ego-ideals, that one internalizes, and that are crucial for psychological well-being, or SEWB (Gorman, 2010).

Roles are established by culture, which also establishes the standards by which one judges how well someone performs those roles and the criteria by which it is possible to define oneself as the kind of people who embody the ideals of the role, which one subsequently internalizes (Lear, 2006). When Lear said, “[One] needed to constitute oneself as a person for whom living up to the relevant ideals constituted who one was...It required a steadfast commitment stretching over much of one's life to organize one's life in relation to these ideals” (Lear, 2006), he was attempting to explain this (Gorman, 2010).

In the same way that culture helps to define roles and internalize ideals, it also helps to decide what behaviors are suitable and inappropriate. We feel the sensation of shame when we think about actions that we have internalized as being unacceptable. This allows us to control our own behavior. Although our parents' and other people's responses to our behavior may have initially instilled shame in us, after these values are internalized, we no longer need the presence of another person to experience shame (Lear, 2006).

It makes sense that someone who has been cut off from their culture will be hindered from fulfilling those needs if culture provides the context within which we define ourselves and defines the needs that motivate us, needs that progress through a hierarchy to self-actualization and self-transcendence. People who have been cut off from their culture are likely to be limited to the lower levels of motivation since the relevance of culture to needs increases as we move up the hierarchy (Gorman, 2010).

At its most extreme, this would imply that they would struggle to move above their basic survival requirements since little else would make sense without the context that civilization offers (Gorman, 2010).

Jonathan Lear argues how actions that once had higher meaning in the context of cultural values and beliefs could end up being reduced to only securing basic survival necessities in his book “Radical Hope: Ethics in the face of Cultural Devastation” (Lear, 2006).

Lear illustrates how the destruction of a culture can eliminate the conceptual context in which we create our very identity with the analogy of a chess piece. If the owners of the chess set stopped playing chess, the chess piece would not only have lost its way of life but also the concepts with which to understand itself and

the rest of the world (Lear, 2006). If the chess piece were a person with an understanding of identity, rules, and goals created by the world of chess.

When people lose their way of life, also their manner of life is destroyed. They are no longer able to live up to their conceptions of what pleasure is, and they are also unable to pursue happiness in the conventional methods. They forget the ideas that have been used to understand their enjoyment (Lear, 2006), influencing their SEWB (Gorman, 2010).

Additionally, there is a clear effect on how people behave. It is challenging for a person to know how to behave or when to feel ashamed when there is no culture to help define standards and proper versus inappropriate behaviors. This could lead to inappropriate feelings of shame or socially undesirable behavior (Lear, 2006).

3.6. Maslow's hierarchy during COVID-19 pandemics

As already explained, Maslow's theory states that humans are typically motivated to attain lower basic needs before satisfying their higher human needs, although, based on external factors or individual differences, there might be exceptions (Shoib, 2022). Maslow also argued that if humans fail to meet the needs at the various stages of the hierarchy, this could lead them to both physical and mental illness (Shoib et al., 2022).

In this view, COVID-19 pandemic has had a great impact. Satisfying basic physiological needs became less concerning, the home-bound orders and all the other activities that people usually do in their lives became impossible to do during that time. The virus spread made people paranoid about keeping themselves and their families safe, making the knowledge of the infection and the safety needs some sort of obsession. The social condition of people, bounded at home, came less. The need to feel connected to the others was only satisfied via social media channels but many people still felt disconnected from the world. Furthermore, both esteem needs, and self-actualization needs were impossible to satisfy due to the physical limitations imposed by the rules and to the overall hopelessness, powerlessness, depression, anxiety, and distress that the pandemic brought (Shoib et al., 2022).

When an individual's physical health declines, his/her ability to maintain social connections and access protective factors also deteriorates, resulting in a decline in mental health. This, in turn, can lead to further deterioration of psychological needs such as self-esteem and love and belonging, creating a self-perpetuating cycle of depression (Shoib et al., 2022).

The satisfaction of basic needs was found to have a direct impact on psychological health and the ability to cope with stressors, as demonstrated by the relationship between basic needs satisfaction and scores of neuroticism and belief in internal locus of control. Maslow's hierarchy of needs posits that all five levels of needs are interdependent, such that a change in one level can affect the satisfaction of needs at the same or different levels. This bidirectional relationship between each level allows for flexibility in utilizing the

hierarchy. With the COVID-19 pandemic, the position of mental health in Maslow's hierarchy may have shifted. Therefore, models for psychosocial interventions based on Maslow's hierarchy need to be flexible and consider the interdependence of all tiers. This requires linking each need to many other needs, regardless of their position in the hierarchy, and using a cause-effect model to explain or predict changes in an individual's needs (Shoib et al., 2022).

3.7. Safety needs or physiological needs? Let the crisis begin

Safety needs are more fundamental than physiological demands and include personal security, financial security, and health and well-being. The primary cause of mental problems like anxiety, phobia, melancholy, and PTSD is safety-related worry. The amygdala, LC/NE system, and corticotrophin-releasing hormone system can be thought of as a "safety circuitry," whose main behavioral function is "fight or flight" and "fear and anger" emotions. The amygdala, in particular, has been proved to be the neural basis for fear, stress elicited fear and anxiety (LeDoux, 1998; Vuilleumier, 2005).

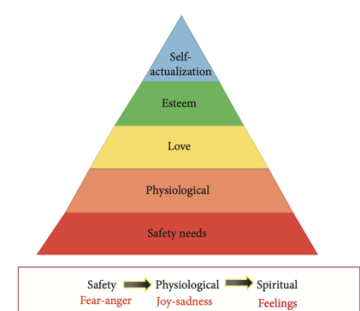
All these systems are the neuronal underpinning for safety. This is comparable to the appraisal theory of emotions: anger is caused by secondary appraisal, which is associated to coping with risky situations, whereas fear is caused by primary appraisal, which is related to personal safety. If coping goes well, the individual will be happy; if coping fails, the person will feel sad or depressed (Zheng et. Al, 2016).

In Maslow's pyramid safety needs come second to physiological needs but some studies consider safety needs to be more important than physiological needs (Zheng et. Al, 2016).

Maslow found that “practically everything looks less important than safety, even sometimes the physiological needs which being satisfied, are now underestimated. A man may be characterized as living almost for safety alone” (Maslow, 1943). Actually, physiological needs are less fundamental than safety needs. More fundamental than physiological needs, safety needs include personal protection, financial security, and health and well-being [Figure 5]. For instance, the deer cannot eat (physiological needs) on the wild prairie when the wolves chase them (safety). Taking an example from Cosmides and Tooby's theory; “Imagine walking alone at night and hearing some rustling in the brush. Your energies are aroused to be ready for action, you become acutely aware of sounds that could indicate that you are being stalked, the threshold for detecting movements is lowered, you no longer feel pangs of hunger, attracting a mate is the farthest thing from your mind” (Cosmides & Tooby, 2000).

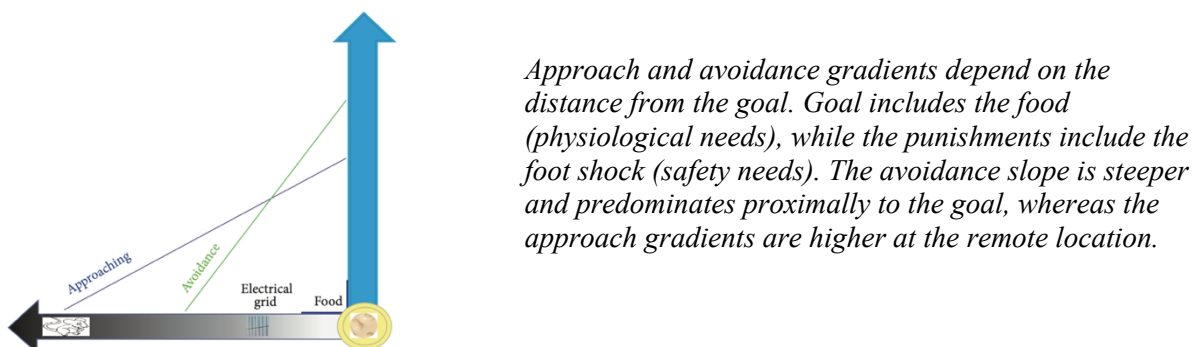
Figure 5: New version of Hierarchy of Needs: “safety-hedonic-esteem-love-self-actualization” (Adapted from Zheng et. Al, 2016).

All emotions and feelings depend on whether the stimulus can satisfy the needs of individuals, and the satisfaction of different needs can induce different emotions: safety can induce fear and anger, hedonic needs can induce joy and sadness, and spiritual needs can induce feelings such as love.



It is then clear that safety needs are fundamentally more important than physiological needs, to the point that safety needs can block physiological needs. As explained by Miller's Avoidance and Approach experiments that use behavioral measures to assess motivational disposition in rodents, as an animal moves closer to the potential reward (e.g., food), the force exerted to obtain the reward increases [Figure 6]. Similarly illustrated is the avoidance: the force the animal exerted to avoid the aversive stimulus (a shock) also increases as the animal comes closer, and furthermore, the slope of the avoidance gradient tended to be steeper than that of approach (Norman et al., 2011). Later experiments by Ito found that the organisms tend to be more sensitive to the threatening information and generally process such information faster than the rewarding information (Ito, 2005). He called this phenomenon negativity bias and attributed it to a protective strategy through evolution, since even a single failure to respond adaptively to a survival threat may preclude passing on genetic information. He found that "as a potential threat looms, the adaptive response of the brain is to amplify these threats and initiate appropriate behavioral responses, such as fleeing, freezing, or attacking." And he found that the negativity bias can be seen across all levels of the neuraxial organization (Norman et al., 2011). These data support the notion that safety needs are faster and more fundamental than hedonic value of our psychological-hedonic needs (Zheng et. Al, 2016).

Figure 6: Safety needs can block physiological needs (Adapted from Zheng et al., 2016)



Maslow also mentioned that safety needs can induce diseases, "One reason for the clearer appearance of the threat or danger reaction in infants, is that they do not inhibit this reaction at all, whereas adults in our society have been taught to inhibit it at all costs. Thus, even when adults do feel their safety to be threatened, we may not be able to see this on the surface. Infants will react in a total fashion...In infants we can also see a much more direct reaction to bodily illnesses of various kinds. . . for instance, vomiting, colic, or other sharp pains." (Maslow, 1943). Even the adults can inhibit reactions, they still can react in some mental disorders (Zheng et al., 2016). Citing Maslow, "Some neurotic adults in our society are, in many ways, like the unsafe child in their desire for safety, although in the former it takes on a somewhat special appearance. Their reaction is often to unknown, psychological dangers in a world that is perceived to be hostile, overwhelming, and threatening" (Maslow, 2943). The neurotic person might be usefully described in a slightly different way as an adult who still has a childlike outlook on the world. In other words, a neurotic adult might act as though he were truly afraid of getting spanked, of his mother disapproving, of being

abandoned by his parents, of having his food taken away, etc. It seems as though his youthful attitude of dread and threat reaction to a dangerous environment had subsided and remained untouched by the processes of maturation and learning and were now ready to be roused by any stimulus that would make a kid feel unsafe and threatened (Maslow, 1943).

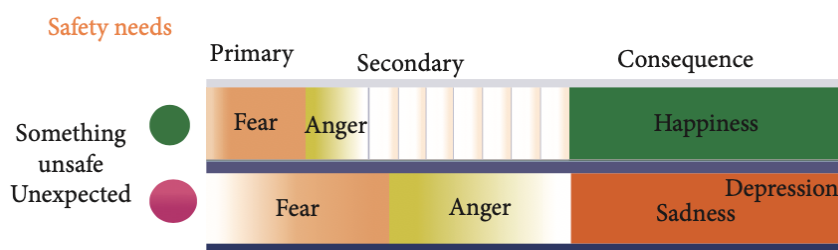
People will feel terrified and outraged if something unexpected happens, but peaceful and at ease if something predictable happens. Therefore, phobia patients may experience difficulties in achieving the emotional flow (fear-anger-happiness-sadness-calm). These patients are too shy to express rage; therefore, their emotions are monitored as they transition from fear to anger, which is the best approach to get rid of fear. As a result, rage may be the most effective therapy for these people, since NE is their neuronal foundation (Zheng et al., 2016).

Unrelenting melancholy and the incapacity to enjoy positively hedonistic circumstances are traits of depression. Therefore, anxiety over safety rather than physiological enjoyment may be a contributing factor in depression. In fact, Lazarus's secondary evaluation and excessive self-blame are both hallmarks of major depressive episodes in all cultures (Zahn et al., 2015). Consequently, depressive individuals have issues with anger, coping evaluation, or their issue is a result of their incapacity to handle the risky stressful scenario and displayed inside rage. The distinction between fear and anger is the behavior's direction: while anger involves hurling oneself against the stimulus, fear involves hurling the stimulus itself. Inside of depression is anger. Anger is typically a response to external stimuli. Due to ongoing helplessness, these individuals lack the ability to reject external stimuli and instead desire to commit suicide (Zheng et al., 2016).

Our daily emotions are thus represented by the emotional rainbow (or emotion flow) of fear, rage, happiness, sadness, and missing [Figure 7].

This study proves that the hierarchy is put in crisis in presence of diseases and other extreme conditions (Zheng et al., 2016).

Figure 7: Emotion flow (Adapted from Gu et al., 2015)



3.8. Self-actualization and mental disorders

According to quantitative research, setting self-actualization objectives is more closely related to not having one's basic needs satisfied than it is to having those needs met. Qualitative research indicates a more intricate connection between fundamental requirements, goal-setting, and the definition of self-actualization.

The need for self-actualization, which Maslow defined as the desire “to become everything that one is capable of becoming” (Maslow, 1943), is at the top of the hierarchy of needs. The fundamental objective of the paradigm for mental health recovery—for people to “strive to reach their full potential”—is strikingly similar to this (Substance Abuse and Mental Health Administration, 2011).

Maslow is frequently criticized for placing self-actualization at the top of the hierarchy and physiological requirements like food, water, and air at the bottom, although many argue that the nature and hierarchy of need levels between the two are arbitrary or susceptible to personal opinion (Wahba & Bridwell, 1976). It is uncertain whether and how to organize them into a hierarchy if a set of “primary goods” or needs are required to achieve self-actualization (Nussbaum 2006; Rawls 1971).

It's interesting to note that Maslow's subsequent research contends that dissatisfaction over unmet demands rather than satisfaction of those wants may be the root cause of the search for self-actualization. That is, overcoming hardship and failure can help a person become their true selves. It is unclear if this denotes the end of the linear hierarchical model or merely an exception to it.

It is difficult to ignore the conceptual similarities between Maslow's idea of self-actualization and mental health recovery. These similarities provide a solid theoretical, if intuitive, framework for thinking about how material deprivation may influence one's recovery potential. Maslow's theory would propose that before beginning a process of recovery or self-actualization (i.e., a “being need”), more fundamental needs must first be met. Maslow's later theory that being needs may develop from the frustration, not fulfillment, of basic needs (Maslow, 1970) is supported by the observation that for people participating in mental health treatment programs a focus on self-actualization appeared to occur when more basic needs were not addressed. Naturally, recognizing one's requirements or a desire for self-actualization is distinct from really accomplishing those objectives.

For many years and counting, Maslow's theory has been mentioned in almost every psychology textbook (Kenrick et al., 2010). Maslow's theory undersells the intricate connection between a person's fundamental needs, goal-setting, and the definition of self-actualization (Henwood et al., 2015).

Although the theory has been applied to empirical research in a variety of fields, an investigation of what Maslow's theory has to offer to research on mental health recovery or mental health services design has not been attempted.

3.8 (a): Maslow Theory and depressed patients' therapy

Maslow's hierarchy of basic needs theory has been widely used in holistic nursing based on the framework of nursing procedures (Eneman, 2019). A person can maintain balance when the majority of their needs are met, but when they are ill, they may have many needs that they are unable to meet on their own. Nurses are needed to care for them at this time, and if each need is not addressed, it will certainly result in a poor

psychological condition. Similar to physical concerns, poor mental health can also lead to numerous physical issues (Lownsdales, 1997; Novick, 2001).

According to Maslow, the majority of fundamental wants are frequently unconscious, yet for knowledgeable individuals using the right techniques, they may become conscious. According to Maslow, not all behaviors are influenced by basic needs. Even so, not all actions are driven by motivation (i.e., demand). There are several factors that influence conduct in addition to motivation. Humans seek the realization of their inherent worth and potential because that is just who they are. Consciousness is the driving force behind human conduct, which is also intentional and creative (Mucedola, 2015).

As seen in Chapter One, the common physical symptoms accompanied with depressive disorder are sleep disorder, anorexia, weight loss, constipation, hypolibido, impotence, amenorrhea, pain, fatigue and so on.

Due to melancholy, pessimism, paranoia, and even pessimism, hallucinations, and delusions, depression patients are more likely to experience sleep difficulties. Additionally, depressed patients don't eat enough and have low appetites, which leads to malnutrition—a lack of nutrients relative to what the body requires.

Depression sufferers are frequently at risk for self-harm and suicide because they frequently experience psychological issues like pessimism, despair, self-blame, and self-guilt. They believe they are hopeless, useless, and powerless, in need of love and recognition from family and society. They are concerned about how their illness may harm their reputation, giving them fear and worry. Memory loss, delayed responses, inattention, and other symptoms of depression have a significant negative impact on learning and professional success. All these symptoms and their consequences are related to the needs illustrated by Maslow in the hierarchy (Mucedola, 2015).

The core idea behind Maslow's hierarchy of needs is that mental health directly correlates with how well certain demands are met. The requirement for a proper mental state is balanced when the majority of a person's needs are satisfied (Mucedola, 2015).

In order to meet the needs of patients' self-realization and generate patient confidence in overcoming diseases, circumstances should be created in accordance with the various needs of various persons while implementing various types of nursing care. Each patient should, to the greatest extent possible, achieve the best state of harmony with treatment and nursing, enhancing the overall quality of care and fostering rehabilitation. Accordingly, specialized care measures should be taken at each level in accordance with the urgent, heavy, light, slow, targeted, and level by level (Mucedola, 2015).

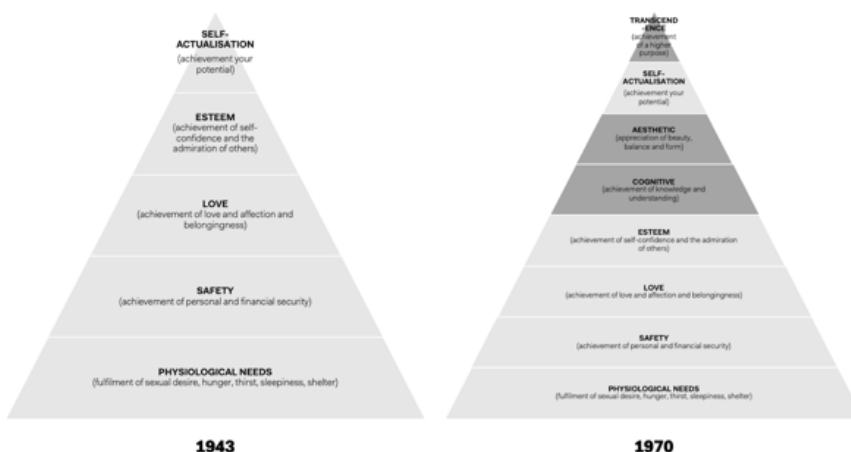
Depression causes depressed people to get bored with everything. They are led to experience emotional fulfillment by meeting their inner requirements to feel understood, cared for, and self-sufficient. According to Maslow's hierarchy theory, once a person's lower-level needs are met, they must then focus on achieving their higher-level wants. Therefore, nurses must use varied nursing techniques for various patient

populations as they transition from the classic “disease centered” nursing discipline to the new “human centered” holistic nursing. In order to meet patients’ physiological, psychological, emotional, intelligent, social, and spiritual needs and to ensure the best possible physical and mental health of the body, nursing care includes disease treatment and nursing, psychological nursing, prevention, health care, and health consultation, among other things (Li, 2020).

Therefore, if psychotherapy and psychological care can follow these methods, many psychological and ancillary physiological problems will automatically disappear, leading the depressed individual to reach his/her self-actualization by satisfying all of his/her needs and, eventually, defeating depression.

In this regard, the Maslow model of 1970 [Figure 8] has been seen to be effective in the field of prevention. Its methods promote self-actualization by engaging people in activities that increase their sense of purpose, self-worth, and self-esteem leading to a decreased number of depression and suicide cases (Mucedola, 2015).

**Figure 8: Hierarchy of Needs:
1943 vs 1970 (Adapted from
Liddels, 2020)**



3.9. Maslow and eating disorders: the distortion of human needs

Sleep and food are essential for human survival. However, those who have eating disorders experience two major disruptions: abnormal eating patterns and poor sleep (Jawed et al., 2023).

Studies demonstrate that eating disorders completely distort physiological human demands. Physiological needs are considered as the primary forces behind human conduct within the context of the theory of human motivation. Humans can't function adequately physically or psychologically without being satisfied. When it comes to eating disorders, the requirement for fasting, purging, or starvation goes against fundamental tenets of human existence. Additionally, the consequences and medical issues associated with eating disorders make it difficult or impossible to fulfill physiological needs (Dzysiuk, 2011).

One can infer from the frequency of the love and belongingness need and safety need distortions that they are also, even though to a lesser level, prevalent in the psyches of anorexics, bulimics, and binge eaters. Because sick people are oblivious to the difficulties they face, the safety requirements are quite low. Furthermore, the anger, anxiety, and despair eating disorder patients experience may complicate their need

for love and bonding with other people as well as their social isolation. As a result, their desire to be alone prevents their need for belongingness from being satisfied (Dzysiuk, 2011).

According to statistics, the urge for self-actualization comes in second to the need for esteem. These demands presumably have some connection to one another.

Unfortunately, people with eating disorders cannot have lower esteem needs because they have a very difficult time understanding the idea of positive self-evaluation (Dzysiuk, 2011).

Chapter Four: CONCLUSIONS

What the previous chapters showed is that consumer behavior is a complex phenomenon that involves many factors, including psychological and emotional aspects and it is closely linked to human needs, and this connection becomes especially relevant in the context of consumers with mental disorders.

As seen in Chapter One, individuals with mental disorders often have unique needs and desires that influence their consumption patterns. For example, those with anxiety disorders may seek out products or services that offer a sense of calm and relaxation, while those with depression may seek out products that provide comfort or pleasure. However, for other mental disorders such as addiction or compulsive buying disorder, the relationship between consumer behavior and mental health needs can be more complicated. In some cases, consumers with these disorders may engage in excessive consumption behaviors to cope with underlying emotional or psychological distress. They may use shopping or purchasing as a way to manage negative emotions or to feel a sense of control in their lives. This can lead to a cycle of addictive behavior that can be difficult to break (Machin et al., 2022).

Understanding these needs and the ways in which they drive consumption can be critical for marketers seeking to develop effective strategies for this population. By considering the unique needs of consumers with mental disorders, marketers can design products and services that better meet their needs and help to improve their overall well-being. Additionally, by examining the ways in which consumers with mental disorders engage with products and services, marketers can gain insights into the underlying motivations and drivers of their behavior, which can inform the development of more effective interventions and treatments. Overall, a deep understanding of the connections between consumer behavior and human needs is essential for improving the mental health and well-being of consumers with mental disorders (Machin et al., 2022).

As individuals are an active part of the economic environment, it is extremely important to create marketing strategies that are also effective for people affected by mental disorders (Machin et al., 2022).

Marketing in the mental health sector is fundamental and the lack of theory and research specifically addressing marketing mental health needs to change. Marketing involves a multi-layered strategy that is based on careful analysis of the requirements and characteristics of the consumer, the environment, and the service provider (Kotler & Armstrong, 2003). The purpose of marketing in the mental health sector is to provide a viewpoint from which to integrate the analysis, planning, implementation, and control of the healthcare delivery system. Using a marketing strategy for mental health efforts, such as producing more precise definitions of different clients' needs and improving the ability to spot opportunities for serving particular population segments can be extremely useful (Machin et al., 2022).

Marketing researchers have played a valuable role in improving the mental health of consumers by making significant contributions to knowledge. They have conducted broad studies on the impact of materialism on consumer mental wellbeing, coping strategies to enhance mental wellness, and specific mental disorders such as addiction, depression, anxiety, and eating disorders. Furthermore, marketing research has assisted practitioners in identifying optimal pricing, product design, distribution channels, and promotional strategies. It has also contributed to a better understanding of the mental health consumption journey and informed mental health public policy and stigma reduction efforts. Given the growing interest in the intersection of mental health and marketing, scholarship in this area is crucial. Nevertheless, classically trained marketing researchers may find the context, terminology, and setting unfamiliar, and thus scholars must develop unique skills to connect with this difficult-to-reach population (Machin et al., 2022).

To effectively conduct research in the field of marketing and mental health, it is essential to recognize and emphasize the distinctive disciplinary focus of marketing, which is centered around understanding the customer and the marketplace. Rather than treating mental health as a mere context for the application of previously established marketing theories, it is important to appreciate the unique aspects of this field and allow them to enrich marketing knowledge by introducing novel variables or extending the levels of existing ones. For example, the role of individuals with mental health issues is distinct in terms of their level of awareness of their condition or acceptance of treatment. From a marketing perspective, research can examine not only the patient's understanding of mental health issues but also that of their family and friends. Furthermore, research can explore the interactions between patients and healthcare practitioners and investigate how communication strategies can improve adherence to prescribed medication and healthy practices (Machin et al., 2022).

Research questions must be important to marketing researchers as well as mental health researchers (Shugan, 2003). To develop appropriate questions, begin by reviewing mental health topics in not only the marketing literature but also the vast literature on mental health consumers and services in medical, psychology and public health journals. The demand for the publication of works on mental health in marketing journals is increasing because there are few topics that matter more than a consumer's mental health (Machin et al., 2022).

What the previous chapters showed is that consumer behavior is a complex phenomenon that involves many factors, including psychological and emotional aspects and it is closely linked to human needs, and this connection becomes especially relevant in the context of consumers with mental disorders (Rochlen & Hoyer, 2005).

As said in Chapter 1, individuals with mental disorders often have unique needs and desires that influence their consumption patterns. For example, those with anxiety disorders may seek out products or services that

offer a sense of calm and relaxation, while those with depression may seek out products that provide comfort or pleasure. However, for other mental disorders such as addiction or compulsive buying disorder, the relationship between consumer behavior and mental health needs can be more complicated. In some cases, consumers with these disorders may engage in excessive consumption behaviors to cope with underlying emotional or psychological distress. They may use shopping or purchasing as a way to manage negative emotions or to feel a sense of control in their lives. This can lead to a cycle of addictive behavior that can be difficult to break (Rochlen & Hoyer, 2005).

Understanding these needs and the ways in which they drive consumption can be critical for marketers seeking to develop effective strategies for this population. By considering the unique needs of consumers with mental disorders, marketers can design products and services that better meet their needs and help to improve their overall well-being. Additionally, by examining the ways in which consumers with mental disorders engage with products and services, marketers can gain insights into the underlying motivations and drivers of their behavior, which can inform the development of more effective interventions and treatments. Overall, a deep understanding of the connections between consumer behavior and human needs is essential for improving the mental health and well-being of consumers with mental disorders (Rochlen & Hoyer, 2005).

A useful tool that marketers could use to achieve better results in the field is AI, an instrument that has the potential to revolutionize the way marketers understand and engage with consumers with mental health issues, leading to more effective marketing strategies and improved mental health outcomes.

AI algorithms can analyze vast amounts of data from multiple sources, allowing marketers to gain a deeper understanding of consumer behavior and preferences. This can lead to more effective marketing strategies and more targeted interventions to improve mental health outcomes (Marks, 2019).

The algorithms can help marketers to monitor and track consumer behavior in real-time, allowing them to quickly identify changes in behavior and respond with appropriate interventions. This can be especially important for consumers with mental health issues, who may be more likely to experience rapid changes in behavior or mood (Marks, 2019).

AI can also help identify patterns in consumer behavior that are not immediately apparent, allowing marketers to develop more nuanced and personalized marketing strategies. For example, AI algorithms can analyze social media data to identify consumers who are struggling with mental health issues and target them with personalized marketing messages that speak directly to their needs (Marks, 2019).

The purpose of this thesis is to show that consumer behavior is a complex phenomenon, especially in the context of individuals with mental disorders. Understanding the unique needs – whose hierarchical order

proposed by Maslow is distorted – and desires of consumers with mental disorders is essential for marketers to develop effective strategies that improve their overall well-being. Moreover, marketing researchers have played a valuable role in identifying optimal pricing, product design, distribution channels, and promotional strategies for mental health consumers. To conduct effective research in the field of marketing and mental health, it is important to appreciate the unique aspects of this field and recognize the distinctive disciplinary focus of marketing. Given the growing interest in the intersection of mental health and marketing, research in this area is crucial, and it must be important to both marketing and mental health researchers. By acknowledging the importance of mental health in marketing and conducting research in this area, marketers can create marketing strategies that are effective for people affected by mental disorders also using powerful tools like AI.

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