

# *The Impact of Motivation to Experience Happiness on Depressive Symptoms*

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**Abstract:** The growing mental health concerns worldwide have highlighted the need to study depression as it heavily impacts overall well-being and life satisfaction. Depression research investigates genetic, environmental, and psychological factors for effective prevention, diagnosis, and treatment. Meanwhile, motivation plays a crucial role in individual and organizational success and well-being, exploring intrinsic and extrinsic factors, cognitive and emotional processes, and social and environmental influences to optimize outcomes. This review paper examined the complex relationship between motivation and depression, focusing on the direct and indirect relationship between attitudes toward happiness and depression, relevant factors in the relationship, and the underlying neural mechanisms. The review discussed how different factors could contribute to the development and maintenance of depressive symptoms through multiple pathways and the underlying neural mechanisms that may be involved, particularly asymmetries in alpha oscillations. All in all, the findings highlighted the complex relationship between motivation and depression and proposed potential intervention targets to reduce the risk of depressive symptoms in susceptible individuals. One of the major limitations of available research is that some studies reviewed in this paper rely on self-report measures, which may be influenced by social desirability bias and other biases that could affect the validity of the results. Future research should explore using various methods to have a comprehensive understanding of the relationship between motivation and depression. Understanding the relationship between motivation and depression can lead to improved interventions, customized treatments, and preventive programs for children and adolescents.

**Keywords:** motivation, depression, attitudes towards happiness, self-esteem, alpha oscillations

## 1. Introduction

With the rapid pace of modern life and increasing societal pressures, both motivation and depression have emerged as crucial factors affecting individuals' well-being and productivity. Depression is a pervasive mental health condition marked by a constant low mood, anhedonia (the inability to find interest or enjoyment in activities), and a range of cognitive, emotional, and physical symptoms [1]. This debilitating condition can significantly impair an individual's quality of life, relationships, and productivity. Depression is a complex and multifaceted phenomenon, with various theoretical models attempting to explain its origins, development, and maintenance. These models range from

neurobiological and psychological perspectives to evolutionary theories that seek to understand the potential adaptive functions of depression.

Motivation is a fundamental psychological process that underlies human behavior, propelling individuals to pursue goals, make choices, and tackle various life challenges [2]. It holds a critical position in both personal and professional growth, fueling individuals' aspirations for advancement, accomplishment, and overcoming barriers. Motivation can be broadly classified into two categories: intrinsic and extrinsic motivation. Intrinsic motivation refers to participating in an activity for its inherent enjoyment and personal satisfaction, and extrinsic motivation stems from external factors such as rewards or social pressure. Understanding the nuances of motivation is essential for optimizing performance, fostering engagement, and promoting overall well-being.

Exploring the relationship between motivation and depression is vital for several reasons. Firstly, it can help elucidate the underlying mechanisms that contribute to the onset and persistence of depressive symptoms, providing valuable insights into the interplay between motivational processes and depressive experiences. Secondly, understanding this relationship can inform the development of more effective, targeted interventions that address both motivation and depression, ultimately improving mental health outcomes for those affected by this challenging condition. Lastly, investigating the connection between motivation and depression can illuminate how these two constructs reciprocally influence each other, offering a comprehensive perspective on the dynamic interplay between them.

The theoretical background of motivation encompasses diverse perspectives that have evolved over time, offering valuable insights into the factors that drive human behavior and the processes underlying goal pursuit, performance, and satisfaction. Early theories, such as Maslow's hierarchy of needs, postulated that individuals are motivated by a series of innate needs that must be satisfied hierarchically, from basic physiological requirements to higher-order psychological and self-actualization needs [2]. In contrast, Herzberg's two-factor theory differentiated between hygiene factors, which prevent dissatisfaction when fulfilled but do not necessarily promote satisfaction, and motivational factors, which directly contribute to satisfaction and motivation. More contemporary approaches, such as self-determination theory, highlight the significance of autonomy, competence, and connectedness in fostering intrinsic motivation and psychological well-being [2]. These theoretical frameworks provide a comprehensive understanding of the multifaceted nature of motivation and its implications for individual and organizational functioning.

The theoretical background of depression is similarly complex and multifaceted, encompassing a range of perspectives that seek to explain the origins, development, and maintenance of this debilitating mental health condition. Neurobiological theories emphasize the role of neurotransmitters, such as serotonin and dopamine, in the etiology and treatment of depression. On the other hand, cognitive models highlight the impact of maladaptive thought patterns and cognitive distortions on depressive symptoms [1]. Psychosocial theories focus on the interplay between individual and environmental factors, such as stressors, interpersonal relationships, and social support, in shaping the onset and course of depression. In recent years, evolutionary theories have emerged as an intriguing alternative perspective, positing that depressive symptoms may have evolved to serve specific adaptive functions, such as signaling distress and obtaining social support [1]. These theories challenge conventional views of depression as solely a pathological condition and raise important questions about the relationship between depression and motivational processes.

The theoretical backgrounds of motivation and depression encompass diverse perspectives that provide insights into human behavior, goal pursuit, and well-being. A person exhibiting a lack of motivation may display disinterest, disengagement, and avoidance of challenges, which are patterns that resemble depressive symptoms. This suggests that there could be a negative relationship between motivation and depressive symptoms, with reduced motivation potentially contributing to or

exacerbating depression. Although there has been extensive research on both motivation and depression, the connection between motivational factors and depressive symptoms is still unclear. This review examined this relationship from multiple angles to provide a more nuanced understanding. By exploring the underlying factors and processes that drive these constructs, this review aims to shed light on the intricate interplay between motivation and depression. Gaining insight into the connection between motivation and depression allows for the development of refined intervention strategies, personalized therapeutic approaches, and proactive prevention methods.

## **2. The Direct Relationship Between Attitudes Towards Happiness and Depression**

The concept of motivation to experience happiness (happiness motivation) refers to the intrinsic desire and effort that individuals put forth to seek out and engage in activities that evoke positive emotions. Individuals with depression might experience reduced happiness levels, potentially due to diminished motivation to seek out and engage in activities that bring about positive emotions. This could result from a depressive state, where negative emotions take precedence and hinder the pursuit of happiness. Millgram et al. research analyzed how the motivations to feel happiness or sadness mediated group differences in symptom severity amid stress [3]. The results revealed that depressed individuals exhibited weaker motivation to feel happiness and stronger motivation to feel sadness compared to non-depressed individuals. Moreover, those with a stronger motivation to feel happiness coped better with stress. The authors also discovered that initially depressed participants experienced a more significant decrease in happiness motivation and a smaller decrease in sadness motivation when anticipating stress compared to non-depressed participants. Their findings revealed that, among initially depressed individuals, the motivation for happiness before a stressful event predicted symptom severity during stress [3]. These results demonstrate the significant role that motivation to experience happiness plays in the relationship between happiness and depression. Depressed individuals exhibit a reduced motivation to seek out and engage in activities that promote happiness, which may further exacerbate depressive symptoms. Furthermore, the motivation to experience happiness is linked to better stress coping, suggesting that fostering motivation to experience happiness may benefit individuals struggling with depression.

However, the pursuit of happiness is not beneficial under every circumstance. Valuing happiness refers to the degree to which individuals consider happiness to be an essential and desirable life goal. Two key arguments arise from placing an excessive emphasis on the pursuit of happiness. First, people who highly value happiness might create unattainable emotional goals, persistently seeking an elusive level of happiness, which can result in disappointment, frustration, and discontent, potentially contributing to depressive symptoms. Second, individuals who misinterpret happiness may believe that it represents a flawless existence devoid of adversity or negative feelings, or they may assume it is a perpetual state of positivity. This misconception can cause them to emphasize attaining and sustaining happiness excessively, which may increase their risk of depressive symptoms. Ford et al. research investigated the association between valuing happiness and symptoms and diagnosis of depression [4]. The results indicated that participants who valued happiness more highly reported higher levels of depressive symptoms, even after controlling for potential confounders such as neuroticism and social desirability. The association between depressive outcomes and valuing happiness was supported by the findings, highlighting that the extreme focus on happiness, rather than merely valuing it, is what contributes to such outcomes. These findings support the argument that individuals who excessively value happiness might create unattainable emotional goals, leading to disappointment, frustration, and discontent when they fail to achieve these goals. Additionally, individuals who misinterpret happiness and believe it to be a perpetual state of positivity may experience depressive symptoms when faced with life's challenges and fluctuations, as their expectations of constant happiness remain unfulfilled.

In addition, chronic depressive symptoms may also impact an individual's self-identity, potentially altering their self-perception and sense of self-worth over time. Self-verification motive refers to individuals' desire to confirm their self-concept, even if it entails negative self-beliefs. Hedonic motive involves seeking pleasurable experiences and avoiding negative ones. The simultaneous presence of high self-verification motivation and high hedonic motivation might result in decreased resilience in the face of challenges. The pursuit of happiness, fueled by a strong hedonic motivation, could be obstructed by the desire to validate negative self-views stemming from a high self-verification motive. This internal conflict makes it harder for individuals to bounce back from setbacks or adverse experiences, potentially increasing their susceptibility to depression. Arens and Stangier conducted a study examining hedonic and self-verification motives among participants with and without MDD, who were exposed to different musical conditions, such as happy, neutral, and sad music [5]. The study found that depressed participants who opted for sad music tended to attribute their selection to self-verification motives, whereas non-depressed participants mainly identified hedonic motives as their reason. Plus, when selecting happy music, depressed participants predominantly attributed their choice to hedonic motives compared to non-depressed participants. However, depressed participants preferred negative affective states significantly more than control participants [5]. Additionally, depressed participants were significantly more likely to agree that sadness could fulfill a self-verifying role compared to non-depressed controls. These results imply that those with depression might be more inclined to engage in self-verification processes, even when doing so leads to the pursuit of negative affective states. Depressed participants in the study displayed a stronger preference for sadness as a means of self-verification compared to non-depressed controls [5]. Moreover, it also indicates that when choosing happy music, depressed participants mainly attributed their selection to hedonic motives, even more so than non-depressed individuals. One possible explanation is that Coexisting elevated hedonic motivation and strong self-verification motives in depressed individuals can reduce resilience during challenges. The internal conflict arising from pursuing happiness while confirming negative self-beliefs hinders their recovery from setbacks, potentially increasing vulnerability to depression. The mentioned study highlights three aspects of the relationship between depression and motivation. First, depressed individuals typically have low motivation to experience happiness. Second, those who overvalue happiness may be at a higher risk of developing depressive symptoms. Lastly, the coexistence of high self-verification and hedonic motivation in depressed individuals can contribute to the onset and persistence of depressive symptoms.

### **3. Relevant Factors in the Relationship**

#### **3.1. Accomplishment and Depression**

The studies mentioned above demonstrate the direct relationship between motivation and depressive symptoms. However, there are relevant factors that could influence this connection, which warrant further consideration. Work motivation encompasses the psychological factors influencing a person's willingness to participate and maintain effort in their job. Job burnout is marked by feelings of emotional fatigue, detachment, and a perceived insufficiency in one's work performance. Mental resilience refers to the ability to adapt and recover from stress and adversity. People who encountered job burnout were likely to possess greater work motivation previously. The higher level of motivation often leads them to invest more effort into their jobs, which could result in longer work hours and an imbalance between work and personal life. Such factors might contribute to overworking and eventual burnout. However, the connection between work motivation and job burnout after the burnout has occurred still requires further investigation. As burnout escalates, it becomes a significant risk factor for developing depressive symptoms since the ongoing stress and emotional burden linked

to burnout can negatively impact an individual's mental health and overall well-being. Meng and Yang's study evaluated Chinese automotive production workers' work motivation, job burnout, mental resilience, and depression [6]. Results revealed negative correlations between work motivation and depression and between job burnout and work motivation. In contrast, a positive correlation was found between job burnout and depression. The moderated mediation model suggested that job burnout fully mediates the relationship between work motivation and depression, implying that the negative effects of pursuing success can be worsened by poor work-life balance and overworking. Additionally, the study identified a negative correlation between mental resilience and depression, with mental resilience moderating the indirect impact of work motivation on depression through its influence on job burnout [6]. This indicates that mental resilience can help protect against the negative effects of job burnout, thereby reducing depression risk. This finding is relevant to the earlier discussion on self-verification and hedonic motives, as those with higher mental resilience may be better able to handle work and personal life challenges [5]. High work motivation can lead to job burnout, which in turn increases depression risk. This supports the notion that decreased happiness levels can contribute to depressive symptoms [3].

Self-esteem refers to a person's comprehensive assessment of their own worth or significance. Avoidance motivation refers to the drive to avoid negative outcomes or experiences, such as failure or rejection. Highly accomplished individuals often have high self-esteem, while those with low accomplishment may have low self-esteem and avoid social situations due to fear of failure or rejection. This avoidance can result in social difficulties, potentially contributing to the development of depressive symptoms. Masselink, van Roekel, and Oldehinkel's longitudinal research collected data at three different time points (T1, T3, and T5) [7]. Researchers found a significant association between T1 self-esteem and depressive symptoms at both T3 and T5. Moreover, self-esteem was found to predict avoidance motivation, which directly influenced depressive symptoms. In the mediational model, avoidance motivation and social problems were significantly associated with depressive symptoms. These findings demonstrate that low self-esteem during early adolescence is related to increased avoidance motivation, which is connected to social difficulties (increased social problems) and reduced social contact. This implies that individuals with low self-esteem might avoid social situations due to concerns about failure or rejection. Notably, the observed social difficulties and reduced social contact were linked to increased depressive symptoms during late adolescence and early adulthood. By uncovering the intricate relationships between avoidance motivation, self-esteem, social factors, and depressive symptoms, researchers can better understand the mechanisms that contribute to the emergence of depression in individuals who have low self-esteem. The two studies discussed in this section emphasize the connection between accomplishment and depression. First, job burnout influences the relationship between work motivation and depressive symptoms. Second, an individual's accomplishments affect the association between self-esteem, avoidance motivation, and depressive symptoms.

### **3.2. Cognitive Control over Outcome and Depression**

Accomplishment is associated with cognitive control, as it involves the effective management of planning, attention, and decision-making processes. Enhanced cognitive control enables individuals to successfully navigate challenges, leading to a greater sense of accomplishment. However, when individuals engage in extensive cognitive processing without success, they may develop maladaptive cognitive control, such as rumination. Rumination involves a continuous, passive dwelling on one's negative emotions, often accompanied by self-blame and unproductive problem-solving attempts that exacerbate negative feelings. Persistent negative thoughts, like "If only I didn't have to do this," arise from desiring outcomes that are no longer achievable. The stress resulting from this incongruity can heighten the risk of developing depression. In McGuirk et al. experimental studies, participants were



either primed to focus on happiness or placed in a control condition [8]. After a task meant to induce a sense of failure, their ruminative responses were evaluated. The findings showed that participants in the happiness-focused condition exhibited higher levels of rumination related to the anagram task compared to those in the neutral and happy-room/no-failure conditions. The results also demonstrated that participants with higher perceived social expectations experienced increased rumination, depression, and negative emotions. Furthermore, the researchers found that participants' self-reported rumination served as a mediator between social expectations and well-being through analyses. The findings from the studies offer significant insights into the potential downsides of a happiness-centric culture [8]. By demonstrating that such a culture can increase rumination over failure, the research highlights the potential negative impact of an excessive focus on happiness and the pressure to conform to societal expectations and expected accomplishment. This pressure may lead individuals to suppress or ignore negative emotions, which could inadvertently exacerbate their ruminative tendencies, depression, and overall negative affect. Recognizing the full range of emotions, including cognitive control, can foster a more balanced perspective, better-equipping individuals to manage negative emotions and reducing the likelihood of rumination and its adverse effects. In conclusion, a happiness-focused culture can lead individuals to pursue outcomes and accomplishments excessively, potentially resulting in maladaptive cognition, especially for those who feel pressure to meet high social expectations related to happiness. This cultural context, which increases rumination over failure, may contribute to an elevated risk of depression and negative emotions.

Individuals with lower motivation may experience difficulties finding meaning and purpose in their activities, leading to a sense of disconnection and dissatisfaction with their lives. The absence of a sense of accomplishment and perceived control can exacerbate feelings of helplessness, as they may believe their efforts will not yield positive outcomes. This withdrawal, coupled with feelings of hopelessness and worthlessness, can contribute to developing and perpetuating depressive symptoms. Outcome Controllability refers to an individual's perceived ability to influence the outcomes of their actions or decisions. Outcome Value relates to the perceived importance or desirability of the outcome. Effort Costs refer to the mental or physical resources expended to achieve a particular goal or outcome. These three elements are crucial aspects of motivation that play a role in goal-oriented behavior. Grahek et al.'s review of studies revealed that individuals exposed to uncontrollable stressors exhibit passive behavior and feelings of helplessness, contributing to depression [9]. This suggests that perceiving low outcome controllability may lead to a diminished sense of accomplishment and control, increasing the risk of depressive symptoms. The review also showed that depression is linked to altered outcome value, such as reward-processing deficits [9]. Depressed individuals may struggle to find meaning and purpose in their activities due to these altered values, contributing to anhedonia. Furthermore, the review indicated that depression is associated with decreased effort exertion, particularly in cognitive tasks, demonstrating that those with lower motivation might be less willing to expend resources to achieve goals, leading to disconnection and dissatisfaction. This withdrawal, along with feelings of hopelessness and worthlessness, can play a role in the onset and persistence of depressive symptoms. The studies mentioned in this section highlight the role of individuals' expected accomplishments and perceived cognitive control over outcomes in influencing motivation and the development and persistence of depressive symptoms.

#### **4. The Underlying Neural Mechanism**

Gaining insight into the neural mechanisms underlying the connection between motivation and depressive symptoms allows for a more profound understanding of the processes at play, ultimately leading to a holistic and enriched perspective on motivation and depression. Approach motivation (i.e., appetitive; pursuing positive or rewarding experiences) and avoidance motivation (i.e., aversive; evading negative or harmful experiences) constitute the two fundamental dimensions of the brain's

approach-avoidance motivational system, which is critical in regulating behavior in response to various stimuli and situations. The brain's approach-avoidance motivational system comprises various neural structures and circuits, including frontal regions associated with approach motivation and amygdala, which is instrumental in processing aversive stimuli and generating avoidance motivation. Dissonance or imbalance of some motivation-related neural mechanisms may contribute to initiating and perpetuating depressive symptoms. Messerotti Benvenuti et al. investigated the time-based patterns of task-induced imbalances in alpha oscillations in individuals diagnosed with MDD and healthy control participants [10]. The study found that individuals with MDD exhibited reduced leftward asymmetry in frontal regions associated with approach motivation, indicating a diminished capacity for approach motivation and heightened sensitivity to avoidance motivation. This imbalance was more pronounced during the early stages of task processing, suggesting that motivational imbalances might emerge early in cognitive processes and impact subsequent emotional and cognitive functioning. Furthermore, the study found that the observed imbalance in alpha oscillations correlated with the severity of depressive symptoms, with participants exhibiting more severe symptoms having a more significant reduction in leftward asymmetry. This finding supports the notion that an imbalance in approach-avoidance motivation is associated with developing and maintaining depressive symptoms [10]. The observed imbalance in alpha oscillations reflects a potential disruption in the brain's approach-avoidance motivational system, which could play a role in the emergence and persistence of depressive symptoms. By investigating these neural mechanisms, researchers can acquire a deeper comprehension of the intricate relationship between motivation and depression, paving the way for potential therapeutic interventions. Furthermore, this knowledge can inform the development of targeted treatment approaches that address the underlying neural imbalances, potentially improving outcomes for individuals experiencing depression.

## 5. Conclusions

In sum, the complex relationship between motivation and depression involves a multitude of interconnected factors, as evidenced by the research findings presented in this paper. One study suggests that individuals with depression may experience reduced happiness levels, potentially due to diminished motivation to engage in activities that elicit positive emotions. Moreover, people who place a high value on happiness might set unrealistic emotional goals, resulting in disappointment and frustration, which can contribute to depressive symptoms. This research also indicates that the misconception of happiness as a constant state of positivity can lead to depressive symptoms when encountering life's challenges. Furthermore, a previous study supports the idea that a combination of high self-verification and hedonic motivations can diminish resilience during adversity. The pursuit of happiness may be obstructed by the desire to confirm negative self-beliefs, making it more challenging for individuals to bounce back from setbacks or negative experiences.

Factors influencing the relationship between motivation and depression include job burnout and mental resilience. Prior research suggests that high work motivation can lead to burnout, increasing the risk of depression. However, better mental resilience enables individuals to cope with work challenges, reducing burnout and depression likelihood. Furthermore, another study indicates that individuals with low accomplishment and self-esteem may avoid social situations, leading to social difficulties that contribute to depressive symptoms. Motivational components, such as Outcome Controllability, Outcome Value, and Effort Costs, also play a role. Research shows that individuals with lower motivation may struggle to find meaning in their activities, intensifying feelings of helplessness and perpetuating depressive symptoms. Previous studies support the idea that the pressure to conform to societal norms can result in increased stress and emotional challenges. Finally, the neural mechanisms underlying motivation and depression are linked to asymmetries in alpha

oscillations. These oscillations may impact depressive symptoms by affecting cognitive and emotional processes involved in the onset and maintenance of depression.

It is essential to acknowledge several constraints in the current understanding of the relationship between motivation and depression. Firstly, while the paper synthesizes evidence from various studies, this review needs to incorporate more longitudinal studies in future analyses. Longitudinal research provides essential information on the time-related aspects of the relationship between motivation and depression since it enables the examination of alterations in motivational factors and depressive symptoms over an extended period. Secondly, it is essential to acknowledge that some of the studies reviewed in this paper rely on self-report measures, which are susceptible to social desirability bias and other biases that could compromise the validity of the findings. Future research should consider incorporating studies with multiple methods to obtain a more holistic and accurate understanding of the connection between motivation and depression. For instance, incorporating behavioural observations could provide valuable insights into how motivation impacts individuals' engagement and persistence in goal-directed activities. Lastly, the generalizability of the findings may be restricted due to potential cultural, age, and socioeconomic differences among the samples included in the studies. Future research should strive to examine the relationship between motivation and depression in diverse samples to enhance the generalizability of the findings. By uncovering the intricacies of this relationship, researchers and practitioners can better appreciate the importance of considering both motivation and depression in their efforts to promote mental health and well-being.

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