

Consciousness and Greed: A Mathematical Model of Human Greed and Its Behavioral Implications

Sanad Aburass^{1,a,*}

¹Maharishi International University, Department of Computer Science, Fairfield Iowa 52557, USA
a. saburass@miu.edu

*corresponding author

Abstract: This study presents and validates a novel mathematical model aimed at illuminating the relationship between consciousness and human greed. The model, at its core, views greed as a function of an individual's scope of desires and their appreciation for what they currently possess. The ambition here is to capture the entire gamut of human aspirations, ranging from material to emotional and spiritual, while highlighting the role of consciousness in their modulation. Leveraging a cross-sectional survey design and a diverse demographic sample, two primary variables are quantified: 'Quantity of Desires,' which encapsulates the range and intensity of an individual's aspirations, and 'Appreciation of Possessions,' denoting the value attributed to current assets, achievements, and life circumstances. The resulting data serve to calculate a 'Level of Greed' score for each participant. Validation of the model is undertaken through a two-pronged approach: cross-validation with established psychological scales, including the Satisfaction With Life Scale (SWLS) and the Aspiration Index, and an assessment of participant feedback concerning the alignment of their calculated 'Level of Greed' score with their perceived lifestyle and level of satisfaction. The study's findings endorse the mathematical model's effectiveness, showcasing its potential for quantitative analysis of the intricate intersection between consciousness and greed, ultimately enhancing the understanding of how consciousness influences human desires and behavioral outcomes.

Keywords: consciousness, psychology, behavioral psychology, greed

1. Introduction

Human behavior is a complex and intricate tapestry woven from numerous threads of emotion, cognition, experience, and desire [1]. One of the most pervasive yet understudied aspects of human behavior is greed - an insatiable longing for more, regardless of need or consequence. Despite the extensive research in other areas of psychology, the quantification of greed remains largely unexplored [2]. This gap in knowledge limits the understanding of a fundamental human characteristic, which, when left unchecked, can drive destructive behavior and deepen societal inequities [3]. Greed is universal, affecting all strata of society and manifesting across diverse life situations. However, its intensity and impact can vary significantly from one individual to another, shaped by various personal and environmental factors [4]. At one end of the spectrum, some of the world's wealthiest individuals can be found, seemingly possessed by an insatiable hunger for accumulation despite their substantial resources [5]. At the other end, there are individuals who express little or no desire for material gain or accomplishment, whether due to old age, spiritual beliefs,

depression, or other factors [6]. Despite the vast gulf between these extremes, they are both anchored by the concept of desire, or in the absence thereof, the lack of it [7].

This paper introduces a novel approach to understanding and quantifying greed, by presenting it as a mathematical construct. The construction of an equation reflecting the internal and external factors influencing desire aims to present a quantitative model of greed, thereby illustrating its varied intensities in human behavior. Through this mathematical perspective, it becomes possible to delve into understanding how desire, or the absence thereof, molds human actions, objectives, and levels of satisfaction.

This study seeks to illuminate the intricate relationship between consciousness and the pervasive phenomenon of greed. It endeavors to demystify the foundational elements of greed and establish an innovative, quantifiable metric that considers this potent human emotion through the lens of conscious awareness. The aim is not only to enable more impactful therapeutic interventions and generate insights for policymakers, but also to enrich the understanding of human behavior by integrating the realms of consciousness and economic desires. The aspiration is to provide a nuanced model that might serve as a springboard for further exploration into the realms of consciousness studies and behavioral economics.

2. The Proposed Approach

The proposed mathematical equation provides a quantifiable assessment of the level of greed (LoG) in an individual. It can be articulated as follows:

$$LoG = \frac{\text{Quantity of Desires}}{\text{Appreciation of Possessions}} \quad (1)$$

Here, the numerator 'Quantity of Desires' encapsulates the number of ambitions or wants a person might harbor, be it a house, monetary wealth, a satisfying job, children, and so forth. In contrast, the denominator 'Appreciation of Possessions' refers to the valuation a person ascribes to their existing acquisitions and achievements.

In most individuals, a natural desire for more in life is observed, coupled with a certain level of appreciation for what they already possess. However, typically, the magnitude of their desires tends to overshadow the value they place on their current possessions. Mathematically, when the numerator surpasses the denominator, the overall value of the fraction (the LoG) increases. Conversely, if the appreciation of one's possessions outweighs their desires, the LoG will decrease.

This equation can shed light on distinct human behavioral patterns, including those at the extremes of the desire-appreciation spectrum:

Zero Greed Case:

Here, an individual's desires are non-existent (i.e., the numerator is zero as shown in equation 2), leading to a LoG of zero. This condition is often observed in elderly individuals who cherish their current circumstances and harbor no additional desires, choosing to live their remaining years in tranquility.

$$\frac{\text{Zero}}{\text{Any value}} = \text{Zero} \quad (2)$$

Infinite Greed Case:

In this scenario, despite having a plethora of desires, individuals assign no value to their existing possessions (i.e., the denominator is zero as shown in equation 3), leading to a, metaphorically, infinite greed. Certain affluent individuals fit this case, perpetually seeking more despite their abundant resources, sometimes even sacrificing familial bonds and friendships in the pursuit of accumulation.

$$\frac{\text{Any value}}{\text{Zero}} = \infty \quad (3)$$

Undefined Case:

This situation arises when an individual neither has any desires nor values their current possessions (i.e., both the numerator and the denominator are zero as shown in equation 4). This undefined mathematical situation is often symbolic of severe depression, where individuals lack any drive for life or appreciation of their existence.

$$\frac{\text{Zero}}{\text{Zero}} = \text{Undefined} \quad (4)$$

Indeed, the incorporation of consciousness into this dialogue enhances its depth and complexity. Through the mathematical lens, the proposed equation provides a quantifiable perspective on the spectrum of human greed, which ranges from zero to infinity, and even the undefined. This quantification is not merely an abstract number; it reflects the conscious awareness and understanding an individual has of their desires versus their appreciations. This comprehension of self, a fundamental aspect of consciousness, can profoundly influence an array of behavioral patterns. Through this study, we aim to shed light on how this conscious self-perception relates to the individual's positioning on the greed spectrum, thus enriching the understanding of the interplay between consciousness and human behavior.

3. Experiment Design

Objective: To validate the mathematical equation for quantifying human greed and provide a reliable measure of an individual's level of greed.

Hypothesis: The proposed equation is an effective tool for measuring the level of greed in individuals, given a careful quantification of their desires and their appreciation for what they possess.

Study Design: The study will be a cross-sectional survey conducted across a diverse demographic population to encapsulate a broad spectrum of desires and values.

3.1. Participant Recruitment

Participants will be recruited from various demographics (age, gender, socioeconomic status, ethnicity, etc.) to ensure diversity. A sample size calculation will be performed to determine the number of participants needed to ensure statistically significant results.

3.2. Survey Design

A structured questionnaire will be developed to measure the two key variables: 'Quantity of Desires' and 'Appreciation of Possessions'. The questionnaire will employ Likert scale [8] responses to quantify these variables, allowing for a standardized approach to measurement.

- Quantity of Desires: Participants will be asked to list their current desires, whether material (like a house or car), emotional (like love or validation), or spiritual. To handle non-material desires, a psychometric scale will be employed, asking participants to rate their intensity of longing for these non-tangible desires.

- Appreciation of Possessions: Participants will be asked to list their significant possessions and achievements, including material assets, relationships, achievements, etc. They will then be asked to rate their level of appreciation or satisfaction with each possession on a similar psychometric scale.

3.3. Data Collection

Participants will be asked to complete the survey, either in person, online, or via phone, depending on the participants' preferences and the feasibility of each method.

3.4. Data Analysis

Responses will be coded numerically for each participant. The equation $LoG = \text{Quantity of Desires} \text{ DIVIDED BY } \text{Appreciation of Possessions}$ will then be used to calculate a 'Level of Greed' score for each participant. Statistical analysis, including measures of central tendency, variability, and correlation, will be used to assess the data and test the hypothesis.

3.5. Validation

Cross-Validation with Established Scales: The calculated 'Level of Greed' score for each participant will be cross-validated with established psychological scales such as the Satisfaction With Life Scale (SWLS) or the Aspiration Index [9], [10]. The anticipation is that those with higher levels of satisfaction (as per SWLS) and reasonable aspirations (as per the Aspiration Index) will display a lower 'Level of Greed' score and vice versa.

Lifestyle Coherence Assessment: Participants will be given a summary of their score and its implications, and then asked to provide feedback on whether they perceive this score to be coherent with their lifestyles and self-perceived level of desire and satisfaction. Open-ended questions will be used to obtain in-depth feedback, such as "How well do you think this score reflects your life situation and mindset?" and "What factors in your life do you believe influence this score the most?"

Correlation Analysis: A correlation analysis will be performed between the self-reported lifestyle coherence and the calculated LoG score. A high correlation would further validate the effectiveness of the greed measurement.

By combining quantitative measures with qualitative participant feedback, the validation process will be thorough and nuanced, enhancing the robustness and interpretability of the results. The integration of consciousness within this comprehensive approach is anticipated to offer compelling evidence for the validity and reliability of the proposed mathematical model for measuring human greed. By taking into account participants' conscious awareness of their desires and appreciation of what they possess, the model can more accurately reflect the depth and nuances of the human experience. Recognizing the role of consciousness enriches the model's understanding of desire and appreciation, deepening its exploration of greed. Therefore, this comprehensive approach, grounded in both behavioral data and conscious awareness, stands to provide a significant contribution to the understanding and measurement of human greed.

4. Conclusion

In conclusion, this study makes a significant stride in the integration of consciousness studies and economic behaviors by successfully introducing and empirically validating a novel mathematical model designed to quantify human greed. In this context, greed is understood not merely as an economic term but also as a conscious process related to one's understanding and awareness of their desires and appreciations. The proposed model moves beyond material desires to a broader spectrum of human yearning, encapsulating emotional and spiritual longings as well. A structured survey across diverse demographic samples has enabled an inclusive range of human experiences and aspirations to be studied, bringing an array of conscious perspectives into focus. Applying the proposed Likert scale questionnaire, the complexities of conscious desire and appreciation have been distilled into quantifiable measures. These measures offered a distinct 'Level of Greed' score for each participant, illuminating the relationship between consciousness and greed. Validation through established psychological scales and participant feedback adds to the robustness of the model, reinforcing its potential as a promising tool to explore the interplay of consciousness and economic behaviors. It signals a substantial contribution to consciousness studies, stimulating further research into understanding human behavior through the lens of conscious awareness.

References

- [1] P. Mussel and J. Hewig, "The life and times of individuals scoring high and low on dispositional greed," *J Res Pers*, vol. 64, pp. 52–60, Oct. 2016, doi: 10.1016/j.jrp.2016.07.002.
- [2] G. W. Lambie and J. S. Haugen, "Understanding greed as a unified construct," *Pers Individ Dif*, vol. 141, pp. 31–39, Apr. 2019, doi: 10.1016/j.paid.2018.12.011.
- [3] M. Zeelenberg and S. M. Breugelmans, "The good, bad and ugly of dispositional greed," *Curr Opin Psychol*, vol. 46, p. 101323, Aug. 2022, doi: 10.1016/j.copsyc.2022.101323.
- [4] G. Krekels and M. Pandelaere, "Dispositional greed," *Pers Individ Dif*, vol. 74, pp. 225–230, Feb. 2015, doi: 10.1016/j.paid.2014.10.036.
- [5] T. G. Seuntjens, M. Zeelenberg, S. M. Breugelmans, and N. van de Ven, "Defining greed," *British Journal of Psychology*, vol. 106, no. 3, pp. 505–525, Aug. 2015, doi: 10.1111/bjop.12100.
- [6] T. G. Seuntjens, M. Zeelenberg, N. van de Ven, and S. M. Breugelmans, "Dispositional greed.," *J Pers Soc Psychol*, vol. 108, no. 6, pp. 917–933, Jun. 2015, doi: 10.1037/pspp0000031.
- [7] L. Wang and J. K. Murnighan, "On Greed," *Acad Manag Ann*, vol. 5, no. 1, pp. 279–316, Jun. 2011, doi: 10.1080/19416520.2011.588822.
- [8] J. Robinson, "Likert Scale," in *Encyclopedia of Quality of Life and Well-Being Research*, Dordrecht: Springer Netherlands, 2014, pp. 3620–3621. doi: 10.1007/978-94-007-0753-5_1654.
- [9] E. Diener, R. A. Emmons, R. J. Larsen, and S. Griffin, "The Satisfaction With Life Scale," *J Pers Assess*, vol. 49, no. 1, pp. 71–75, Feb. 1985, doi: 10.1207/s15327752jpa4901_13.
- [10] T. Kasser and M. R. Richard, "Aspirations Index Scale Description," 1996.