

Term paper

Framing Poverty in Everyday Conversations: Insights from Reddit

Department of Sociology
Ludwig-Maximilians-Universität Munich

Darius Nader



Matriculation number: [REDACTED]

Munich, August 22nd, 2025



Lecturer: [REDACTED]
Seminar: Quantitative Text Analysis
Semester: Summer Semester 2025

Contents

1	Introduction	1
2	State of Research	2
2.1	Explanations of Poverty	2
2.2	Poverty Attributions and Inequality Perceptions	3
3	Theoretical Framework	5
3.1	Central Concepts	5
3.1.1	Poverty	5
3.1.2	Everyday Conversations	5
3.2	Framing Theory	6
3.3	Hypotheses	7
4	Data and Methods	8
4.1	Data Collection and Preparation	8
4.2	Data Analysis Strategy	8
4.2.1	Topic Modeling	9
4.2.2	Sentiment Analysis	10
5	Results	11
5.1	Topic Modeling Findings	11
5.2	Sentiment Analysis Findings	15
6	Discussion and Conclusion	17
A	Appendix	I

1 Introduction

“Life’s a roller coaster. You get your ups and downs. But work shouldn’t be like that, work shouldn’t be a rollercoaster. You should start at the bottom and work your way to the top. But it [doesn’t] work like that anymore, you work at the bottom and you stay at the bottom.” (Mike, quoted in Irwin, 2018, p. 223)

Mike’s quote shows how structural barriers shape lived experiences of poverty, as well as how these struggles are expressed by ordinary people. However, much of the existing research is based on surveys, experiments or small-scale interviews (Bastias et al., 2024; Irwin, 2018). This leaves us with limited knowledge of how people in poverty discuss their situation in everyday conversations. Poverty-related forums on Reddit (subreddits) can provide a valuable setting in which to study how poverty is explained and therefore, how economic inequality is perceived (Schieferdecker et al., 2024; Schneider & Castillo, 2015). In this way, Reddit provides a collective space where personal stories can be shared, unconstrained by the limitations of traditional research designs.

This study addresses two questions: (1) *How is poverty framed in everyday conversations on r/poor?* and (2) *What sentiment accompanies these frames?* To answer them, I use Latent Dirichlet Allocation (LDA) to identify topics and classify them into frames based on Brady’s (2019) theories of the causes of poverty. The sentiment analysis then calculates the average sentiment within each frame. The results show that structural framing is the most frequent, followed by political and individual framing and also carries the most negative sentiment. In general, the findings suggest that people living in poverty primarily describe it as being shaped by structural constraints rather than individual choices. These attributions are associated with negative sentiments, which can lead to the perception that economic inequality is unfair.

The rest of the paper is structured as follows: The second chapter summarizes the current state of research on poverty attributions and framing. Chapter three develops the theoretical framework and hypotheses. The fourth chapter presents the data and methods, with a focus on topic modeling and sentiment analysis. Next, the fifth chapter presents the results. Finally, the sixth chapter concludes with a discussion of the study’s implications, limitations and directions for future research.

2 State of Research

2.1 Explanations of Poverty

The concept of poverty has a long-standing history in the social sciences. Most measurement approaches categorize the causes of poverty into either individual or structural attributions that can be distinguished by the type of cause and the amount of control (Bastias et al., 2024; Piff et al., 2020). According to individual attributions, poverty is not just about being low-income but also about poverty-perpetuating choices like not finishing education, deciding not to work or having kids too early. These choices can reinforce each other, described in literature as a “culture of poverty” (Sawhill, 2003). In contrast, structural attributions refer to external factors, like economic and social contexts, such as unemployment, economic growth or discrimination (Bullock, 1999). Some scholars, such as Brady (2019), view political attributions as another distinct category, which are based on the extent to which the government controls structural factors.

There is a broad consensus that individual and structural attributions do not have to be mutually exclusive. This means that social and economic contexts and circumstances can influence the behavior of individuals (Davidai, 2022). For example, experiments of Shah et al. (2012) show that scarcity leads to poverty-perpetuating behavior, possibly leading to a short-term perspective regarding finances. However, other scholars criticize individual explanations for failing to consider systemic poverty and advocate examining structural causes instead of describing the proportion of people at risk of poverty in a population (Brady, 2023; Brady et al., 2017). Others recommend viewing poverty from a relational perspective, examining the relationship between the financial secure and insecure (Desmond & Western, 2018). To sum up, this implies that understanding poverty requires looking at multiple attributions instead of only singular ones.

How people perceive poverty depends on their socioeconomic position and social context. Whereas some studies suggest that people in the middle-class or above explain economic outcomes more frequently through individual attributions (Cozzarelli et al., 2001; Davidai, 2022), low-income individuals are more likely to make structural attributions (Bullock, 1999). Regardless of their socioeconomic position, people tend to express more sympathy for those in poverty when it is attributed to structural rather than individual factors (Bullock, 1999; Cozzarelli et al., 2001; Piff et al., 2020). Interviews conducted

by Shildrick and MacDonald (2013) showed that in a social context with low working-class solidarity, people in poverty distanced themselves from “the poor” as a group, especially those who used welfare programs. At the same time, low-income individuals often feel hopeless and frustrated about structural inequalities in society (Irwin, 2018; Morduch & Schneider, 2017). Taken together, these findings demonstrate that emotions surrounding poverty are complex. While individual blame and feelings of shame exist, people experiencing poverty also highlight negative sentiments toward structural factors.

Although there is much literature about poverty attribution, there are still questions about how people experiencing poverty attribute poverty and which emotions are attached to this, especially in a social context with higher working-class solidarity. I will connect my research to existing literature by following the tradition of distinguishing between different types of poverty attributions, in addition to answering the call for future research by Bastias et al. (2024) by more directly linking poverty to economic inequality.

2.2 Poverty Attributions and Inequality Perceptions

Research has shown that poverty attributions shape how people perceive economic inequality. Schneider and Castillo (2015) demonstrate that poverty attributions mediate the relationship between social context and their perception of economic inequality. In contexts where people attribute poverty to individual causes, economic inequality is more often perceived as fair. When poverty is attributed to structural causes, economic inequality is more likely to be judged as unfair. Other studies support this finding and show that people’s perception of economic inequality can be influenced by their perception of differences in economic outcomes (Davidai, 2022). When people attribute poverty to structural causes, they become more concerned about inequality (Piff et al., 2020). In summary, the way people explain poverty significantly influences their concern about inequality.

By examining lived experiences, we can understand people’s perceptions of social and economic structures and how they change over time (Irwin, 2018). Another way to achieve this is through studies examining the financial strategies households in poverty use to make ends meet (Bachas et al., 2021; Fisher & Hardy, 2023; Morduch & Schneider, 2017). A common theme in these studies is that people cannot afford long-term planning due to uncertainty caused by unexpected expenses or high income variability. These

findings suggest that paying attention to everyday life can help us understand how poverty influences financial behavior and how people perceive inequality.

After establishing that attributions of poverty influence how people perceive inequality, it is important to consider framing, as this shapes how these attributions are communicated and interpreted. Most existing research on framing economic inequality has focused on legacy media and elite perspectives. These studies demonstrate that media coverage often justifies inequality and frames redistribution negatively (Vaughan et al., 2025). However, little is known about how ordinary people discuss economic inequality. Everyday conversations reveal experiences and sentiments about inequality that usually remain hidden in personal stories, making conversations an ideal setting for examining how attributions are framed and interpreted (Schieferdecker et al., 2024).

3 Theoretical Framework

3.1 Central Concepts

3.1.1 Poverty

Defining poverty is difficult because the concept has been approached in many different ways. Two common definitions are absolute and relative poverty, but these rely on numerical and survey data, which are beyond the scope of this paper (Simpson Reeves et al., 2020). People experiencing poverty are also not a homogeneous group, as their definition and representation can vary widely. For example, there is a significant difference between poverty in developed and developing countries (Shildrick & MacDonald, 2013) and therefore it can take many forms depending on the social or economic context.

With this in mind, the paper focuses on individuals facing financial hardship, as it is tied directly or indirectly to other dimensions of inequality, such as food, housing, employment and education (Bastias et al., 2024). The social context is critical here since financial or material hardship influences how people explain poverty and perceive inequality (Schneider & Castillo, 2015). This focus aligns with a multidimensional view of poverty, in which lived experiences reveal how economic hardship affects various aspects of life and provide a foundation for examining how people discuss poverty in everyday conversations (Desmond & Western, 2018; Simpson Reeves et al., 2020).

3.1.2 Everyday Conversations

Everyday conversations provide a window for understanding how people frame poverty and perceive economic inequality. These conversations are informal and unscripted interactions, without a fixed agenda and based on personal rather than strategic communication. The focus here is on ordinary people, which means individuals lacking substantial income, wealth or power. Their views are shaped by their personal experiences rather than professional expertise (Schieferdecker et al., 2024).

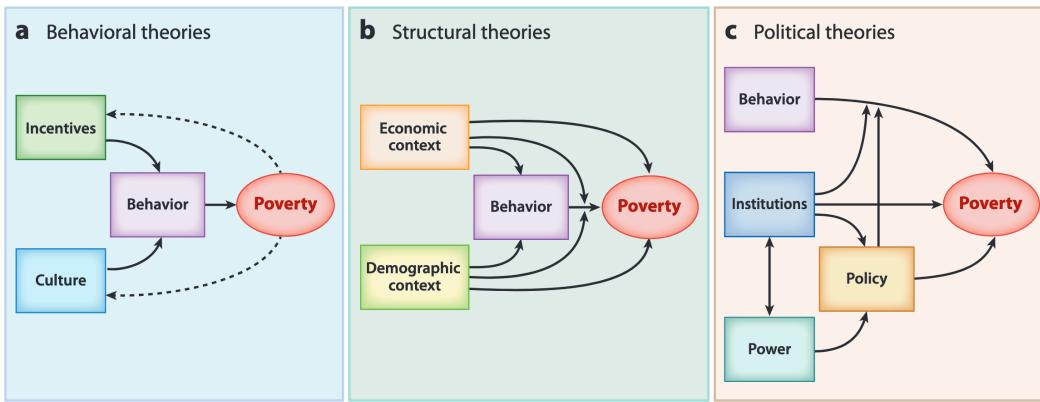
In this paper, I specifically focus on people at the lower end of the income distribution who live in or near poverty and share their stories in an online community, instead of looking at news outlets and focusing on the middle or upper class. Analyzing their discussions also makes it possible, where applicable, to compare them to more financially secure groups (Bastias et al., 2024; Desmond & Western, 2018).

3.2 Framing Theory

Framing theory provides a framework for understanding how poverty is discussed in communication. According to Entman (1993, p. 52), “[t]o frame is to select some aspects of a perceived reality and make them more salient in a communicating text, ... in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described.” In this paper, I apply framing theory to everyday conversations among people experiencing poverty, focusing on how they attribute and perceive poverty. Since much of the attribution literature only distinguishes between individual and structural causes but does not offer a comprehensive framework, I use the typology of Brady (2019) to classify the various ways poverty is caused and hence framed.

The typology offers three categories that capture various causes of poverty and will be used as possible frames in everyday conversations (see Fig. 1): First, individual or behavioral theories (a) that focus on individual actions, shaped by incentives or cultural factors. From this perspective, poverty results from poverty-perpetuating behavior such as leaving school early, single motherhood or unemployment. Second, structural theories (b) that emphasize broader demographic and economic contexts, such as labor market changes, segregation or low economic growth that can cause poverty directly, for example, through a factory closure and resulting job loss. Third, political theories (c) that argue poverty stems from power relations and institutions, since the government can shape redistribution, labor protections or welfare systems that can influence poverty.

Figure 1: Theories of the Causes of Poverty



Note. Adapted from Brady (2019). The typology distinguishes between individual (a), structural (b) and political (c) explanations of poverty.

Brady criticizes the tendency to examine individual explanations in isolation rather than comparing them to structural or political theories. I address this by examining and comparing individual, structural and political framing and how they manifest in everyday discussions. However, in this paper I do not treat these as full theories but as frames to analyze poverty in everyday conversations.

3.3 Hypotheses

In this paper, I argue that social context shapes how people attribute poverty. People who live in poverty have different experiences from those in more privileged positions. Research shows that individual attributions often legitimize inequality, while structural attributions challenge it. For disadvantaged groups, this suggests that individual framing is less common and structural framing is more frequent. These frames also differ in their emotional tone. Structural attributions often express frustration and hopelessness because they emphasize factors beyond individual control. In contrast, individual attributions may express blame or shame, but these feelings are possibly less negative in high-solidarity contexts, such as poverty-related communities:

H1: Among people experiencing poverty, structural framing will occur more frequently than individual or political framing in everyday conversations.

H2: Among people experiencing poverty, structural framing will on average, have a more negative sentiment than individual or political framing in everyday conversations.

4 Data and Methods

4.1 Data Collection and Preparation

This paper takes a bottom-up approach, examining everyday conversations among people living in or near poverty. Reddit, a social media platform with subreddits (dedicated online communities centered around specific topics), was chosen to allow a thematically aligned analysis without the danger of filtering out relevant information. The subreddit *r/poor* fits perfectly for the chosen methodology since it has a large and active user base consisting of approximately 108,000 users (as of August 20, 2025), mainly from North America¹ and “[...] is a place for people who are poor to discuss personal situations and strategies on making ends meet [...]” (Reddit, 2025). Since Reddit is based on sharing posts, mainly text-based and is relatively anonymous, it allows people to talk unconstrained (Schieferdecker et al., 2024, p. 5).

Reddit provides an API that allows researchers to collect posts from subreddits, but only in a limited capacity. To obtain more meaningful results, I instead used pre-collected data from *Project Arctic Shift* by (Heitmann, 2025), allowing researchers to download posts or comments of subreddits from a given time period. To avoid period effects related to the COVID-19 pandemic, I focused on a post-pandemic perspective and collected posts between January 1, 2023 and July 31, 2025. After importing the data into JupyterLab with Python, I pre-processed the dataset by removing posts deleted by moderators or Reddit, filtering for the selected period, and eliminating HTML elements, hyperlinks, emails and spam. The final sample consists of 5,244 posts included in the analysis, each constructed by combining the title and body text of a post.

4.2 Data Analysis Strategy

The methodological strategy of this paper proceeds in two steps. First, I use unsupervised learning methods, specifically topic modeling, to uncover latent themes in the dataset. These topics are then manually coded into one of Brady’s three frames: individual, structural or political. Second, I analyze the sentiment of each post using a dictionary-based approach with the VADER (Valence Aware Dictionary and sEntiment Reasoner) lexicon from NLTK to assess whether frames are expressed in a more negative,

¹ A user poll ($N = 88$) supports this assumption. Full results are in Table 2 in the Appendix.

positive or neutral tone. The combination of topic modeling and sentiment analysis is widely used to study public attitudes and sentiments (Song, 2023; Xu et al., 2024) and allow me to test H1 and H2 by examining the prevalence of different framing and the associated sentiment, thereby allowing insights into how economic inequality is perceived in the subreddit.

4.2.1 Topic Modeling

In the research agenda of Schieferdecker et al. (2024), the authors specifically suggest the combination of topic modeling and using data collected from social media platforms like Reddit to discover themes and context of conversations about economic inequality. For the data analysis, I use Latent Dirichlet Allocation (LDA), a generative probabilistic model that assumes documents are composed of multiple topics, each represented by a distribution of words (Blei et al., 2003). Using this approach, a document-term matrix (DTM) of word frequencies is created so that each document can be described as a mixture of topics and each topic as a mixture of words (van Atteveldt et al., 2022). For the implementation of LDA, I used the Gensim library in Python (Řehůřek, 2024).

In addition to the previous steps, the pre-processing for LDA includes removing special characters and punctuation using regular expressions and changing the text to lowercase. Next, the posts were tokenized, meaning the posts were broken down into a list of words, using a custom tokenizer based on the NLTK Whitespace Tokenizer. Stop words, which add little information, were removed using the standard NLTK stop word list in English, in addition to the words “like”, “im”, “ive”, “get”, and “got”, which occurred frequently but did not carry much meaning. The tokenized text was then fitted into a DTM with bigrams, including only words with a document frequency of at least 1% (van Atteveldt et al., 2022).

For the LDA model, the DTM was first converted into a corpus so that Gensim could estimate the model. I selected an optimal number of 10 topics ($k = 10$) for the LDA model based on a combination of quantitative and qualitative validation, including perplexity and coherence scores and manual assessment of content validity, with 20 passes (controlling how often the model trains on the corpus) and 100 iterations (controlling how often each document is looped through) (Řehůřek, 2024). In the final step, a new column was created to assign the dominant topic to each Reddit post if it had a 40% or higher

probability of belonging to that topic. Setting the threshold any higher would have left a substantial number of posts unassigned, which would have been problematic given the goal of capturing a broad range of discussions. The topics were then manually validated by drawing a random sample of posts for each topic and assigning them to one of three frames.

4.2.2 Sentiment Analysis

For the sentiment analysis, the text required different pre-processing than before. Unlike with topic modeling, it is not advisable to lowercase or remove special characters, emojis or punctuation, since VADER, in addition to words, relies on those elements to calculate sentiment scores. VADER analyzes each post by calculating a compound score from a dictionary where words are assigned values ranging from -4 (extremely negative) to +4 (extremely positive), with variations accounting for capitalization and punctuation. The advantage of VADER is that it is made for social media and already validated in research (C. Hutto & Gilbert, 2014; Xu et al., 2024).

However, some adjustments were necessary to avoid misinterpretations or false positives because it was not explicitly designed for poverty-related language. For example, words such as “like” or “please,” which were mainly used as stop words, and words such as “free,” “care,” “credit” and “rich,” did not have positive meanings as the scores suggested. These words were used as purely descriptive terms or had different meanings, such as “medical care” or “credit cards”, and were set to a score of zero.² After these adjustments, the compound scores were assigned to topics and frames. Following the standard VADER thresholds, an average compound score above +0.05 was classified as positive sentiment, while a score below –0.05 indicated negative sentiment (C. J. Hutto, 2025). This allowed aggregating sentiment patterns across the different ways poverty was framed.

² The original scores for all adjusted words are in Table 3 in the Appendix.

5 Results

In this chapter, I will first present the results of the data analysis by introducing the topics and their representative words, which are displayed in Table 1. The topics generated by the LDA model are then grouped into three categories: individual, structural or political. This allows us to conduct an initial test of H1. Next, I will interpret the topics based on existing research to identify consistencies and deviations from prior findings. Finally, I present the average sentiment of posts within each category and aggregate these results by frame to determine which framing is associated with more negative or positive sentiment. This step relates directly to H2.

5.1 Topic Modeling Findings

The first topic focuses on housing, income and related government assistance programs. Words such as “housing” and “income”, in addition to “assistance”, “program”, or “medicaid”, indicate concerns with affordable living, public benefits and healthcare. The random sample of posts reflects this, as many discuss the struggle of housing and healthcare systems and how they rely on government assistance programs. They also share tips and information about possible benefits and rights. A single mother of a 5-year-old child writes: “I work full-time but am low income and rely on government assistance to make ends meet. I don’t get child support and cannot afford childcare”, which illustrates that even though some people in poverty work full-time, they cannot get by without the assistance of those programs. Although users in the posts did not necessarily speak positively about safety net programs, an adversarial view against people using them, as found in the paper of Shildrick and MacDonald (2013), could not be found. However, the accounts align with research indicating that not being eligible for programs is common for individuals with a higher income variability (Morduch & Schneider, 2017, pp. 69–70).

The second topic focuses on family life and intergenerational struggles. Terms like “family”, “parents” or “kids” emphasize the difficulties of family and poverty, but also “school”, suggesting a focus on decisions regarding education. The results are mostly a mix of stories of people who grew up in poverty and how it influences their self-identity today, people in families who still struggle due to living in poverty and themes of intergenerational poverty. A user who grew up in poverty mentions how it is important for children to

learn about behavioral choices that perpetuate poverty, for example, regarding education, addiction or family formation, but that “they [can] craft their own future as adults.” Education seems to be a significant contributor to why people experience upward or downward mobility. One user writes about seeing family members do well after college, while another user describes having to drop out due to financial instability and feeling stuck now.

Table 1: Overview of topics and frame classification

Topic	Representative words	Frame
1	income, housing, live, state, assistance, free, living, program, low, medicaid	Political
2	family, parents, life, feel, school, kids, mom, even, never, years	Individual
3	car, one, even, going, know, go, work, back, could, afford	Structural
4	help, need, health, know, anyone, insurance, really, afford, advice, would	Unassigned
5	food, eat, stamps, food stamps, even, bank, eating, pantry, food bank, banks	Political
6	pay, car, rent, month, credit, bills, money, debt, paid, make	Structural
7	job, work, jobs, time, working, hours, pay, find, need, college	Structural
8	buy, free, use, make, good, store, cheap, one, water, also	Unassigned
9	people, poor, life, rich, one, know, us, poverty, many, think	Political
10	money, want, would, make, much, buy, things, spend, think, need	Individual

Note. Topics were generated using LDA topic modeling and manually classified into frames (individual, structural, political or unassigned).

Topics 3 and 6 both focus on unexpected expenses as a trigger for downward spirals into poverty. Topic 3 contains terms such as “car,” “afford” and “work” that point in the direction but are not as clear. Looking at the posts directly, a theme emerges about how sudden bills, for example, for car repairs, can block access to work due to a dependence on being able to pay for a car and gasoline. Topic 6 also focuses on sudden expenses, but from a financialized perspective with terms such as “credit”, “bills” or “debt”. Unexpected bills can result in short-term financial planning, which makes it difficult to save for the future. People often turn to loans or credit cards, which can damage the credit score and make it harder to borrow in the future as debt accumulates. Still, access to credit and a

good credit score can reduce transaction costs and provide better monitoring for spending that can actually help low-income households save money (Bachas et al., 2021; Morduch and Schneider, 2017, pp. 3–5). This demonstrates how short-term economic shocks can have a lasting impact on financial stability and how financial systems perpetuate these.

Topic 4 and 8 do not highlight specific dimensions of poverty and instead, they highlight how subreddit members support one another and demonstrate solidarity through everyday struggles. Topic 4 (“help,” “advice,” “need”) consists of direct requests for assistance, often regarding healthcare, food or housing. Users seek affordable alternatives or help. In contrast, Topic 8 (“free,” “cheap,” “use”) revolves around strategies for coping with financial hardship. These strategies include money-saving tips, free alternatives, discounts and ongoing promotions. Together, these topics illustrate the subreddit’s role in providing mutual aid and exchanging knowledge about how to deal with economic inequality in everyday life.

The fifth topic centers on food insecurity. The main terms drive a clear picture about food insecurity (“food stamps”, “food bank”, “pantry,” “eating”). Examples include relying on fast food, following certain diets to save money and using food banks and food stamps. Although programs like SNAP can reduce inconsistency in food consumption, they are insufficient to offset the gap between the financially secure and insecure (Fisher & Hardy, 2023, p. 295). In addition, most posts complain about the system, either due to how someone is seen as eligible for receiving food stamps, but also about the limitations of the food banks themselves, for example, locations or how often they can be visited per month. Due to eligibility issues and the fact that people are usually only temporarily living in poverty, they are sometimes seen as unreliable (Morduch & Schneider, 2017, pp. 165–166).

The seventh topic revolves around employment struggles. The terms “job,” “working” and “pay” highlight the challenges of finding work and making ends meet. The contrast between “college” and “hours” illustrates the difference between hourly wage work and jobs that require a college education. In the context of the US, higher education often comes with the dilemma between accumulating student debt and higher job security and better-paying jobs (Morduch & Schneider, 2017, pp. 59–60). In addition, many posts describe the difficulty of finding a job, the fear of being fired or the need to juggle several low-paying or unstable jobs. Others emphasize the scheduling conflicts that arise from

holding several jobs or balancing employment with family responsibilities.

Topic 9 offers broader reflections on poverty, economic inequality and the divide between the poor and rich (“poor,” “rich,” “poverty”). Posts discuss systemic issues and political corruption by government officials and political parties or criticize organizations like the Federal Reserve for “manufacturing poverty”. Several posts criticize these issues and call for collective action, such as holding a general strike. These frustrations reflect the findings of Irwin’s (2018, p. 217) interviews. In one interview, a respondent stated: “It’s always been the same people with money at the top … it keeps people at the top at the top, and people at the bottom, and that will never change.”

The tenth topic revolves around how people earn and spend money (“money”, “spend”, “buy”), as well as their opinions regarding it (“would”, “think”, “need”). Some posts express shame or frustration about impulsive spending and living paycheck-to-paycheck. Other posts vent about being unable to afford everyday products, such as hygiene products, and about earning money outside of regular jobs, such as sports betting or plasma donations. According to research, the challenge is not so much a lack of financial literacy, but rather, unreliable access to programs that would enable more consistent consumption and improve spending and savings habits when such programs are available (Fisher and Hardy, 2023; Morduch and Schneider, 2017, pp. 90–93, 166–167).

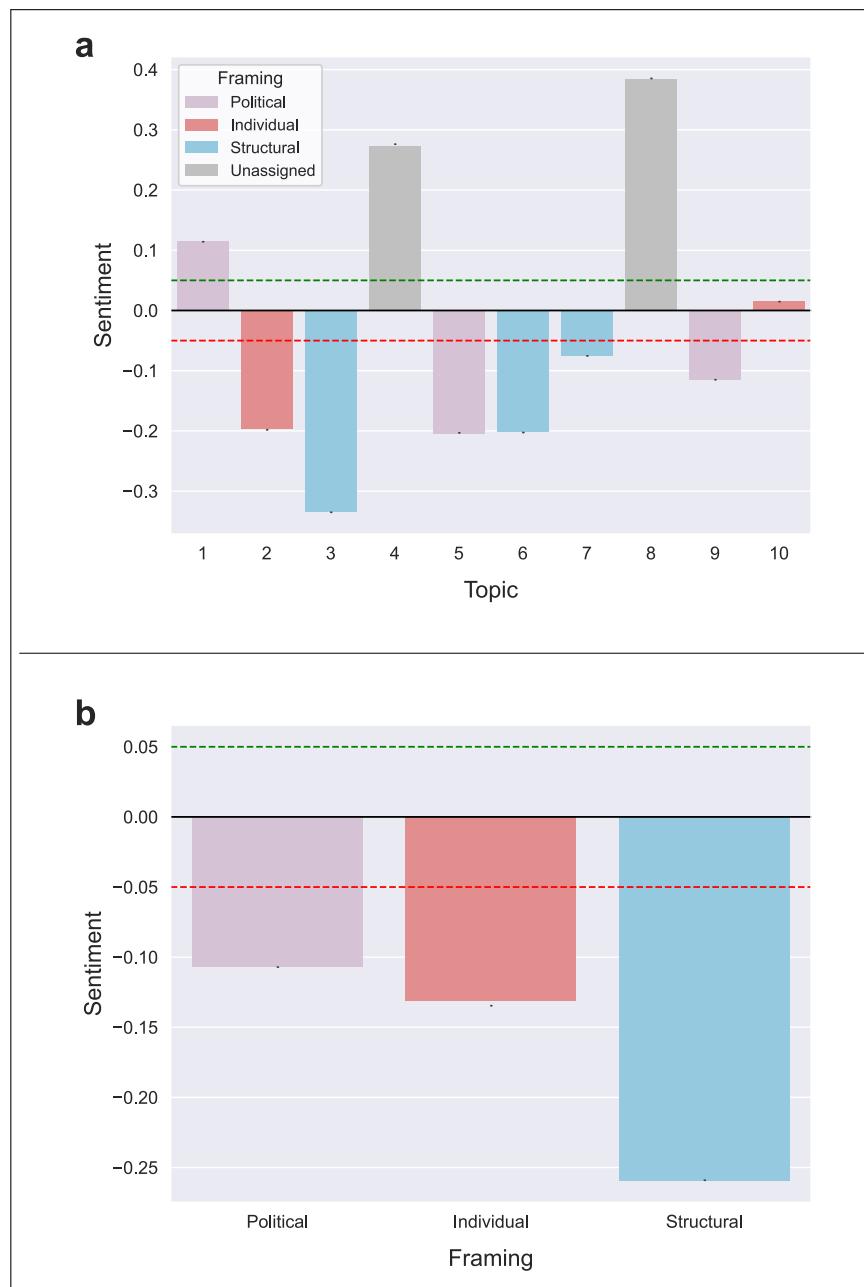
After investigating the topics, they must be assigned to frames that align with Brady’s framework. Beginning with individual framing (Topics 2 and 10), poverty is associated with personal choices and responsibility. These include family formation, education, and money management. Structural framing (Topics 3, 6, and 7) links poverty to economic shocks, debt and employment that lead to financial instability. Finally, political framing (Topics 1, 5, and 9) emphasizes how the government can influence the relationship between behavior and poverty through policy. These explanations focus on assistance programs, systemic failures and corruption. Topics 4 and 8 were not assigned to any frame because they focus on solidarity and mutual support rather than the causes of poverty ($n = 1,760$; $k = 2$). The most frequent posts used a structural framing ($n = 1,743$; $k = 3$), followed by political ($n = 987$; $k = 3$) and individual ($n = 754$; $k = 2$) framing. An additional 1,760 posts were unassigned. The results provide evidence against the null hypothesis of no difference across frames and support H1, that discussions more often rely on structural, rather than individual or political framing.

5.2 Sentiment Analysis Findings

Calculating compound scores for the sentiment analysis reveals differences in the emotional tone in communication within the subreddit. A compound score over +0.05 indicates positive sentiment, a score under -0.05 a negative sentiment and a score in between +0.05 and -0.05, a neutral sentiment. The plots in Figure 2 show the average sentiment per topic (a) and framing (b). Figure 2a reveals that most topics are negative, except Topics 1, 4 and 8, which are positive, and Topic 10, which is neutral. Structural topics (3, 6, 7) are the most negative. Most political and individual topics are negative, but political framing has a positive topic (Topic 1) and individual framing a neutral topic (Topic 10). Topics 4 and 8, that were not assigned to any frame, are highly positive.³ Figure 2b reveals the aggregated score for the framing and shows that all frames are negative but vary in their intensity, with political framing being the least negative (-0.11), followed by individual framing (-0.13) and structural framing with the highest negative score (-0.26).

Topics related to structural framing are probably seen as the most negative because they point to forces beyond the control of individuals (Brady, 2019). In contrast, political framing might appear less negative because policies and programs can be subject to change. Even when users were criticizing such programs, many also emphasized how much they rely on them and see them as a necessity (Morduch & Schneider, 2017), which can also explain why Topic 1 received a relatively positive score. Individual framing is also negative, even more so than political framing, but not as strongly as previous studies suggest. This may be due to the subreddit's high-solidarity context, where users are less likely to blame others in poverty (Shildrick & MacDonald, 2013, pp. 300–301). The strong positive sentiment in Topic 4 and 8 reinforces this interpretation, in which people share strategies and advice on how to cope with poverty. Overall, the results contradict the null hypothesis that there is no difference in sentiment across frames. The results support H2, indicating that structural framing is associated with a more negative sentiment among people experiencing poverty than political or individual framing and suggest that people in poverty are more likely to view economic inequality as unfair (Schneider & Castillo, 2015).

³ The complete list of compound sentiment scores organized by topic is provided in Table 4 in the Appendix.

Figure 2: Average sentiment scores by topic (a) and by framing (b)

Note. Compound sentiment scores range from -1 (most negative) to $+1$ (most positive).

Values > 0.05 are positive, < -0.05 negative, and in between neutral.

6 Discussion and Conclusion

In summary, this paper examined how poverty is discussed in everyday online conversations. Specifically, I examined how people experiencing poverty frame it and how these frames are perceived in terms of sentiment. Topics were generated using a LDA model and categorized based on the combination of the concept of framing and Brady's (2019) theories of the causes of poverty: individual, structural or political. The sentiment scores were then aggregated to capture emotional differences in framing. Both hypotheses were supported: Posts using structural framing appeared most frequently (H1), followed by posts with political and individual framing. Posts with structural framing carried the most negative sentiment (H2), followed by posts with individual or political framing.

The results imply that structural attributions are associated with more negative emotions, such as frustration and hopelessness related to living in or near poverty. This is in contrast to shame, which is commonly associated with individual framing. Examining an online community with a high level of solidarity reveals how users communicate different aspects of poverty through personal stories and provide mutual aid, advice and support to cope with financial hardship. These findings suggest that policy debates should acknowledge the multiple dimensions of poverty and pay closer attention to the structural constraints embedded in everyday life rather than focusing on just single aspects.

Regarding the limitations of this study, several issues should be acknowledged. Although the dictionary-based sentiment approach recognizes emojis, case and punctuation, it cannot detect context or sarcasm. This is problematic because sarcasm was common in posts and words with multiple meanings were at first misclassified. Additionally, using a public forum like Reddit helps to avoid the common criticism of targeting very specific minorities when studying poverty (Brady, 2023, pp. 7–8), but it is no guarantee that everyone who posts in the subreddit is actually poor, especially since poverty can be temporary (Simpson Reeves et al., 2020, pp. 443–444). In addition, social media platforms have a biased user base in terms of age, location and other demographics. This makes it difficult to generalize findings to all people in poverty (Schieferdecker et al., 2024, pp. 4–5). There is also the issue of possible reverse causality. Although this study does not establish causation, previous studies have shown conflicting evidence regarding whether poverty attributions influence perceptions of inequality or vice versa (Schneider & Castillo, 2015, p. 278).

This study shows how natural online settings can improve our understanding of economic inequality perceptions. In future studies, using a relational approach, one could compare different social contexts by looking at different communities or include comments of posts. There is also further room to utilize different computational methods. For example, more sophisticated models could improve the sentiment analysis. Alternatively, after demonstrating that unsupervised learning can consistently detect the framing of poverty, future work could use supervised learning to code posts based on the framework used in this study in order to analyze more posts. Qualitative methods are also promising, such as focusing on Reddit posts during specific events such as the COVID-19 pandemic or macroeconomic events. Ultimately, online conversations provide access to a vast number of lived experiences, like the one Mike described in the introductory quote, where poverty is not seen as an individual shortcoming but as structural factors that keep people “at the bottom.”

References

- Bachas, P., Gertler, P., Higgins, S., & Seira, E. (2021). How Debit Cards Enable the Poor to Save More. *The Journal of Finance*, 76(4), 1913–1957. <https://doi.org/10.1111/jofi.13021>
- Bastias, F., Peter, N., Goldstein, A., Sánchez-Montañez, S., Rohmann, A., & Landmann, H. (2024). Measuring Attributions 50 Years on: From within-Country Poverty to Global Inequality. *Behavioral Sciences*, 14(3), 186. <https://doi.org/10.3390/bs14030186>
- Blei, D. M., Ng, A. Y., & Jordan, M. I. (2003). Latent dirichlet allocation. *The Journal of Machine Learning Research*, 3, 993–1022.
- Brady, D. (2019). Theories of the Causes of Poverty. *Annual Review of Sociology*, 45, 155–175. <https://doi.org/10.1146/annurev-soc-073018022550>
- Brady, D. (2023). Poverty, not the poor. *Science Advances*, 9(34), eadg1469. <https://doi.org/10.1126/sciadv.adg1469>
- Brady, D., Finnigan, R. M., & Hürgen, S. (2017). Rethinking the Risks of Poverty: A Framework for Analyzing Prevalences and Penalties. *American Journal of Sociology*, 123(3), 740–786. <https://doi.org/10.1086/693678>
- Bullock, H. E. (1999). Attributions for poverty: A comparison of middle-class and welfare recipient attitudes. *Journal of Applied Social Psychology*, 29(10), 2059–2082. <https://doi.org/10.1111/j.1559-1816.1999.tb02295.x>
- Cozzarelli, C., Wilkinson, A., & Tagler, M. (2001). Attitudes toward the poor and attributions for poverty. *Journal of Social Issues*, 57(2), 207–227. <https://doi.org/10.1111/0022-4537.00209>
- Davidai, S. (2022). How do people make sense of wealth and poverty? *Current Opinion in Psychology*, 43, 42–47. <https://doi.org/10.1016/j.copsyc.2021.06.010>
- Desmond, M., & Western, B. (2018). Poverty in America: New Directions and Debates. *Annual Review of Sociology*, 44, 305–318. <https://doi.org/10.1146/annurev-soc-060116-053411>
- Entman, R. M. (1993). Framing - Toward Clarification of a Fractured Paradigm. *Journal of Communication*, 43(4), 51–58. <https://doi.org/10.1111/j.1460-2466.1993.tb01304.x>

- Fisher, J., & Hardy, B. L. (2023). Money matters: Consumption variability across the income distribution. *Fiscal Studies*, 44(3), 275–298. <https://doi.org/10.1111/1475-5890.12339>
- Heitmann, A. (2025, August). GitHub - ArthurHeitmann/arctic_shift. Retrieved August 16, 2025, from https://github.com/ArthurHeitmann/arctic_shift
- Hutto, C., & Gilbert, E. (2014). VADER: A Parsimonious Rule-Based Model for Sentiment Analysis of Social Media Text. *Proceedings of the International AAAI Conference on Web and Social Media*, 8(1), 216–225. <https://doi.org/10.1609/icwsm.v8i1.14550>
- Hutto, C. J. (2025, August). GitHub - cjhutto/vaderSentiment. Retrieved August 16, 2025, from <https://github.com/cjhutto/vaderSentiment>
- Irwin, S. (2018). Lay Perceptions of Inequality and Social Structure. *Sociology*, 52(2), 211–227. <https://doi.org/10.1177/0038038516661264>
- Morduch, J., & Schneider, R. (2017). *Financial Diaries: How American Families Cope in a World of Uncertainty*. Princeton University Press. <https://doi.org/10.1515/9781400884599>
- Piff, P. K., Wiwad, D., Robinson, A. R., Aknin, L. B., Mercier, B., & Shariff, A. (2020). Shifting attributions for poverty motivates opposition to inequality and enhances egalitarianism. *Nature Human Behaviour*, 4(5). <https://doi.org/10.1038/s41562-020-0835-8>
- Reddit. (2025, August). Playing the game of life on the HARD setting. Retrieved August 16, 2025, from <https://www.reddit.com/r/poor/about/>
- Řehůřek, R. (2024, October). LDA model - gensim. Retrieved August 16, 2025, from https://radimrehurek.com/gensim/auto_examples/tutorials/run_lda.html
- Sawhill, I. V. (2003). The behavioral aspects of poverty. [Publisher: Public Interest]. *Public Interest*, (153), 79–93.
- Schieferdecker, D., Reinhardt, S., Mijs, J., Silva, G. M., Teeger, C., Carvalhaes, F., & Seekings, J. (2024). Everyday Conversations About Economic Inequality: A Research Agenda. *Sociology Compass*, 18(9). <https://doi.org/10.1111/soc4.70001>
- Schneider, S. M., & Castillo, J. C. (2015). Poverty Attributions and the Perceived Justice of Income Inequality: A Comparison of East and West Germany. *Social Psychology Quarterly*, 78(3), 263–282. <https://doi.org/10.1177/0190272515589298>

- Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some Consequences of Having Too Little. *Science*, 338(6107), 682–685. <https://doi.org/10.1126/science.1222426>
- Shildrick, T., & MacDonald, R. (2013). Poverty talk: How people experiencing poverty deny their poverty and why they blame ‘the poor’. *Sociological Review*, 61(2), 285–303. <https://doi.org/10.1111/1467-954X.12018>
- Simpson Reeves, L., Parsell, C., & Liu, S. (2020). Towards a phenomenology of poverty: Defining poverty through the lived experiences of the ‘poor’. *Journal of Sociology*, 56(3), 439–454. <https://doi.org/10.1177/1440783319851204>
- Song, X. (2023). Understanding subjective inequality in China. *European Sociological Review*, 39(4), 545–568. <https://doi.org/10.1093/esr/jcac047>
- van Atteveldt, W., Trilling, D., & Calderon, C. (2022). *Computational Analysis of Communication*. Wiley Blackwell.
- Vaughan, M., Theine, H., Schieferdecker, D., & Waitkus, N. (2025). Communication about economic inequality: A systematic review. *Annals of the International Communication Association*, 1–12. <https://doi.org/10.1093/anncom/wlaf006>
- Xu, Z., Fang, Q., Huang, Y., & Xie, M. (2024). The public attitude towards ChatGPT on reddit: A study based on unsupervised learning from sentiment analysis and topic modeling (J. Yadav, Ed.). *PLOS ONE*, 19(5), e0302502. <https://doi.org/10.1371/journal.pone.0302502>

A Appendix

Table 2: Self-reported geographic location of subreddit users in r/poor

Region	Votes	Percent (%)
North America	64	72.7
Europe	14	15.9
Asia	6	6.8
Middle East	2	2.3
Oceania	2	2.3
South America	0	0.0
Total	88	100

Note. Results are based on an informal [subreddit poll](#) (N = 88).

Table 3: Adjusted VADER lexicon scores for selected words

Word	Original Score	Adjusted Score
like	1.5	0.0
please	1.3	0.0
free	2.3	0.0
care	2.2	0.0
credit	1.6	0.0
rich	2.6	0.0

Note. Original scores are from the [VADER lexicon](#).

Table 4: Average compound sentiment score by topic

Topic	Score	Sentiment
1	0.12	Positive
2	-0.20	Negative
3	-0.33	Negative
4	0.27	Positive
5	-0.20	Negative
6	-0.20	Negative
7	-0.07	Negative
8	0.39	Positive
9	-0.12	Negative
10	0.02	Neutral

Note. Values above 0.05 are positive, those below -0.05 negative and those in between neutral.