

Beyond Positive or Negative: How Mixed Emotions on Reddit Are Linked to Depressive Symptoms in Asian American Families

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Abstract

Studies on intergenerational relationships between parents and children in Asian American families highlight their impact on mental health and well-being. This study investigates the role of ambivalent emotions in online narratives shared by Asian and Asian American children on the subreddit, *r/Asianparentstories*. By employing a BERT-based model to detect emotions at the sentence level and depressive symptoms at the post level, we examine how mixed feelings relate to depressive symptoms. First, among 28 detectable emotions, eight (realization, approval, sadness, anger, curiosity, annoyance, disappointment, disapproval) comprise over 50%; these eight emotions frequently co-occur with one another and with less common emotions. Second, we find the co-occurrence of multiple emotions, showing that individual posts contain combinations of positive and negative emotions rather than exclusively positive or negative affect. Finally, our findings indicate that emotion pairs involving at least one negative emotion (e.g., nervousness-remorse and annoyance-relief) are more strongly associated with depressive symptoms, whereas emotion pairs that do not include negative emotions show mixed associations with depressive symptoms. These findings demonstrate the value of computational emotion classification and the need to account for emotional ambivalence when studying parent-child relationship dynamics and mental health.

Content Warning: The dataset may include explicit, offensive, or violent language.

Introduction

Asian Americans are a rapidly growing racial group in the United States, comprising approximately 7% of the total population (Budiman and Ruiz 2023). The literature on depression among Asian Americans presents conflicting findings. Some studies have suggested a lower prevalence of depression in this group than in other racial groups (Kalibatseva et al. 2017), whereas others have indicated a higher prevalence than their counterparts in Asian countries, mainly due to acculturative stress (Kalibatseva and Leong 2011). Prevailing mental health stigma and limited services within Asian cultures and communities contribute to reported underutilization (Su-Kubricht et al. 2025; Augsberger et al.

2015; Jang et al. 2019; Yang et al. 2020), raising concerns about unmet mental health needs in this population.

Previous studies note various factors associated with depression in Asian Americans, mainly focusing on sociocultural factors such as perceived racism and discrimination, acculturation and acculturative stress, and loss of face (Ching 2022; Gupta et al. 2013; Kalibatseva et al. 2017).

Intergenerational family conflict also influences psychological well-being, and its importance has been extensively discussed in relation to mental health outcomes, including depression, among Asian Americans (Kalibatseva et al. 2017; Ying, Coombs, and Lee 1999; Ying and Han 2007; Pham, Lui, and Rollock 2020; Cheng, Lin, and Cha 2015). While earlier research focuses on sociocultural and structural factors shaping these relationships, recent work examines the emotions children in Asian American families experience toward their parents.

Proposed by Luescher and Pillemer (Lüscher and Pillemer 1998), intergenerational ambivalence is a well-documented aspect of the parent-child relationship, characterized by mixed or ambiguous feelings (Lendon, Silverstein, and Giarrusso 2014) rather than “limited frameworks that emphasize intergenerational solidarity or conflict.”

Understanding the nature of these mixed feelings can inform how clinicians and families address emotional conflict within these relationships. Prior work on intergenerational ambivalence in Asian and Asian American families reveals a spectrum of experiences ranging from the stress and strain of differing cultural values and acculturation (Weng and Robinson 2014; Samanta 2019) to family leisure as a context for managing ambivalence (Hebblethwaite 2018).

Such ambivalence affects both psychological well-being and physical health (Fingerman et al. 2008). Network analyses of emotion co-occurrence provide a novel perspective for examining co-occurrence within individuals (Moeller et al. 2018). This approach can capture patterns that traditional correlation analyses may miss, such as the frequency and specific pairings of positive and negative emotions experienced together (Trampe, Quoidbach, and Taquet 2015).

Using natural language processing (NLP) techniques, we extract emotions from each post and detect linguistic markers of depressive symptoms. This allows us to quantify the co-occurrence structure of emotions and the relationship between combinations of emotions within the same post and

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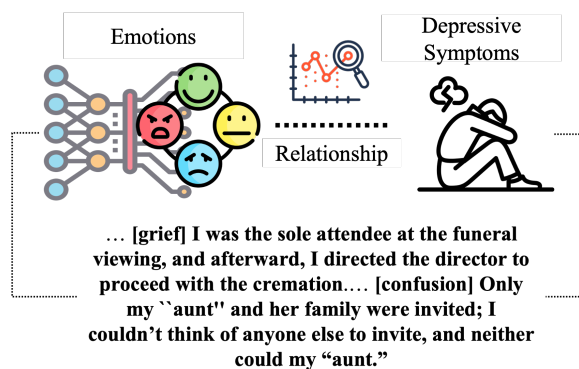


Figure 1: This study examines the association between mixed emotions and depressive symptoms.

depressive symptoms, as shown in Figure 1. This emotion analysis-based approach has been extensively applied at the intersection of NLP and mental health research (Copper-smith et al. 2015; Zirikly and Dredze 2022; Chim et al. 2024; Lan et al. 2025).

Despite numerous previous studies examining mental health in Asian American families through the lens of culture and depressive symptoms (as defined in clinical guidelines, DSM-5 (American Psychiatric Association 2015)) research focusing specifically on underlying emotions is scarce, particularly regarding the presence of ambivalent emotions within these relationships.

In this study, we analyze posts from the subreddit, *r/AsianParentStories*, a community where individuals share experiences of growing up with Asian parents, particularly in relation to strictness, abuse, unrealistic expectations, and other family conflicts, according to the subreddit description¹. This context indicates that the subreddit is particularly suitable for our research because the emotions expressed in these posts are not simply general emotional states, but are often related to parents and the parent-child relationship.

In line with this relational context, this study examines children’s emotional ambivalence toward their parents, rather than merely the presence of mixed emotions in general discussion. This distinction is important because emotional conflict within the parent-child relationship may reveal how love, guilt, anger, fear, obligation, and sadness co-exist in ways that relate to depressive symptoms.

To investigate this, we employ a network approach to emotions and examine the association between emotional ambivalence and depressive symptoms. First, we seek to present emotion networks and co-occurrence patterns of emotions. Second, we predict depressive symptoms in posts and investigate how ambivalent emotion pairs are correlated with those symptoms within Asian American families. In East Asian cultures, individuals with depression often express emotional distress through physical complaints rather than by openly acknowledging their feelings (Chentsova-Dutton, Tsai, and Gotlib 2010; Ryder et al. 2008).

Thus, we posit that exploring emotions, intergenerational relationships, and depressive symptoms in an online context

could be particularly informative, because Asian Americans may feel freer to express their emotions without guilt or stigma. The findings of our research contribute to the existing literature on emotion and Asian Americans by highlighting the importance of investigating mental health through the lens of emotion networks and emotional ambivalence, rather than focusing solely on a single emotion.²

Related Work

The intergenerational relationship between parents and children in Asian American families receives sustained scholarly attention. Previous research has highlighted that cultural and generational divides between foreign-born parents and their U.S.-born children are more pronounced in Asian families than in families of other racial groups (Lee 1997; Tsai-Chae and Nagata 2008), such as European American families (Ying, Coombs, and Lee 1999). This is attributed to significant differences in social norms and acculturation gaps (Pham, Lui, and Rollock 2020) between parents and children, as well as family composition (Tsai-Chae and Nagata 2008; Chung 2001; Szapocznik and Kurtines 1993).

For example, whereas European American families often emphasize nuclear family structures and independence, Asian American families are more inclined to have extended family setups and emphasize interdependence among family members (Ying, Coombs, and Lee 1999).

Additionally, Asian parents tend to have high educational expectations for their children, aiming for upward mobility (Hsin and Xie 2014). Moreover, challenges in intergenerational relationships are compounded by hierarchy within Asian families (Ying and Han 2007; Ying, Coombs, and Lee 1999). Parents originating from countries that prioritize Confucianism, which emphasizes filial piety, often adopt a more authoritarian parenting style and communication approach (Ying, Coombs, and Lee 1999; Pham, Lui, and Rollock 2020; Ishii-Kuntz 1997).

Co-occurrence network analysis shows that positive and negative emotions frequently co-occur within individuals and even within the same situations (Moeller et al. 2018). This finding challenges the assumption that positive and negative emotions are mutually exclusive, suggesting that mixed emotional experiences are more common than previously recognized. The study also identifies specific emotions that frequently co-occur, such as tiredness, happiness, stress, and boredom.

Our study also applies a co-occurrence approach to represent quantified relationships among emotions in unstructured Reddit data. Each detected emotion is displayed in proportion to its frequency, and the strength of association between emotion pairs reflects how often they co-occur.

Social media data, such as Reddit, offer an opportunity to analyze networks of emotions through the examination of naturally occurring language in conversation. The language used in conversations provides an insight into individuals’ health and functioning (Resnik et al. 2021). Interactions on social media have increasingly become a “clinical

¹<https://www.reddit.com/r/AsianParentStories/>

²All data and code are available at <https://github.com/phl20918/Beyond-Positive-or-Negative>

whitespace”, offering new opportunities for early detection and monitoring, which are significant for clinical implication (Lan et al. 2025; Coppersmith et al. 2018).

Reddit allows for longer and more personal narratives than other social media platforms, providing a rich source of data owing to its relative anonymity through the use of pseudonyms (Youm et al. 2026). The anonymity afforded by Reddit enables users to share candid and potentially sensitive personal stories (De Choudhury and De 2014), which can be considered more authentic owing to the reduced fear of social repercussions compared with other social media services (Miller 2020). Furthermore, online communities allow minoritized populations to share interests across geographic boundaries (Gonzales 2017; Han et al. 2026).

Methods

Data

The primary data for this study are collected from the subreddit forum *r/AsianParentStories* on Reddit ($N = 31,144$) using PushShift (Baumgartner et al. 2020). The included posts are from 2012 to 2022 and provide a repository of personal narratives and experiences shared by individuals of Asian descent, many of whom are children of immigrants in the United States. The subreddit had approximately 94,000 members as of November 2023 and is described by its community as a space for sharing experiences of growing up with Asian parents, including stories about strictness, abuse, and family conflict.

This subreddit has been previously analyzed as a space for Asian American identity work and for sharing Asian immigrant family experiences (Dosono and Semaan 2019). Reddit’s user base is diverse, with approximately 57% of its participants residing in the United States (World Population Review 2024), making the platform relevant for studying Asian American experiences. Since Asian American identity is based on self-identification, we treat this subreddit as an online community organized around Asian family experiences, rather than a demographically defined sample of Asian Americans.

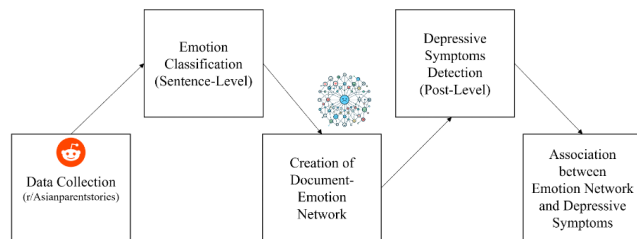


Figure 2: Analytic Strategy

Analytic Strategy

As depicted in Figure 2, we use an automated system to classify emotions in sentences, create an emotion network, and detect depressive symptoms. First, the analytic strategy employs a BERT-based emotion classifier to parse emotions in the collected posts by implementing the GoEmotions model from Hugging Face (Demszky et al. 2020) based on 58,000 annotated English Reddit comments.

Second, we construct a document-emotion network (Staiano and Guerini 2014), which serves a similar function to a document-term matrix commonly used in text analysis. This approach allows us to map the relationships among emotional expressions through network analysis and their connections to intergenerational ambivalence between parents and children. This enables us to visualize co-occurrence patterns of emotions within narratives of Asian and Asian American parent-child relationships. To generate this network, we use an automated procedure that represents emotions as nodes and their co-occurrences within posts as weighted edges. This network-based representation shows that emotions rarely appear in isolation within posts.

Last, to detect linguistic markers of depressive symptoms, we use ReDSM5 (Bao, Pérez, and Parapar 2025), a Reddit corpus annotated at the sentence level by a licensed psychologist for the presence or absence of the nine DSM-5 (American Psychiatric Association 2015) depressive symptoms (Depressed mood, Fatigue, Anhedonia, Worthlessness, Changes in appetite, Cognitive issues, Sleep issues, Suicidal thoughts, Psychomotor alteration).

To improve reliability at the sentence level, we use these fine-grained, human-validated DSM-5 annotations as the supervision source for training our depressive symptom classifiers. From this source, we construct a task-specific dataset of 2,558 sentences, consisting of 2,058 symptom-labeled sentences and 500 NO_SYMPTOM sentences.

Each sentence is assigned a single label derived from the original expert annotation, including NO_SYMPTOM for sentences that do not express a DSM-5 depressive symptom. This formulation reflects our classification goal: distinguishing sentences that express a DSM-5 depressive symptom from those that do not. We split the resulting dataset into training, validation, and test sets using an 80/10/10 ratio.

Table 1: Comparison of BERT, LLaMA (LoRA), and RoBERTa on depressive symptom classification.

Model	Macro Precision	Macro Recall	Macro F1
BERT	0.7805	0.7757	0.7739
LLaMA (LoRA)	0.7909	0.8060	0.7903
RoBERTa	0.8264	0.8182	0.8168

We fine-tune three transformer models for this task: Llama-3.1-8B-Instruct, BERT-cased, and RoBERTa-cased. Llama-3.1-8B-Instruct is fine-tuned using supervised instruction tuning on the sentence-label pairs. BERT-cased and RoBERTa-cased are fine-tuned for sentence-level depressive symptom classification. All experiments are conducted on an NVIDIA A100 GPU. As shown in Table 1, RoBERTa achieves the best overall performance. We therefore use the RoBERTa-based model for depressive symptom detection in the remainder of the study.

At the post level, our operationalization of depressive-symptom posts is intentionally inclusive but necessarily coarse. We classify a post as containing depressive symptoms if at least one sentence is identified as expressing a depressive symptom. This design choice prioritizes sensitivity

to symptom expression in online discourse rather than clinical diagnosis, but it may overestimate prevalence by conflating transient emotional expressions with more sustained depressive states. Importantly, our framework is intended to identify linguistic indicators associated with depressive symptom expression, not to infer clinical depression at the individual level.

Results

We first examine the distribution of emotions at the sentence level using the cumulative distribution function (CDF) and complementary cumulative distribution function (CCDF). CDF shows the cumulative distribution of emotions, whereas CCDF presents the opposite (Figure 3). The analysis reveals that the eight most frequently occurring emotions collectively constitute 64.3% of the emotions expressed in the examined sentences. Specifically, this includes five negative emotions (disappointment, disapproval, annoyance, anger, and sadness; 33.8%) and three positive and ambiguous emotions (curiosity, approval, and realization; 30.5%). The sentiment polarity of emotions is determined by the consensus of the researchers.

Table 2 shows the proportions of each of the eight emotions in the dataset and their corresponding examples. “Realization” (11.9%) and “Approval” (11.9%) are the most prevalent across the dataset, reflecting moments in which posters recognize or articulate their identity as Asian Americans. This is depicted in examples such as, “growing up in a traditional Chinese family, this couldn’t be further from the truth” and “I’m an ABC - American-born Chinese.”

The remaining five negative emotions (“Sadness,” “Anger,” “Annoyance,” “Disappointment,” and “Disapproval”) and one ambiguous emotion (“Curiosity”) follow the two dominant emotions. Although some emotions are not explicitly negative, their expression in the context of parenting may carry negative connotations. For example, the “Curiosity” label in Table 2 captures a poster questioning why her parents treat sons and daughters differently, reflecting the poster’s attempt to make sense of gendered expectations rather than expressing a clearly positive or neutral emotional state.

In addition to the context for each emotion, Figure 4 illustrates the lexical representation of parents, revealing the semantics behind each emotion-sentence group. Each emotion label serves as the anchor node for its respective sentence group. For example, in the embedding space, the term “realization” serves as the “parent” for the set of sentences classified under “realization.” The network depicts semantically proximal terms to these “parents” within sentences identified as “realization.”

In the network, eight emotions (“Realization,” “Approval,” “Sadness,” “Anger,” “Curiosity,” “Annoyance,” “Disappointment,” and “Disapproval”) are nodes that represent “Parents” in each emotion-sentence group. Other nodes are words that are semantically close to “Parents” in each emotion group, measured by cosine similarity, of at least 0.5. Notably, **“Culture” appears across seven of the eight emotion clusters**, indicative of its pervasive role in shaping parental dynamics and familial norms.

Words such as “Perfect,” “Successful,” “Marriage,” “Husband,” and “Education,” underscore their significance in the parental discourse across three distinct emotional domains. Additionally, words such as “Strict,” “Racist,” “Compared,” “Doctor,” “White,” and “Relationship” are prevalent across two emotion groups, suggesting the complexities inherent in parental interactions and societal expectations. After examining singular emotions, we examine pairs of emotions within individual posts. Initially, we explore the co-occurrence of emotions, followed by an examination of the strengths of their connections in pairs.

In Figure 5, the first and fourth quadrants depict the co-occurrence of emotions with the same sentiments, representing positive and negative emotions, respectively. The second and third quadrants illustrate the co-occurrence of emotions with different sentiments. This observation suggests that pairs of emotions with the same sentiment occur more frequently. The diagonals of the matrices in the first and fourth quadrants highlight instances in which the same emotion pairs per sentence are more prevalent in a post.

The network of emotions in Figure 6 reveals the strength of the connections between emotion pairs. Each node represents an emotion, with node size proportional to its frequency. Links between nodes represent co-occurrence, and link width indicates the frequency of co-occurrence. While pairwise co-occurrence statistics show which emotion pairs are associated with depressive-symptom expression, our network analysis further reveals higher-order relational structure among emotions. This enables us to identify central, bridging, and tightly connected emotion patterns that are less apparent from pairwise associations alone.

In this network, the eight singular emotions appear as larger nodes, consistent with our initial investigation. The frequency of co-occurrence is higher among these eight emotions than among other emotion pairs. Instead, the posts exhibit multiple emotions, with more than two emotions accounting for 93.2% of the data. In our analysis, we consider all possible permutations of emotions, thereby encompassing all emotional combinations within a post. We generate a list of emotional pairs and explore their correlations with depressive symptoms.

Table 3 presents selected emotion pairs with coefficients statistically significant at the 0.05 level, indicating associations with depressive symptoms in Reddit posts. Overall, posts containing emotion pairs that involve at least one negative emotion (e.g., nervousness-remorse and relief-annoyance) are more likely to be associated with depressive symptoms, whereas posts with ambivalent pairs combining positive and negative (e.g., excitement-remorse) or ambiguous and positive emotions (e.g., curiosity-excitement) are less likely to be related to depressive symptoms.

In these ambivalent pairs, the strength of association varies across specific emotion combinations. To examine these associations, we conduct a logistic regression analysis and report odds ratios and 95% confidence intervals for each estimate. In particular, posts containing positive emotions paired with annoyance have higher odds of depressive symptoms; for instance, posts with both relief and annoyance are approximately twice as likely to contain depressive

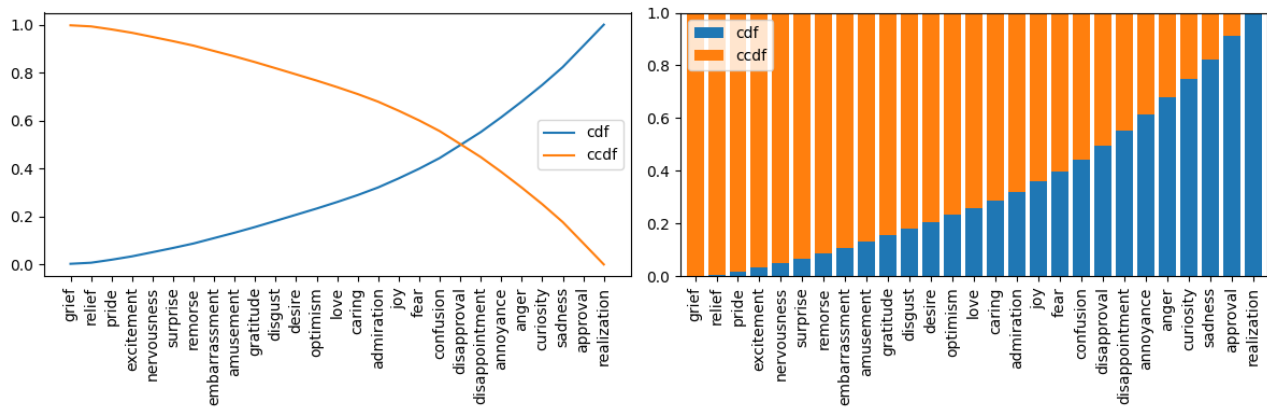


Figure 3: Frequency Distribution of Emotions. The eight most frequently occurring emotions are identified at the intersection of the CDF and CCDF.

Table 2: Most frequent eight emotions in sentences (proportion and sentence examples)

Emotion	Proportion	Example
Approval	11.9%	I’m an ABC - American-born Chinese, and my husband’s family is picture-perfect American [approval]. We live two hours from my family and only half an hour from his, so we see his side much more often. Recently, my mom noticed I spent a lot of time with my in-laws and seemed hurt and upset, asking why I didn’t visit home more often.
Realization	11.9%	The thing that gets me is how because of it, members of my family put off all kinds of interaction with each other [realization]. And we’ll only talk with each other when other people are around, pretending as though we care. And since we never talk to each other, it’s easy to start holding grudges or to become incredibly passive-aggressive with one another.
Sadness	9.7%	I wept for the part of myself I abandoned at 14 when I made getting into a good university my top priority [sadness]. It saddened me to realize how readily I sacrificed my identity to pursue a goal that ultimately left me feeling empty.
Anger	7.6%	My parents divorced when I was 13. They were the typical verbally abusive, emotionally manipulative, immature, selfish, and condescending type, to the point where not a single kind word was spoken, or positive conversation was held [anger].
Curiosity	6.7%	In my family, the eldest boy is always favored, which happens to be my brother followed by my two sisters. My parents and extended family believe that boys can do no wrong, while girls should prioritize caring for the family and conform to traditional roles. I’m curious if other Asian families share this mindset of favoring boys over girls [curiosity].
Annoyance	6.1%	I suppose I’m relieved to be considered the least troublesome child. It’s your rapid shifts in mood, from anger to childlike happiness, that annoy me the most [annoyance]. Regardless of the emotional distress you cause, you quickly forget and switch to a cheerful demeanor, which is frustrating.
Disappointment	5.2%	My parents are pressuring me to end things with him, so I need your advice. Originally, we had an “underground” relationship, but we wanted to work up the courage to break it to them someday. It’s just that, unfortunately, my parents hang around with people that validate their beliefs [disappointment]. Now they’ve got transcripts of some private conversations - and, unfortunately, some particularly bad ones when I was having a bad day and bitching about them.
Disapproval	5.1%	However, confessing to my math teacher about having a “depressive episode” would require me to be honest with not only her, but also my parents and myself. They wouldn’t understand, and I doubt I’d receive any emotional support or help [disapproval]. Opening up would be difficult and likely lead to many sleepless nights. The only person who knows how I feel is a friend, whom I’m hesitant to confide in fully due to fear of betrayal.

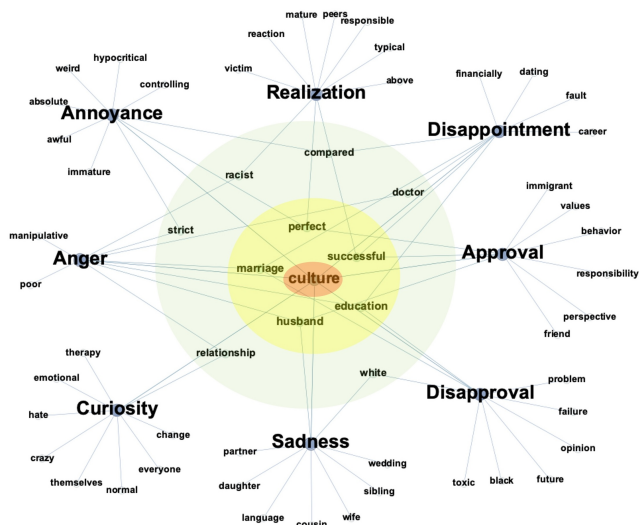


Figure 4: Network of words with close semantic links to “Parents” in each emotion group

symptoms compared to posts in which this emotion pair is absent (Odds Ratio (OR) = 2.06, 95% CI [1.06, 4.00]).

Posts where positive emotions co-occurred with disappointment (e.g., realization-disappointment, OR = 1.36, 95% CI [1.14, 1.63]) or sadness (e.g., joy-sadness, OR = 1.38, 95% CI [1.10, 1.75]) also show elevated odds of depressive symptoms. Another notable co-occurrence is the pairing of relief and annoyance. In the example in Table 3, the poster describes feeling “better and more refreshed” while away from home, indicating relief. However, upon returning home, the poster expresses frustration and resentment, indicating annoyance.

Emotion pairs associated with lower odds of depressive symptoms (OR < 1) in Table 3 include the co-occurrence of curiosity and excitement. The statement “It is interesting, though, to watch how the other Chinese characters deal with these people,” reflects excitement, while “Has anyone else noticed these crazy Asian mother figures in Asian television?” reflects curiosity. The post appears to center on the poster’s reflective engagement with cultural representation in media, with an interest in and observation of it rather than personal distress.

Additionally, mixed emotions of excitement and remorse are exemplified in Table 3, which is associated with reduced odds of depressive symptoms (OR = 0.58, 95% CI [0.33, 1.00]), indicating a weaker association with depressive symptoms. In this example, excitement is shown by “She went to college, parent thought it’d be a GREAT idea to link accounts with hers” while remorse is shown by “Sorry, parent can’t afford to pay for me now.” This post describes a context in which the prospect of college initially evokes excitement, but that feeling becomes entangled with guilt and regret amid financial hardship and family conflict.

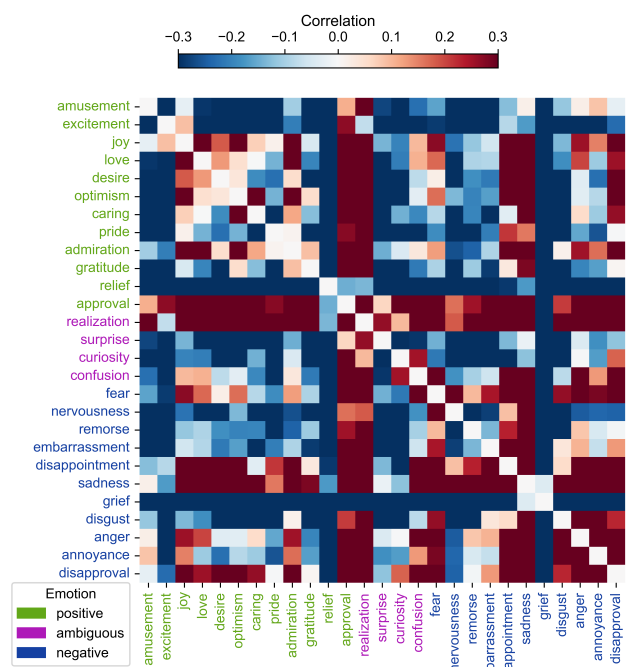


Figure 5: Co-occurrence Matrix (Heatmap). Green-colored emotions are positive sentiment emotions, blue-colored emotions are negative sentiment emotions, and purple-colored emotions are ambiguous.

Discussion

Primary Findings

Our analysis reveals that over 28 distinct emotions are expressed, with eight being the most prominent: realization, approval, sadness, anger, disapproval, annoyance, curiosity, and disappointment. Notably, the word “parents” consistently co-occurs with the word “culture” within these eight emotions, suggesting a strong connection between cultural values and differences and parent–child relationships in Asian American families.

A recurring theme is the tendency of Asian parents to view their children through the lens of perfection and success, which is consistent with previous research (Lee and Zhou 2014). This emphasis on success is further evidenced by examples highlighting the strong value Asian parents place on education, competitiveness, and even specific high-prestige careers (e.g., doctor) (Fouad et al. 2008), as Asian families often perceive this as their children’s “duty to succeed” based on the sacrifice of first-generation parents (Dundes, Cho, and Kwak 2009).

Consistent with prior literature (Kibria 1997; Pang 1994), our analysis shows that parental emotions are often expressed in relation to dating choices and marital partners. We also note that emotions often occur in combination with one another, indicating interconnectedness. These findings align with the concept of intergenerational ambivalence, which refers to the simultaneous experience of positive and negative emotions in parent–child relationships (Suito, Gilligan, and Pillemer 2011; Fingerman et al. 2008).

Table 3: Selected examples of associations between emotion pair networks and depressive symptoms with logistic regression. Odds ratios (OR) are reported with 95% confidence intervals (CI). Shaded emotion pairs (odds ratios > 1) indicate that posts containing these pairs are more likely to include depressive symptoms.

Emotion Pairs	OR [95% CI]	Example
Nervousness, Remorse	4.96 [1.93,12.75]	Or even go back to school to get the Masters, which I still am iffy about and the timing of this couldn't be worse to pursue that seriously [nervousness]. My mother, however, seems to be having other ideas. She often tells me her biggest regret raising me and my sister was not giving us more stringent instruction towards what studies and career paths guarantee success [remorse].
Relief, Annoyance	2.06 [1.06,4.00]	Even though I still dealt with my anxiety over there, I still felt better and more refreshed [relief]. ... About a month ago, I have returned home since I promised my parents I would but every night I've been back, I've been absolutely miserable and hysterical ... my mom was crap to me for half my life and has said the shittiest things to me but had the audacity to cry and act as if I'm an evil, ungrateful daughter for wanting to move out.” It's complete bullshit how there's never any compromise [annoyance]. At the end of the day, it's my life but as every Asian kid in America knows.
Curiosity, Excitement	0.72 [0.53,0.96]	It is interesting, though, to watch how the other Chinese characters deal with these people [excitement]. I think it's interesting that not all the parents in these shows are portrayed this way. Most of the people in the shows are actually reasonable! That makes me more hopeful that not all of Asian culture is hopeless. But it still does seem like this crazy Asian mother thing is common for some reason. Just wanted to share. Has anyone else noticed these crazy Asian mother figures in Asian television [curiosity]?
Excitement, Remorse	0.58 [0.33,1.00]	She went to college, parent thought it'd be a GREAT idea to link accounts with hers [excitement]. Sister went on a huge spending spree. Parent flipped, saying how much her savings took a nose dive. I have no idea how much CC debt my sister is in. ... Takes a few jobs here and there; she traveled all around the world during this time. ... After all her major adventures, she finally gets into medical school, coincidentally around the time I'm going to college. She needs money each money to cover her expenses. Sorry, parent can't afford to pay for me now [remorse] ...

Our results show that Asian American adult children's emotional experiences with their parents involve the co-occurrence of contrasting emotions, consistent with the concept of intergenerational ambivalence (Weng 2017).

The coexistence of positive emotions, such as joy and approval, and negative emotions, such as anger and disappointment, highlights the emotional complexity of these parent-child relationships, suggesting that emotional experiences within these relationships are rarely one-dimensional. Moreover, the interconnected emotional patterns observed in our study align with prior research showing that intergenerational relationships are often characterized by ambivalent feelings (Tighe, Birditt, and Antonucci 2016).

Previous research on depressive symptoms among Asian Americans has primarily emphasized the influence of individual negative emotions such as anger (Cheung and Park 2010; Park et al. 2010) and sadness (Chentsova-Dutton et al. 2007). However, our findings indicate that a substantial portion of posts contain both positive and negative emotions, and that these co-occurrence patterns are associated with the likelihood of depressive symptoms.

Mixed emotion pairs combining positive and negative elements (e.g., relief-annoyance, caring-anger, love-disappointment, gratitude-disapproval, admiration-anger) show significant associations with the likelihood of depressive symptoms. Some negative emotions (e.g., remorse, fear)

are associated with either higher or lower odds of depressive symptoms, depending on which positive emotion they co-occur with.

Posts are more likely to contain depressive symptoms when grief or disgust co-occurs with positive emotions, such as amusement, caring, gratitude, and admiration, or with other negative emotions, such as confusion and anger. In contrast, sadness paired with positive emotions, such as love and optimism, is associated with lower odds of depressive symptoms. These findings suggest that, among Asian Americans, the link between negative emotions and depressive symptoms depends on specific emotion pairings rather than the presence of negative emotions alone.

Implications

Our findings suggest that this discrepancy may stem from the distinct nature of various negative emotions. For example, grief is frequently associated with significant life events, such as parental divorce and death, whereas sadness often stems from empathizing with the challenges their first-generation immigrant parents face.

These observed associations suggest that timely support during major life events may warrant further investigation, particularly given prior evidence of low help-seeking rates in this population (Augsberger et al. 2015; Yang et al. 2020). While our findings are correlational, the observed associa-

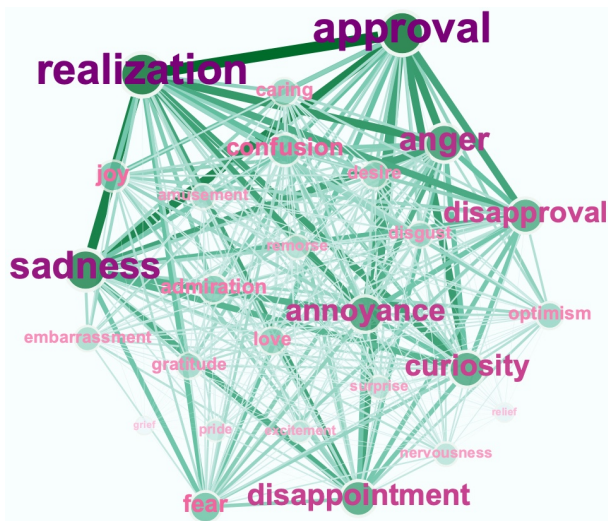


Figure 6: Network of Emotion Pairs. This network includes all 28 emotions, with node sizes determined by their frequency and link width sizes determined by co-occurrence between emotions.

tions point to online outreach strategies that may merit further exploration for supporting Asian Americans in managing intrafamilial conflicts and processing negative emotions within the family context, even when positive emotions are simultaneously present.

Our analysis suggests that within Asian American parent-child narratives, expressions classified as excitement often reflect sarcasm rather than positive affect, and labels such as curiosity can similarly carry context-specific meanings shaped by family dynamics and cultural framing. In other words, Asian Americans appear to frequently employ humor as a coping strategy (Perera and Chang 2015) when recounting past experiences of parental discipline. These findings suggest that adaptive coping strategies may represent a promising direction for future support efforts aimed at healthier family relationships and emotional well-being within Asian American families.

Some posts express empathy and respect for the adversities their parents overcame. The presence of approval or realization suggests that reappraising conflict through the lens of family history may support emotional resolution. This aligns with research on the benefits of positive reframing and acceptance coping strategies for Asian American mental health in the context of intergenerational conflict (Choi et al. 2020).

Conclusion and Future Work

Our results indicate that mixed emotions in Reddit discussions about Asian parents reflect varied relational contexts, and that emotional co-occurrence patterns provide useful information for identifying depressive symptom expression. These findings may inform future research on Asian American parent-child dynamics and offer preliminary insights for mental health professionals interested in social media-based expressions of emotional distress.

Based on our research findings, we recommend that future studies explore intergenerational ambivalence within additional racial and ethnic groups, such as Latinos, who constitute another substantial immigrant demographic in the United States (Budiman 2020). Comparing the cultural and contextual factors linked to mixed emotions and mental health across these groups would be beneficial for developing effective interventions.

Future work should also systematically evaluate alternative post-level aggregation strategies for depressive symptom detection, including proportion-based thresholds, symptom-count thresholds, and temporally aware aggregation methods. In addition, future studies should validate predictions on a human-annotated subset from this community. Such validation could support speaker-attribution methods that distinguish poster-experienced emotions from reported emotions, as well as hybrid approaches that integrate clinical knowledge and structured reasoning (Burkhardt et al. 2022).

Future research could also examine whether ambivalent emotion patterns are associated with other mental health outcomes, such as anxiety, among Asian Americans (Mental Health America 2020). Finally, researchers could consider utilizing social media platforms other than Reddit, particularly those that predominantly feature images and videos for communication and sharing purposes, such as TikTok, to conduct a multimodal analysis (Mordecai 2023).

Limitations

The current study has several limitations. First, previous research has shown that intergenerational relationships among Asian Americans vary based on ethnicity and gender (Chung 2001; Pham, Lui, and Rollock 2020). However, because Reddit users do not consistently disclose demographic information, we cannot examine subgroup variation. In addition, the conflict-oriented focus of this subreddit may overrepresent negative emotional experiences relative to broader Asian American populations. Accordingly, our findings should be interpreted as community-specific rather than representative of Asian American experiences more broadly.

Second, the GoEmotions classifier is trained on general Reddit comments rather than specifically on r/Asian-ParentStories, raising the possibility of domain mismatch. Context-dependent or figurative expressions (e.g., sarcasm) may therefore be misclassified, and certain emotion labels, such as curiosity or amusement, may carry meanings shaped by family dynamics and cultural context. In addition, the classifier does not distinguish between emotions directly expressed by the poster and emotions described through reported speech, such as a parent's reaction recounted by the author. Using a Reddit-trained emotion classifier provides a closer linguistic match to our study context than models trained on non-social-media corpora, but this does not eliminate domain-transfer concerns.

Lastly, because our analysis evaluates a large number of emotion-pair associations across 28 emotion categories, some statistically significant findings may reflect multiple-comparison effects. To improve interpretability, we report 95% confidence intervals alongside odds-ratio estimates and treat the pair-level analyses as exploratory.

Despite these limitations, this study has several strengths. To the best of our knowledge, it is the first to use a network approach to analyze emotions in unstructured conversational language data, whereas prior work has largely relied on survey-based structured data. By automating emotion network analysis, we visualize emotion co-occurrence and examine associations between emotional ambivalence and depressive symptoms in social media self-expression.

Furthermore, the majority of studies on second-generation Asian Americans have traditionally focused on specific aspects such as educational achievement (Kim, Cho, and Song 2019; Tran and Birman 2010), social mobility (Tran 2016), and identity formation and negotiation (Dizon et al. 2021; Park 2008). Our research offers a new perspective by examining diverse topics related to Asian American family experiences, with particular emphasis on mixed emotions and their associations with mental health status.

Ethical Considerations

Numerous ethics review boards consider the majority of social computing data to be openly accessible, potentially freeing researchers from the obligation to seek consent (Ienca et al. 2018). Given the sensitive nature of the content and anonymity of the users, ethical guidelines are strictly followed in our study. All data are anonymized to ensure that no personal identifiers are included in the analysis. This study focuses on the aggregate patterns of emotional expression and their association with depressive symptoms rather than on individual stories.

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