ORIGINAL ARTICLE

# Thematic Co-occurrence Analysis: Advancing a Theory and Qualitative Method to Illuminate Ambivalent Experiences

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*Ambivalence is a phenomenon that transcends disciplinary divides and is associated with a myriad of mixed outcomes. Yet, identifying and representing the complexities of ambivalent experiences can be difficult using traditional qualitative methods. Thus, the goal of the present study was to advance a qualitative method, thematic co-occurrence analysis, to address this issue. To illustrate the usefulness of this method, I present a case study detailing 35 estranged adult children's ambivalent responses and reactions to their parents' (non)contact during the COVID-19 pandemic. Findings reveal seven themes and four (non)relationships between them that reflect (a) theme independence, (b) unilateral co-occurrence, (c) unbalanced co-occurrence, and (d) complementary co-occurrence. These findings advance a theory of ambivalence and corresponding method to aid in the future investigations of ambivalent phenomena.*

Ambivalence, according to Connidis and McMullin (2002), is "simultaneously held opposing feelings or emotions that are due in part of countervailing expectations about how individuals should act" (p. 558). Put differently, ambivalence captures the degree to which something might be evaluated both positively and negatively at the same time (Jonas, Broemer, & Diehl, 2000). Although multiple definitions of ambivalence exist, each captures the simultaneous presence of contradictory reactions to a stimulus. Within the communication discipline, ambivalence is the subject of inquiry across contexts such as health (e.g., Zhao & Cappella, 2008), media/technology (e.g., Chang, 2014), organizations (e.g., Larson & Thompkins, 2005), and politics (e.g., Song & Eveland, 2015) in addition to featuring prominently

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in homegrown communication theories such as Babrow's (1992) problematic integration theory and Baxter's (2011) relational dialectics theory. Outside of communication studies, ambivalence is foundational in psychological, sociological, business, and cultural theories among others (Bauman, 1991; Otnes, Lowrey, & Shrum, 1997). Indeed, the extensive attention to ambivalence across disciplinary divides alludes to its importance; as O'Donohoe (2001) has so eloquently concluded, "ambivalence is a fundamental part of the human condition" (p. 94).

Understanding and describing the human condition, as opposed to explaining or critiquing it, are fundamental goals of interpretive researchers (Miller, 2005). Yet, Bauman (1991) argues, the problem is that scholars who study lived experience often seek to sort it into tidy classifications, ignoring the ways that meanings are never singular, but always plural, debatable, and sometimes even contradictory. He concludes that a goal to discretely pattern experience makes the studying and illustration of ambivalence difficult. Thus, ambivalence can pose a conundrum to the interpretive researcher whose task is to illuminate patterns that depict the lived experience of a particular speech community (Miller, 2005).

As it follows, the first goal of this study then is to argue why existing methods do not inherently capture the nuance of ambivalent experiences. The second goal of this study is to introduce a new method that emphasizes the ways themes co-occur. Finally, I apply this method to a specific case study to illustrate its usefulness in depicting ambivalence. In doing so, I advance both a new method and a theoretical heuristic to aid researchers interested in studying ambivalent phenomena. With these commitments in mind, I begin by critiquing representations of ambivalence in qualitative interpretive research and existing methods that address co-occurrence before advancing a new method, thematic co-occurrence analysis, in a case study germane to the present moment.

## Representations of ambivalence in interpretive research

Divergent phenomena can create quandaries for interpretive researchers who might struggle with (a) seeing the ways codes and themes relate to one another, (b) recognizing a big picture, and (c) telling a cogent story from the data (Miles, Huberman, & Saldana, 2014). Indeed, the messiness of lived experience can sometimes be at odds with presenting coherent patterns. Even when researchers acknowledge that multiple competing ideologies exist within a given account (e.g., see relational dialectics theory; Baxter, 2011), these scholars only attempt to study one set of ambivalences at a time. For example, despite emerging from the same stories of adoption, Baxter and colleagues sought to understand the competing ambivalences surrounding the meaning of birthmothers and adoption separately (e.g., Baxter, Scharp, Asbury, Jannusch, & Norwood, 2012; Baxter, Norwood, Asbury, & Scharp, 2014).

When exploring complex experiences, interpretive researchers often engage in a thematic analysis and represent ambivalence in their findings in one of the following ways: (a) as one theme among many, captured by a general ambivalence label (e.g.,

Harper, O'Conner, Dickson, & O'Carroll, 2011; Scourfield, Roen, & McDermott, 2008), (b) as a dialectical tension (e.g., Baxter, Norwood, Asbury, & Scharp, 2014; Nkiru, Case, & Settles, 2020), or (c) as an interpretation of contradictory themes (e.g., Hamrosi, Raynor, & Aslani, 2013; Heinsch et al., 2020). For example, Scourfield, Roen, and McDermott (2008) used the thematic label "living with ambivalence" to capture the ways LGBT young people were simultaneously "out and proud" and also uncomfortable with their sexual identity or hated aspects of "gay culture" (p. 332). Yet, reducing ambivalence to one theme does not illustrate the ways more than one set of concepts might be at odds (i.e., multiple ambivalences) or whether a given ambivalence represents all participant experiences (i.e., all participants feel conflicted).

Alternatively, researchers might also represent ambivalence dialectically such as in the case of White people's push toward awareness about racial privilege and pull away from reflexivity toward denial (Nkiru, Case, & Settles, 2020). Although this study presented multiple ambivalences, this aggregate dialectical tension (e.g., push and pull) suggested that all participants experienced this pattern when it is possible that some people had more polarizing experiences (i.e., some only feel push or only feel pull) or that some ambivalences were more or less pervasive across the data corpus.

Finally, Heinsch et al. (2020) discuss ambivalence as an interpretation of their contradictory findings that some people with suicidal ideation report a need for support, whereas others report a reluctance to seek help. Representing ambivalence this way fails to account for the ways that themes might relate to each other (i.e., some people might experience both simultaneously). This example, in particular, suggests that there might be multiple studies in which the existence of ambivalence gets explained away as at best, differences among participants, and at worst, confusion. One way to address these limitations is to start with existing approaches to documenting co-occurrence.

## Methods for addressing co-occurrence

Scholars from all different epistemological stances have argued for the importance of examining the co-occurrence of particular units of analysis (e.g., codes, themes, words). Most frequently, researchers, typically in the field of technology studies, engage in a co-word analysis, which is a quantitative method that helps them determine keyword co-occurrence rates in the face of an extensive amount of data (e.g., Giannakos, Papamitsiou, Markopoulos, Read, & Hourcade, 2020; Khasseh, Soheili, Moghaddam, & Chelak, 2017). The premise of a co-word analysis rests on the assumption that keywords are adequate descriptors of the article's content and can illustrate the ways certain ideas cluster together visually (Callon, Courtial, & Laville, 1991). For many interpretive researchers, allowing keywords to serve as adequate descriptors would fall short of their task to both paint an evocative description as well as to interpret meaning (Miller, 2005). Rather, they might be more interested in a qualitative method such as the qualitative cluster analysis Guest and McLellan

(2003) developed to help manage large qualitative data sets (i.e., distinguishing trees from the forest). This type of analysis requires researchers to use statistical software to identify the co-occurrence of codes so that they might be more easily collapsed into themes (or suprathemes). They even argue that qualitative researchers might code co-occurrence frequencies to help identify relationships within the data, "illustrating not just which codes appear together but how often, providing a means of assessing the prominence of the combination" (Guest et al., 2012, p. 134). Despite acknowledging the usefulness of this qualitative cluster analysis, a scholar seeking to do interpretive work might still wish to emphasize the quality of their data as opposed to frequencies.

Finally, Saldana (2015) argues that researchers might consider engaging in simultaneous coding. Simultaneous coding occurs when two or more codes apply to the same passage or sequential passages of text. Although he does not describe how simultaneous coding could be conducted, Saldana suggests that complex experiences might warrant a different analytic approach which could shed light on interrelationships. Thus, unlike qualitative cluster analysis which does not inherently meet the standards of interpretive research, Saldana's supposition that multiple codes could pertain to a single unit of analysis simply lacks a process (i.e., method) and does not inherently attune researchers to ambivalent experiences or the interrelationships between emergent themes. This last distinction is the most important; researchers need a method that not only acknowledges the potential for simultaneous coding but also can identify thematic overlap and illuminate how thematic overlap contributes to meaning. It is in the attention to the co-occurrence in and across themes where researchers can see ambivalence emerge in lived experience and understand the quality of thematic co-occurrence itself. Thus, if Guest et al. (2012) sought to distinguish trees from the forest and Saldana recognized the way one tree might be called two names, researchers require a method that helps them understand which trees grow together and the quality in which the trees make up a harmonious (or not) forest.

Despite the usefulness of these approaches, existing analytic techniques privilege the frequency with which a unit of analysis occurs and ignores the fact that quantity (i.e., recurrence) is only one of three standards of thematic analysis which also include repetition and forcefulness (Owen, 1984). Specifically, recurrence merely denotes that an idea emerged more than once, repetition refers to the extent to which participants use the same words and phrases, and forcefulness captures the extent to which a person's account is emphatic and evocative. Even qualitative software might only be successful at determining recurrence and repetition. Yet, forcefulness is an important criterion because it most closely aligns with the standards of the interpretive ontology (i.e., social constructionism) and epistemology that warrants a thematic analysis. Miller (2005) argues that interpretive researchers embrace a subjective epistemology and Tracy (2010) argues that epistemology should be evaluated based on: (a) worthy topic, (b) rich rigor, (c) sincerity, (d) credibility, (e) resonance, (f) significant contribution, (g) ethics, and (h) meaningful coherence. Thus,

forcefulness is what allows readers to put themselves in the participants' shoes (i.e., transferability) and meets the standard of thick description.

## Advancing thematic co-occurrence analysis as a new method

Based on the limitations of existing methods to capture ambivalent experiences and in concert with the ontological and epistemological commitments of interpretive scholars, I argue that a new method is required. Thus, to meet the second goal of this study, I now present instructions that detail how researchers can conduct a thematic co-occurrence analysis. This analytic technique allows for evocativeness and interpretation as well as attunes the research to dynamic interrelationships in and across themes.

### Step one: conduct a thematic analysis

To analyze the data, researchers should begin by: (a) familiarizing themselves with the data by reading and re-reading the data corpus, (b) identifying codes within the data germane to the research questions, (c) combining the codes into initial themes, (d) refining the themes so that they are responsive to the research questions, (e) labeling the themes, and (f) identifying and selecting evocative exemplars (see Braun and Clarke, 2006). Other thematic analysis procedures would also be appropriate (see Miles, Huberman, & Saldana, 2014; Tracy, 2020).

After themes emerge, researchers should hold them to Owen's (1984) standards of (a) recurrence, (b) repetition, and (c) forcefulness. As argued, recurrence is a standard that speaks to quantity. Repetition pertains to whether participants used similar words and/or phrases to describe their experiences. This might manifest in the labeling of the themes. Finally, forcefulness captures the quality of themes and the extent to which participants communicate in detailed, evocative, and emphatic ways. In conducting the thematic analysis first and holding themes to interpretive standards, this method foregrounds emergent socially constructed categories while backgrounding a priori-defined patterns.

### Step two: create a co-occurrence matrix

To develop a co-occurrence matrix, researchers should create a row for each participant/interview/narrative and then label the overarching column accordingly before making a column for each theme (also see Miles et al., 2014). Researchers should consider whether they are interested in patterns across themes, across suprathemes, or even across research questions. Regardless, whereas rows correspond to discrete accounts (i.e., participants, stories, etc.), columns correspond to themes. Next, researchers should go row by row and mark an X every time a theme emerges for that participant. To retain the emphasis on quality and not simply report on quantity, researchers should mark instances of forcefulness with a + (i.e., a plus mark)

**Table 1** Co-Occurrence Matrix

| Narrative # | Reactions to No Contact | | | Reactions to Contact | | Responses to Contact | |
|---|---|---|---|---|---|---|---|
| | Fear of Being Contacted | Sadness by No Contact | Grateful for No Contact | Welcomed Contact & Pressure to Connect | Unwelcomed Contact & Pressure to Connect | Confusion Around Response | Reaffirmed Decision |
| 1 | X + | | | | | | |
| 2 | | | | | B2 / C2 + | | B2 / C2 |
| 3 | | | | | X | C1 + | C |
| 4 | | | | B1 | B2 / C2 | C1 + | B2 / C2 |
| 5 | | | | | | X | |
| 6 | | X + | | | X + | | X + |
| 7 | | X | | | | | |
| 8 | | | | B1 | B2 / C2 + | | B2 / C2 + |
| 9 | | A1 + | A2 + | | | | |
| 10 | | | | | X | X | |
| 11 | | | | | X | X | |
| 12 | | | | | | C1 | C |
| 13 | | | | | | C1 | C + |
| 14 | | | | | X | | |
| 15 | | | | | B2 / C2 + | C1 | B2 / C2 |
| 16 | | X | | | | | |
| 17 | | | | | X | | X |
| 18 | | X | | | | | X |
| 19 | | | | | B2 / C2 + | C1 + | B2 / C2 + |
| 20 | | | | B1 | B2 + | | |
| 21 | | | | | | | X |
| 22 | | | | | B2 / C2 | | B2 / C2 |
| 23 | | | A2 + | | | | |
| 24 | | | | | X + | | |
| 25 | | | A2 + | | | | |
| 26 | | | | | X | | |
| 27 | | | | | X + | | |
| 28 | | | | | X | | |
| 29 | X + | | | | X + | | |
| 30 | | | | | X | | |
| 31 | | | | | B2 / C2 | | B2 / C2 + |
| 32 | | A1 + | A2 + | | | | |
| 33 | | X | | | X + | | |
| 34 | | A1 | A2 | | | | |
| 35 | | X | | | | | |

Note: X represented that a theme emerged in a particular account. Letters A–C represent co-occurrences. Numbers indicate how many themes comprised each relationship. A + indicates forcefulness of each theme. Simultaneous coding emerged because while B1/B2 and C1/2 indicated two independent ambivalent relationships, the co-occurrence of themes B2 and C2 also indicated a complementary relationship.

that corresponds to any emphatic/evocative exemplar. This will become essential for interpretation.

**Step three: analyze co-occurrence matrix for patterns**

The final, and arguably the most important step of a thematic co-occurrence analysis is to look for patterns of co-occurrence. First, decide whether you are interested in the relationships between themes that emerged within a research question or across research questions. For example, you might be focused on the relationships between themes that respond to the following research questions:

RQ: What are people's perceptions of misinformation?

Alternatively, you might be interested in the relationships between themes across a set of research questions such as:

RQ$_1$: What are the resilience triggers for women who choose to terminate a wanted pregnancy due to health complications?

RQ$_2$: How do women who choose to terminate a wanted pregnancy due to health communications enact communicative resilience processes to cope with those triggers?

Thematic co-occurrence analysis, then, could help researchers illuminate the relationships either within or across those research questions.

Second, determine patterns of co-occurrence by closely examining the co-occurrence matrix. This process will be subjective and require researchers to make decisions about whether any pattern they identify is meaningful. One question they might ask themselves is whether a pattern of co-occurrence suggests themes are complementary or contradictory. For example, instances might arise in which themes reinforce or fortify each other. Alternatively, researchers might observe that themes suggest an ambivalent relationship. When a relationship emerges between the themes, I recommend noting this with a combination of letters and numbers (e.g., A1/A2, B1/B2, or C1/C2/C3), where the letter indicates a specific relationship between themes and the number indicates the number of themes that co-occur (as seen in Table 1).

Third, when a co-occurrence manifests, thematic co-occurrence analysis can attune researchers to the ubiquity and quality of those relationships. For example, researchers should ask themselves three questions: (a) is the co-occurrence pervasive/sporadic with regard to recurrence and force? (b) is the co-occurrence unilateral or bi-directional?, and (c) is the relationship between the themes (un)balanced with regard to recurrence, repetition, and forcefulness? To answer the first question, researchers should make a subjective assessment about how pervasive or sporadic each co-occurrent relationship is. Do not merely base this assessment on recurrence but also note the forcefulness of the pairing. To answer the second question, researchers should explore the quality of the co-presence by looking for patterns of

unilateral and bilateral co-occurrence. Specifically, unilateral co-occurrence indicates that the presence of one theme implies the co-presence of another (If A1 then A2). Bilateral co-occurrence indicates a reciprocal relationship where the presence of one theme meant the co-presence of the other and vice versa (If A1 then A2 and if A2 then A1). The last question researchers should entertain is whether the relationship between the themes is (un)balanced with regard to recurrence, repetition, and forcefulness. For example, if one theme is overwhelmingly more recurrent, repetitious, and forceful than its ambivalently paired theme, then the relationship between these themes is unbalanced.

Overall, attention to all of Owen's (1984) standards helps to shift the focus from merely how often relationships emerge to the quality of those relationships. Presenting the visualization of the co-occurrence matrix also helps signal these types of relationships. Furthermore, identifying these relationships encourages additional interpretation and the presentation of more robust exemplars that depict these connections in action. In sum, the usefulness of this method lies in its ability to sensitize researchers to relationships between themes that might not have been obvious without a visual representation.

## Presenting a case study: understanding ambivalence of estranged adult children during the COVID-19 pandemic

The final goal of this study was to illustrate the usefulness of thematic co-occurrence analysis by applying it to a communication process/context/phenomenon. As argued, not only do multiple interest groups within communication care about the study of ambivalence (e.g., numerous interpersonal communication theories address ambivalence and an entire issue of the *Journal of Applied Communication Research* was dedicated to contradiction and paradox in organizational settings; 2004, Volume 32, Issue 2), but also across multiple fields of study (e.g., business, sociology, technology, etc.). Thus, I chose this case study because the experience of parent–child estrangement is prevalent, consequential, and cross-disciplinary (e.g., family studies, psychology) and the catalyst for ambivalence (i.e., the COVID-19 pandemic) is very timely, of interest to multiple stakeholders, and is a global issue. Furthermore, the process of estrangement is central to my larger program of research on relational distancing. Nevertheless, any researcher who might anticipate that their participants are experiencing ambivalence might adopt thematic co-occurrence analysis or even researchers who simply anticipate that there could be a relationship between their themes.

## Conceptualizing parent-child estrangement

According to Scharp (2019), family estrangement occurs when at least one member voluntarily and intentionally distances themselves from another member because of an often ongoing (perceived) negative relationship. Although it is possible that

family estrangement is as common as divorce in some segments of U.S. society (Conti, 2015), scholars around the world are only beginning to explore family distancing (e.g., Agllias, 2011; Blake, Bland, & Imrie, 2020; Scharp & Dorrance Hall, 2019). This turn toward understanding family distancing is important considering parents and children in the estrangement process face stigma (Rittenour et al., 2018), chronic uncertainty (Scharp & McLaren, 2018), and ambiguous loss (see discussion below; Agllias, 2011), in addition to having to cope with the initial reasons they desired distance in the first place (see Carr et al., 2015). In a world where families are the social foundation of every society (DeFrain & Asay, 2007), ignoring the experience of family members who distance themselves from each other could leave out a large population of people who are struggling to make sense of their experience or even get the support they need.

## The ambivalent process of estrangement

Existing research suggests that both adult children and parents going through the process of family estrangement often describe it as shameful, confusing, and debilitating (see Scharp & Dorrance Hall, 2019). One reason might be explained at the cultural level. On the one hand, adult children discuss understanding, and in some instances, subscribing to an ideology of the parent–child relationship that emphasizes biological connections, shared history, and unending obligation (Scharp & Thomas, 2016). On the other hand, adult children also articulate an ideology that positions the parent-child relationship to be loving, reciprocal, and secondary to individual needs. These completing ideologies about the parent–child relationship allude to the ambivalence adult children discuss; they simultaneous want to uphold expectations while rejecting a relationship that put them in harm's way (i.e., that are lacking or absent what they perceive to be love and reciprocity). This ambivalence is likely why so many adult children going through the estrangement process report an on-again/off-again relationship with their parents (Scharp, Thomas, & Paxman, 2015). Furthermore, the ambivalence inherent to the experience of estrangement could be why estranged adult children continuously question whether or not they are good people (Scharp & McLaren, 2018).

Another reason that the process of estrangement might elicit ambivalence could be explained at the interpersonal level. Agllias (2011) argues that the process of parent–child estrangement is a multi-faceted example of ambiguous loss that can trigger uncertainty and ambivalence for those who experience it. Boss (2006) defines ambiguous loss as physical presence with psychological absence or physical absence with psychological presence. This simultaneous absence and presence can plague both adult children (Scharp, 2019) and parents (Agllias, 2011) who tend to avoid discussing the estrangement with others because they fear negative evaluation (Scharp, 2016). Ambivalence at the individual level has also been evidenced across existing estrangement research. Adult children often feel ambivalently about (a) whether to care for a sick parent who has abused them (Scharp & Curran, 2018), (b)

whether their desire to maintain relationships with extended family members is worth potential exposure to their estranged parents (Scharp, 2016), and (c) whether their individual needs should outweigh their family's desire for reconciliation (Scharp & Thomas, 2016). In sum, existing parent–child estrangement research points to the process evoking multiple ambivalences in response to a myriad of triggering interactions and events.

## COVID-19 as a catalyst for reconnection

Indeed, adult children going through the process of estrangement report being triggered by emotional (e.g., guilt), interactional (e.g., attempts at reconciliation), and catalyst events (e.g., holidays) that make them question whether they would benefit from being less estranged (Scharp, 2020; Scharp, Thomas, & Paxman, 2015). Logic would follow that critical health incidents like the COVID-19 pandemic, then, might prompt estranged adult children to reconsider their relationship with their parents.

The COVID-19 pandemic began in December 2019 and has an approximately 2% fatality rate (Fauci et al., 2020). Because of social isolation measures to help reduce the spread of COVID-19, many family groups have banded together as they were restricted to their homes (Usher et al., 2020). Farber, Ort, & Mayopoulous (2020) suggested that families of all types are spending more hours together at home as a means of connecting. Yet, for people who are less able to socialize, isolation is taking its toll. Banerjee and Rai (2020) go so far to say that as a result of the pandemic, "The modern world has rarely been so isolated and restricted . . . individuals are waking up every day wrapped in a freezing cauldron of social isolation, sheer boredom and a penetrating feeling of loneliness" (p. 525). This pandemic consequently increases social isolation, exacerbates vulnerabilities, and can limit people's ability to garner support from people outside of those with whom they are quarantining. This social isolation is particularly significant considering "not even prolonged contact at a distance can make up for the lack of intimacy provided by sharing gazes or actual bodily contact within a space of physical proximity" (Boccagni, 2012, p. 273). This might be one reason that pregnant women experience significantly lower perceived social support during the pandemic (Matvienko-Sikar et al., 2020).

Even in absence of a pandemic, people often turn to their family members to find meaning in the chaos when they experience a major disruption (Theiss, 2018). Thus, adult children in the process of estrangement from their parents likely had to reassess the role they wanted their parents to play in their life in absence of support and in response to cultural expectations. This supposition is supported by the estrangement research that suggests that estranged adult children persistently question whether or not they should decrease the distance they have created (Scharp, Thomas, & Paxman, 2015). Relatedly, a catalyst like the pandemic might exacerbate the ambivalent experiences of adult children who simultaneously feel like the estrangement was a healthy solution to an unhealthy environment while also

triggering feelings of guilt about not fulfilling expected roles in response to a health crisis (Scharp & Curran, 2018). With this logic in mind, I pose the following two research questions.

RQ1: When faced with a catalyst health event (i.e., the COVID-19 pandemic), how do estranged adult children respond to the potential for reconnecting with their parents?

RQ2: What, if any, emergent themes co-occur to reflect the ambivalence of this experience?

## Method

To answer the research questions, I specifically sought out unsolicited online narratives from estranged adult children for five reasons. First, Boss (2006) contends that narratives are a therapeutic tool to help people make sense of and cope with the ambivalence associated with ambiguous loss. Second, she elaborates that when coping with ambiguous loss, people who do not share their story voluntarily, like those elicited from an interview script, experience increased feelings of helplessness. Third, unsolicited narratives allow people to share their story their way without fear of judgement (Langellier & Peterson, 2004). Fourth, I chose online narratives because engaging in traditional face-to-face interviewing during a pandemic posed significant health risks. Finally, research suggests that estranged adult children might potentially live with their parents even though they have engaged in other practices to distance themselves (Scharp, 2019). Consequently, I decided it was important that I did not ask any participant to risk their personal safety by sharing their story in a setting their parent(s) could overhear. As such, one of the primary uncertainties adult children in the estrangement process experience is safety uncertainty given the typically negative relationship they have with their parent(s) (Scharp & McLaren, 2018). With these reasons in mind, I argue that unsolicited online narratives provide robust information that might cause the least amount of harm.

## Data collection

Before data collection, the Institutional Review Board determined that this study was not Human Subjects Research because the data was posted to the public domain. This designation also afforded me the opportunity to collect data immediately. To gather a corpus of narratives about estranged adult children's experience with the COVID-19 pandemic, I purposefully sampled from the subreddit r/EstrangedAdultChild. This subreddit is a community for adult children who have purposefully decided to distance themselves with one or both parents because of abuse, neglect, or ongoing conflict. Because I was interested in the ways the pandemic might serve as a disruption in the estrangement maintenance, I sampled all narratives that included the words, COVID-19, pandemic, epidemic, and

(Corona)virus. I sampled a total of n = 35 stories at three different time points in 2020: (a) April 3rd, (b) April 25th, and (c) June 12th. The first narrative was posted on March 12th and the last narrative was posted on May 29th. Thus, the 35 stories are an exhaustive list of narratives from that subreddit pertaining to the pandemic during the designated time frame.

Users of r/EstrangedAdultChild made anonymous posts using a username. Because some usernames might include actual names, I refer to the narratives by number to avoid unintentionally including identifiable information. I did, however, collect usernames to verify that none of the stories were narrated by the same person. Otherwise, there was no demographic data available. Overall, the data corpus resulted in 40 pages of single-spaced text.

## Data analysis

Following the steps introduced above, I first conducted a thematic analysis (see Table 2) and held the emergent themes to Owen's (1984) standards for thematic analysis. At this point, I also verified my analysis using the techniques of referential adequacy and negative case analysis (Kidder, 1981; Lincoln & Guba, 1985).

To analyze RQ2, I engaged in the second step of thematic co-occurrence analysis by developing a co-occurrence matrix (see Table 1). To develop a co-occurrence matrix, I (a) created a row for each narrative and then labeled the overarching column (see Table 1); (b) made a column for each of the seven emergent themes; (c) went row by row and marked an X every time a theme emerged for that participant; and (d) noted instances of forcefulness by adding a + to the Xs or letters that corresponded to a particular forceful account. For example, in Narrative #31, the author shouted, "WE DESERVE BETTER AND NO DAMN PANDEMIC WILL SEND ME BACK TO THEM!" (as indicated by capital letters and exclamation mark), thus I indicated this forcefulness in the table with a + in the column for the theme, "reaffirmed decision." I also noted forcefulness when participants described a particular experience in evocative detail.

For the final and most important step of thematic co-occurrence analysis, I examined the relationships between the themes. Specifically, I assessed the data for any themes that were unrelated (i.e., independent from) to any other emergent themes. Next, I determined whether any themes co-occurred and whether these co-occurring themes suggested ambivalence (i.e., both themes denoted a contradictory sentiment) or whether these co-occurring themes suggested a complementary relationship (i.e., both themes denoted a similar sentiment). In any case of co-occurrence, I marked the corresponding paired themes with letter and numbers to illustrate which themes co-occurred. For example, when examining Table 1, the first two related themes marked by A1/A2 suggest an ambivalent relationship given the ways the themes are contradictory. Ambivalent relationships also emerged for theme pairs B1/B2 and C1/C2. Because the co-occurrence matrix also allows for simultaneous coding, a complementary relationship B2/C2 also emerged. Because

**Table 2** Theme Descriptions and Exemplars

| Theme Description | Exemplar |
|---|---|
| **Reactions to No Contact** | |
| **Fear of Getting Contacted**: The pandemic triggered a fear that already distanced parents would attempt contact. | Virus fear: getting a call. I am deeply concerned and don't want anyone to be sick or god forbid die. However, my mind is making this all about me and I am petrified of getting contacted. (Narrative #1) |
| **Sadness and Hurt After No Contact**: Estranged adult children reported being sad and hurt that, given the circumstances, their parents did not try to reach out to them. | Expecting to hear from NC parents, yet received nothing. I feel silly for feeling hurt as it was my decision to go NC, but you never truly lose hope that one day they'll come around. I thought this virus would be a turning point, but I should have known better. (Narrative #16) |
| **Grateful for No Contact**: Estranged adult children reported being relieved they did not hear from their estranged parents. | In general, I don't want her to contact me. I don't want her to contact me, but every now and then it hurts that she doesn't. (Narrative #25) |
| **Reactions to Contact** | |
| **Welcomed Contact and Pressure to Reconnect**: Estranged adult children reported genuinely appreciating their parents checking on them. This contact created pressure to reconnect, which was often welcomed because the adult child was missing their parent. | Understandably, during the darkest moments, I was looking for love and support wherever I could find it, including with my toxic LC parents. At first, they seemed generally worried about me and I enjoyed having another set of people to facetime and call from isolation. (Narrative #8) |
| **Unwelcomed Contact and Pressure to Reconnect**: Estranged adult children were upset that their parents contacted them, regardless of the reason. They saw this contact as either too little, too late, or an unwelcome bid to reconnect. | She just called me through facebook. No message. Just a missed call. Bit late "mum". And f you. I'm not sad. I'm mad. And screw you. Good luck with COVID19. But I'm not acknowledging your existence. Just as you have done to me. (Narrative #6) |
| **Responses to Contact** | |
| **Confusion Around Contact**: Estranged adult children did not know what to make of their parent reaching out. They could not figure out why their parent contacted them nor what they would do in response. | She is either going to be ok, or she will decline. I can't even wrap my head around this. Do I call her? If I do call I don't want to hash things out, I'm going to try and talk her into going to the hospital and I don't think she will go. I don't know what to do. (Narrative #10) |
| **Reaffirmed Decision and Desire for Maintained Distance**: Regardless of the pandemic, estranged adult children wanted to maintain distance with their parents. In some instances, parent responses to the pandemic reaffirmed adult children's decision to create distance in the first place. | My mother who I've been estranged from for 12 years sent me a newspaper article. I think she was trying to be thoughtful, in her own narc [narcissistic] way, but IDK. I didn't want to respond, but I did very simply saying wow. Fortunately, there was nothing more. These ppl do the best they can, but she will always be an ass who always put herself first. (Narrative #22) |

there were multiple ambivalences, I then asked the three questions to better characterize their relationship to determine: (a) pervasiveness (b) direction, and (c) balance. I then interpreted each of these relationships to characterize the quality of those relationships.

## Data verification

To verify this analysis, I engaged in five interrelated practices: (a) referential adequacy, (b) negative case analysis, (c) investigator triangulation, (d) audit trail process, and (e) exemplar identification (Lincoln & Guba, 1985). First, I split the data in half, setting aside the second half of the data while I analyzed the first half. After I reached theoretical saturation at Narrative #9 (see Corbin & Strauss, 2008), I then separately analyzed the second half of the data before comparing the first set to the second set. Because there were no differences between themes, I determined I met the standards of referential adequacy. Second, I revised my thematic analysis so that the themes in sum accounted for all the emergent codes in the data. Accounting for 100% of the data in this way meets the standards of negative case analysis, which Kidder (1981) argues is the most rigorous form of data verification. Third, I shared my anonymized data with an experienced qualitative researcher who I then met with to discuss my findings, especially pertaining to my interpretations of the co-occurrence matrix. After discussing the thematic labels, she verified the thematic analysis. We then discussed the relationships that emerged in RQ2. She identified the same ambivalent relationships and made note of the same patterns when using the criteria of (a) pervasiveness, (b) direction, and (c) balance. Finally, I kept a detailed audit trail throughout the process which aided my selection of the exemplars presented below.

## Findings

### RQ1: Pandemic-based responses to reconnection

Overall, seven themes emerged organized by three larger suprathemes: (a) reactions to no contact, (b) reactions to contact, and (c) responses to contact (see Table 2).

*Reactions to no contact*

As argued, medical issues often trigger familial expectations for care even when parents and children are estranged (see Scharp & Curran, 2018). Consequently, estranged adult children discussed anticipating hearing from their parents during the pandemic although they responded in three different ways: (a) fear of getting contacted, (b) sadness and hurt after no contact, and (c) gratitude for no contact. Although not particularly recurrent, estranged adult children spoke with force about their fear of getting contacted. These narrators had no desire to speak with their parents and lamented the possibility that the pandemic would give their parents some sort of excuse to reconnect. Alternatively, some estranged adult children expressed sadness and hurt after not being contacted. They typically posed questions about what type of parents would ignore their children during a pandemic. Finally, some estranged adult children were grateful for not hearing from their parents. These narrators hypothesized that being contacted would only lead to conflict, heartache, or worse. In sum, these three themes represent an array of reactions.

*Reactions to contact*

Although some estranged adult children were left to wonder what contact might be like, others recounted what their reactions were when their parents reached out. Despite some estranged adult children who welcomed contact and the pressure to reconnect, it was much more likely that the contact and pressure to reconnect was unwelcomed. Of note, the pressure to reconnect resulted from both family member interactions and unspoken cultural pressures that suggest, at the very least, adult children should express concern for their parents. For example, one narrator explained the pressure he experienced from his brother, "My brother told me after I asked him in a text how his family and him are doing, that I should be asking how the parents are doing" (Narrative #31). This example echoed many narrators who also mentioned that their other family members pressured them to reconnect. At other times, the pressure to reconnect was based on societal expectations. One estranged adult child wrote:

> I can't bear to go back to the same mental prison of manipulation, control and emotional blackmail I was in before but at the same time I don't hate her or wish her ill and feel so bad about not offering my help at a time like this when even random strangers are pushing notes through doors offering help. I wouldn't think twice about offering help to any other elderly person in need but feel like I must be a really terrible person for not being able to bring myself to phone her. I thought I had got beyond these negative feelings about myself but this pandemic has brought them back tenfold. (Narrative #24)

Again, this exemplar illustrated the way the pandemic triggered estranged adult children's uncertainty about whether they were good people. Indeed, this finding reinforces research that suggests estrangement guilt is pervasive and unwelcomed (Scharp & McLaren, 2018). This pressure, however, often did not appear to change opinions as the narrator of story 31 concluded, "I've learned from my abusive family to never go back to them, WE DESERVE BETTER AND NO DAMN PANDEMIC WILL SEND ME BACK TO THEM!" (note the forcefulness of their conviction in Table 1). Overall, adult children in the estrangement process did not illustrate a desire to reconnect, echoing the existing estrangement literature (Scharp, 2019).

*Responses to contact*

After recovering from their initial reactions, some estranged adult children expressed confusion around the contact, whereas more typically, narrators reaffirmed their decision and desire for maintained distance. Even if an adult child talked to their parents as a result of the pandemic, the interaction went so poorly that they immediately took steps back, often commenting that they, "should have known better" (Narrative 16). Some even went so far to liken their parents to the novel coronavirus. One adult child (i.e., Narrator #2) recalled:

> I already got a comment from a family member saying that it really makes you realize that other stuff I went through wasn't so bad. No, it makes me realize that my abusive parent is also a disease. I think people are waiting for me to have an epiphany that I should keep horrible people in my life in case something happens. Good luck with that.

Consequently, even when they described different scenarios that led them to this conclusion, adult children often decided that they were better off more estranged than less. Taken together, these three suprathemes illustrated seven, sometimes contradictory, reactions and responses to the pandemic. Next, I discuss whether any of these emergent themes co-occurred.

### RQ2: theme co-occurrence

Based on the co-occurrence matrix (see Table 1), four distinct (non) relationships between the themes emerged to illustrate the complexities and ambivalence surrounding these estranged adult children's experiences: (a) theme independence, (b) ambivalent unilateral co-occurrence, (c) ambivalent unbalanced co-occurrence, and (d) complementary theme co-occurrence. Indeed, the co-occurrence matrix not only provided insight into the themes that co-occurred but also suggested implications for those that did not.

*Theme independence*

Only one theme (see Table 1) emerged that was completely unrelated to any other theme, which was the fear of being contacted. This is likely because the lack of contact eliminated the possibility of contact reactions and responses. The absence of co-occurrence with theme, however, still provides insight into the experience of estrangement during the COVID-19 pandemic. For example, the themes of fear and sadness/hurt did not ever manifest together which could suggest that the fear adult children express is related to the presence of their parents (e.g., fear of negative interaction) as opposed to their absence (e.g., fear their parents do not love them). In addition, fear also never coincided with gratitude such that fear might supersede any ambivalent feelings of relief. As such, the co-occurrence matrix can even enhance the interpretation of themes where co-occurrence is absent.

*Unilateral co-occurrence*

In addition to theme independence, the co-occurrence matrix also revealed instances when the presence of one theme always manifested with another. Specifically, this unilateral ambivalence manifested in two instances across the data corpus: (a) if an estranged adult child indicated that they were grateful for not being contacted by their parent(s), then they also expressed sadness and hurt they were not contacted (i.e., marked by A1/A2 in Table 1) and (b) if an estranged adult child indicated that contact from their parent was welcomed, then they also commented that the contact was simultaneously unwelcomed (i.e.,

marked by B1/B2 in Table 1). The first condition (i.e., A1/A2) was balanced such that both themes emerged with similar frequency and similar force. For example, one estranged adult child explained:

> On one hand, I'm glad I don't have to deal with it, on the other ... I don't know why I'm still disappointed to find they don't really care about me. Like ... I know, I really do, and I've come to terms with it. But it still sometimes catches me off-guard. They'd rather us all die of COVID than admit they could be in the wrong. (Narrative #34)

As this estranged adult child explained, their parents' lack of initiative in reaching out reflected a lack of care that created disappointment (i.e., sadness/hurt). As such, all of the participants who articulated some sense of relief or gratitude for the lack of contact ("glad I don't have to deal with it") also questioned how their parent could show such lack of interest or care. This finding suggested that parents who have been distanced by their children might be in a double-bind.

This catch-22 also was reflected in the second condition (i.e., B1/B2) when adult children expressed simultaneous positive and negative reactions to contact and attempts at reconciliation, but in an unbalanced way. For example, one narrator shared:

> I've been NC [no contact] for just under a year, and finally starting to get the hang of it. Until today! This morning, I received an email asking if I was ok, given the current state of world affairs. I responded so my family didn't have to assume I was dead and find myself going "soft". The message was genuinely nice, has kisses, and is asking if I need aid of any kind. I do. It's hard not to give in and fall back into everything being okay. Logically though, the stress will ultimately return along with the judgement ... It makes me have a sick stressed out mind and stomach. Messages could say we miss you but the next one says I'm a horrible person for all their suffering. (Narrative #4)

In this story, the narrator clearly expressed their approval of their parent's message (i.e., "genuinely nice") and then simultaneous disapproval about what that positive message might invite (i.e., "one that says I'm a horrible person"). Thus, this finding reveals that whether a parent reaches out or not, the best possibility for parents who desire reconciliation is ambivalence. Simply, parents who do not reach out are accused of being uncaring; those who do are met with unwelcomed reactions. Furthermore, it is clear that although these two themes co-occurred, unwelcomed reactions were much more salient across the narratives (i.e., unbalanced). In other words, unlike the sadness/grateful ambivalence that frequently co-occurred together with similar force, the welcome/unwelcome ambivalence was unbalanced because welcomed reactions were fewer, accounts less repetitious, and less forceful. This suggested that even the hope of an ambivalent responses seems unlikely when it comes to whether or not estranged adult children would welcome contact from their parents.

*Unbalanced co-occurrence*

The co-occurrence matrix revealed one instance of semi-pervasive ambivalence when two themes often co-occurred (i.e., marked by C1/C2 in Table 1). Indeed, confusion around contact typically resulted in a reaffirmed decision for distance. One narrator lamented:

> My relationship with them just makes me feel lonely and angry and sad … I'm so conflicted and frustrated with myself. I'm so scared she'll die, or he'll die. But really, what does it matter? What changes? Why do I care? What do I currently expect the outcome to be that the thought of them dying brings me such overwhelming sadness … I've given them a hand they've taken my whole arm. I haven't responded, I won't respond, but I want to. I know no good has come from letting them into my life time and time again … It would all be the same as it's always been. I could give her everything and she still wouldn't be satisfied, and she'd be ungrateful about it. (Narrator #9)

As all of the questions in this example indicate, this narrator was confused about what contact with their parents meant but also reaffirmed their decision for distance because reconnection would not end well. This ambivalence is in contrast to the many adult children who did not appear confused at all (i.e., unbalanced). Rather, they explained that contact reinforced their desire for distance without question.

*Complementary co-occurrence*

Finally, there was one instance of unbalanced complementary themes. Even though estranged adult children more typically emphasized that contact was unwelcomed, they also addressed their reaffirmed decision for distance (i.e., marked B2/C2 in Table 1). Unlike the co-occurring themes that reflected ambivalence, these two themes co-occur to reinforce one another. For example, one estranged adult child discussed her reaction to being contacted by her mother:

> She just called me through Facebook. Once. At her late night time early morning. For sure she was high or drunk again. No message. Just a missed call. Bit late "mum". And F you. I'm not sad. I'm mad. And screw you. Good luck with COVID19 but I'm not acknowledging your existence. Just as you have done to me. You can't even muster the energy to call my God damn phone for FREE on WhatsApp? Or an email? Or a message? It's been 5 months since contact and I don't regret it. You're dead to me. (Narrator #6)

As this example so clearly illustrates, many adult children expressed serious displeasure when their parent contacted them. For some, they believed their parent was trying to manipulate them or that their attempt was a little too late. The presence of this complementary co-occurrence also potentially alludes to a potential caveat researchers should consider when studying ambivalence.

Throughout this case, estranged adult children readily expressed contradictory anticipations and reactions to being contacted by their parents. Yet, there is some research on ambivalence that suggests that when it is at its highest, people might cling to one particular viewpoint in the extreme and never express the alternative (Pratt & Doucet, 2000). Put simply, Pratt and Doucet suggest that in certain instances, ambivalence might manifest as absoluteness or self-righteousness. With this in mind, thematic co-occurrence analysis might help researchers in a couple ways. First, it is possible that even if emphatic complementary co-occurrence is articulated by some participants, other expressions across the data set might still illustrate co-occurring ambivalence. If that is not the case, and every person expressed a forceful sentiment, then researchers should attend closely to a co-occurrence matrix column that is both independent and forceful. Acknowledging this possibility and relying on the co-occurrence matrix can help researchers attune themselves to multiple possibilities that are not inherently apparent.

Overall, the ambivalence that emerged in these accounts reveal that what might appear as glimmers of hope (i.e., hurt/sadness for no contact and welcomed contact) should be considered alongside tougher realities (i.e., relief for no contact and unwelcome contact). Indeed, the analysis suggests that parents might be in a no-win situation. For adult children, better recognizing their ambivalence might either encourage them to seek clarity or counseling or might encourage them to hold on to the negative affect that keeps them distanced from their family (Scharp, Thomas, & Paxman, 2015). Next, I discuss the theoretical and methodological implications of characterizing ambivalence and the usefulness of thematic co-occurrence analysis respectively.

## Discussion

The primary goal of this study was to advance a new analytic technique thematic co-occurrence analysis that simultaneously could support the aims of researchers doing interpretive work and also depict the relationships between patterns in a robust way. Based on the case study of estranged adult children during the COVID-19 pandemic, seven themes emerged: (a) fear of being contacted, (b) sadness and hurt by no contact, (c) grateful for no contact, (d) welcomed contact and pressure to reconnect, (e) unwelcome contact and pressure to reconnect, (f) confusion around response, and (g) reaffirmed decision for distance (Table 2). Rife with ambivalent relationships between these themes, the thematic co-occurrence analysis revealed four interrelationships: (a) theme independence, (b) unilateral co-occurrence, (c) unbalanced co-occurrence, and (d) complementary co-occurrence. I now discuss how these findings inform an interpretive heuristic of ambivalence before discussing the implications of thematic co-occurrence analysis for ambivalence and qualitative research in general.

**Advancing an interpretive heuristic for understanding ambivalent experiences**
Grounded in the fundamentals of the interpretive paradigm, thematic co-occurrence analysis serves to help researchers identify the relationships between themes through the use of a co-occurrence matrix. Specifically, researchers can adjudicate (a) whether themes are complementary or ambivalent, (b) whether multiple relationships manifest, (c) whether the relationships between themes emerge within or across units of analysis (e.g., suprathemes) or even research questions, and (d) the quality of the relationship that emerge.

As such, findings based on this case study not only depicted the way themes supported (i.e., were complementary) or contradicted each other (i.e., were ambivalent), but also emphasized the quality of the relationships between the themes. Emergent relationships between themes served as the foundation for a general interpretive heuristic for studying ambivalence. The relationships between the themes and manifested along three continua: (a) sporadic/pervasive, (b) unilateral/bilateral, and (c) unbalanced/balanced (see Figure 1).

First, thematic co-occurrence analysis attuned the researcher to the pervasiveness of the co-occurrences. In this regard, thematic co-occurrence analysis can help researchers determine whether the experience of ambivalence is more sporadic (i.e., occurs infrequently and with little force) or more pervasive (i.e., occurs frequently with more force). Understanding pervasiveness is particularly useful when multiple co-occurrences emerge in the data because it draws attention to whether co-occurrences are more robust than others. Second, the co-occurrence matrix visualizes whether theme A1 co-occurs with theme A2 (i.e., a unilateral relationship) or whether theme A2 also co-occurs with theme A1 (i.e., a bilateral relationship). Finally, thematic co-occurrence analysis can illuminate whether one theme dominates the co-occurring relationship (i.e., unbalanced) such that one theme is recurrent, repetitious, and forceful compared to its partnered theme that is less recurrent, repetitious, and forceful. Understanding balance can draw attention to a more nuanced quality of the co-occurrence compared to whether or not it is merely pervasive. When taken together, researchers might use these continua to better understand the quality of the co-occurrences in addition to simply identifying that the relationship emerged. In attending to ambivalence quality, this study extends existing ambivalence theorizing from merely focusing on types of ambivalence (e.g., sociological and attitudinal, see Connidis & McMullin, 2002; Jonas, Broemer, & Diehl, 2000) to the orientation to and characteristics of it.

Indeed, the present study holds promise for approaching the study of ambivalence as a general orientation and in a systematic way. Existing research often treats ambivalence as an experience to eradicate (e.g., Priderit, 2000). Yet, Freud noted that ambivalence is not only expected but necessary; everyone experiences ambivalence (Costello, 1993). To date, researchers within communication studies and across disciplines (e.g., business, health, political science, psychology, etc.) lament the ways traditional conceptualizations and operationalizations of ambivalence obfuscate the nuance of people's complex experiences or simply overlook them all
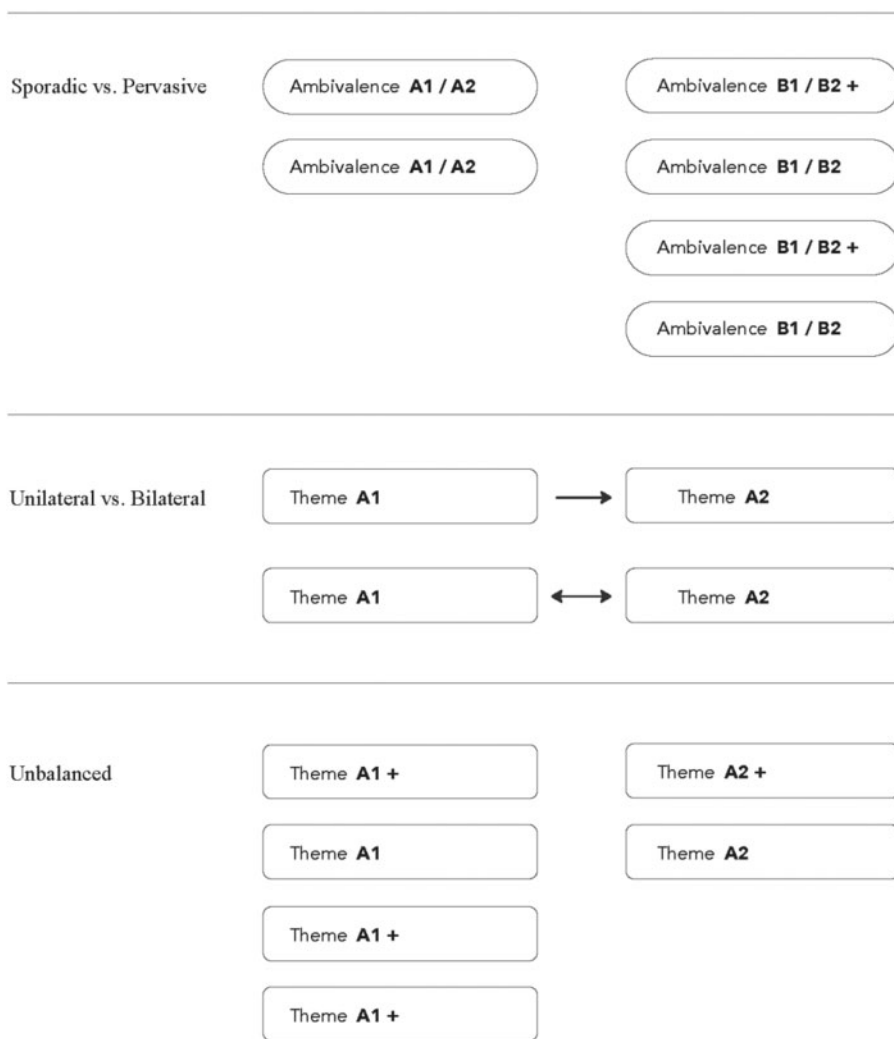
**Figure 1** Characterizations of co-occurring relationships.
Note: Letters A and B represent co-occurrences. Numbers indicate how many themes comprised each relationship. A + indicates forcefulness of each theme.

together (see Gomez, Arteaga, Villasenor, Arcara, & Freihart, 2019; Schneider & Schwarz, 2017; Song & Eveland, 2015). Anthropologists have even gone as far to argue that cultivating an "analytic of ambivalence is our best strategy for understanding what is going on around us" (Kierans & Bell, 2017, p. 23). Yet, Kierans and Bell contend that researchers studying ambivalence are stuck in a methodological paradox, often forced to ignore contradictory lived experiences as simple descriptions of the ways things are. In this regard, applying this emergent communication theory of

ambivalence means accepting that things are not readily clear and engaging in thematic co-occurrence analysis means not only identifying that ambivalence is manifesting, but illuminating the qualities in which it is doing so. Thus, researchers from within and outside of communication might apply this heuristic to theoretically attune themselves to the possibility for ambivalence and then explore the conditions of how it manifests. Researchers can, then, better describe a world that allows for messiness and complexity of actual life.

### Introducing a new method for understanding relationships between themes

As argued, thematic co-occurrence analysis is a useful analytic tool for scholars interested in the study of ambivalence. Yet, the usefulness of thematic co-occurrence analysis does not only end with ambivalence research. Rather, a multitude of scholars engaging in interpretive research could find thematic co-occurrence analysis of use. For example, thematic co-occurrence analysis would be an excellent analytic for scholars engaging in constructivist grounded theory (see Charmaz, 2014). Constructivist grounded theory, in particular, emphasizes the inductive, comparative, emergent, and open-ended components that coalesce into a plausible relationship proposed among (sets of) concepts. Although constant comparison is useful to develop themes and begin the theorizing process, the second and third steps of thematic co-occurrence analysis could better identify and represent the relationship between the themes. These steps could easily be conducted alongside the requisite theoretical sampling and even attune the researcher to ask questions about emergent relationships.

Next, thematic co-occurrence analysis could offer a useful analytic approach in the "secondary cycle coding" stage of Tracy's (2020) iterative phronetic approach. Indeed, this is because thematic co-occurrence analysis would serve to synthesize earlier primary cycle coding for themes. Furthermore, thematic co-occurrence analysis would be useful because elucidating ambivalence is a key aspect of beginning research that encourages researchers to focus on a problem or dilemma and develop attendant wise and practical action (a key part of phronesis).

With regards to Saldana's (2015) recognition of simultaneous coding, thematic co-occurrence analysis affords researchers a methodological technique to see how one theme might be classified in more than one way. As it happens, ambivalences B1/B2 and C1/C2 also yielded a complementary relationship B2/C2. In this regard, thematic co-occurrence analysis provides a method to realize the idea of simultaneous coding.

Finally, creating a co-occurrence matrix and interpreting that matrix might also be useful in bridging interpretive studies that pair cognitions with communicative actions or opportunities with obstacles. For example, and germane to the case study, Scharp and McLaren (2018) described estrangement uncertainties (i.e., cognitions) and their management practices (i.e., communicative behavior). It is likely that a co-occurrence matrix could have provided useful information about how particular

uncertainties were related to particular management practices. Because of its potential to inform any context, thematic co-occurrence analysis could consequently help interpretive researchers from any field, illustrating its general usefulness.

**Limitations and directions for future research**
As with all studies, limitations exist. I begin by addressing the specific limitations of the case study before turning to potential limitations of the method itself. First, because of the online data collected, I have no demographic information about my participants. As argued, I based my collection on a multitude of theoretically-informed reasons but acknowledge that information such as age, race, gender, sexual identity, and socioeconomic status might have provided context for why adult children sought distance, how well they were able to accomplish and maintain distance, and to what extent they felt obligated to care for their parents. In addition to lacking demographic information, another limitation of this study is that online narratives did not allow me to ask follow-up questions about the specific relationships between the themes that emerged. It is certainly possible that participants could have had their own interpretations about why certain themes were related. Nevertheless, these relationships between the themes emerged regardless of prompting. It is even possible that asking participants about their ambivalent responses would create cognitive dissonance and psychological discomfort (Monteith, 1996). Finally, it is possible that collecting online data from a site like Reddit could manifest in a disproportionate amount of negativity. Yet, existing interview-based research supports adult children's claims that they generally do not want to reconcile with their parents and are actively trying to maintain the distance they have been able to create (Scharp, 2019).

Next, limitations of thematic co-occurrence analysis also exist. Without attending to the full spectrum of recurrence, repetition, and forcefulness, researchers might miss the opportunity to explore the nuances of the relationships between themes or overlook the interpretive quality of some participant accounts. In doing so, thematic co-occurrence analysis might not be much more useful than conducting a content analysis. Thus, in the future, researchers should carefully attend to not only interpreting the emergent themes first, but also carefully interpreting the relationships between the themes. Indeed, thematic co-occurrence analysis should encourage researchers to include more examples and interpretations instead of relying on the matrix to tell the story. Furthermore, thematic co-occurrence analysis might be a time-intensive method as it requires the researchers to be immersed in each participant account not only independently but also in conversation with each other. Finally, it is possible that researchers collaborating to construct a co-occurrence matrix might disagree, especially considering conducting interpretive research is subjective. In these cases, I recommend engaging in the peer-debriefing process (see Lincoln & Guba, 1985) so that collaborators can argue through differences and come to a consensus.

Despite these limitations, when conducted with interpretive ontology and epistemology in mind, thematic co-occurrence analysis can promote heurism, evocativeness, and transferability. In sum, thematic co-occurrence analysis holds robust potential to illustrate the ways that lived experience is complicated and messy. In doing so, thematic co-occurrence analysis might help researchers resist the pressure to present experiences in more simplistic ways that do not do their participants or their participants' experiences justice.

Data Availability Statement: The data underlying this article are available on Reddit at https://www.reddit.com/r/EstrangedAdultChild/. The datasets were derived from sources in the public domain.

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