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Keep Your Friends Close: Ostracism via Social Media as a Function of Relational Closeness

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KEEP YOUR FRIENDS CLOSE: OSTRACISM VIA SOCIAL MEDIA AS A FUNCTION OF

RELATIONAL CLOSENESS

RYAN BARTA

32 Pages

Ostracism can occur on social media sites just as easily as in face-to-face interactions, but the outcomes of such events may depend on the closeness of the preexisting relationship. A needs-threat model was employed alongside measures of relational devaluation to collect data from 343 participants. The participants were assigned to one of three groups: close tie, loose tie, or control. Participants in the loose ties condition reported less basic needs fulfilment than those in the close ties condition. Additionally, participants in both experimental conditions reported similar feelings of relational devaluation compared to control participants. A post-hoc exploratory analysis of attributions also found that relationship-saving attributions were uncommon among both experimental conditions; instead, those in the close-ties condition often gave no attribution while those in the loose-ties condition favored face-saving attributions.

KEYWORDS: Ostracism; Social media; Likes; Relational devaluation

KEEP YOUR FRIENDS CLOSE: OSTRACISM VIA SOCIAL MEDIA AS A FUNCTION OF

RELATIONAL CLOSENESS

RYAN BARTA

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KEEP YOUR FRIENDS CLOSE: OSTRACISM VIA SOCIAL MEDIA AS A FUNCTION OF

RELATIONAL CLOSENESS

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CHAPTER I: INTRODUCTION

In a world where technology is becoming ever more omnipresent in everyday life, many interpersonal phenomena are beginning to appear in online interactions (Guadagno, Okdie, & Muscanell, 2013). For example, ostracism, which is generally defined as being ignored and excluded by a group, has occurred in face-to-face interactions for millennia (Williams, 2001). However, with more and more interactions moving into digital spaces, ostracism has begun to emerge in these domains as well. Ostracism historically has been used as a social strategy to punish deviance and maintain group identity and has been found both cross-culturally and in both human and non-human animals (Raihani, Thornton, & Bshary, 2012). There can be benefits to doing so, as groups which ostracize deviant members tend to become more cohesive and strengthen their identity (Gruter & Masters, 1986; Williams, 2001). Despite the adaptive nature of ostracism from the group's perspective, it can be devastating from the perspective of the individual being ostracized. In order to combat this, humans have developed myriad strategies to avoid ostracism and cope with it once it happens. Examples of these strategies include attempting to reintegrate into a group by attending more closely to social information and attempting to reestablish meaningful existence and control once ostracism has occurred (Williams & Nida, 2011).

Seeking out and receiving social support is a vital strategy for coping with the negative feelings which can emerge from a variety of stressors, including ostracism. One way that one's support system can be accessed is by posting on social media (Zell & Moeller, 2018; Carr, Wohn, & Hayes, 2016). People will use social media to post about a variety of topics with a variety of valences, often looking for social support via simple acknowledgement and validation (e.g., comments, emojis, 'Likes'). However, not all sources of social support are equal; research

has suggested that receiving a 'like' from a person with whom a poster is relationally close will result in a greater degree of perceived supportiveness than receiving the same cue from a person who is less relationally close to the poster (Carr, Wohn, & Hayes, 2016). But what happens when the expected support is not received? When someone does not receive the attention they expect they can experience this as a form of ostracism (Wesselmann, Wirth, & Bernstein, 2017; Williams, 2009). This begs the question, then, whether the absence of such support from socially significant others is more likely to be interpreted as ostracism, and thus experienced as more emotionally painful, than the absence of support from less relationally significant others. The present research explores these questions empirically using experimental methods and measures common to ostracism literature.

Ostracism

Among social organisms, humans in particular have an especially strong desire to belong. For this reason, threats to that need, such as ostracism, can have serious negative physical and psychological consequences (Baumeister & Leary, 1995; Covert & Stefanone, 2018; Hales, et al., 2018). Occurrences of ostracism can vary from perilous extremes such as exile or solitary confinement in prisons to more mundane settings, such as not making eye contact with a coworker in the hallway. Given that there exists such variance in extremity of ostracizing events, it is unsurprising that a study found that a sample of 40 participants reported experiencing around one ostracizing event per day (Nezlek et al., 2012). In the present day, there are more ways of experiencing ostracism than ever before due to the popularity of social media and online interconnectedness. Despite the frequency of ostracizing events and the fact that experiencing ostracism is inherently stressful (Nezlek et al., 2012; Williams, 2001), most people do not feel fundamentally separate from their social networks and do not have any traditional symptoms of

chronic ostracism. Chronic ostracism is characterized as when a person is "continuously or repetitively ignored and excluded by important people in their lives" (Williams, 2007 p.442); chronically ostracized individuals often develop feelings of alienation, helplessness, depression, and a general sense of meaninglessness (Williams, 2009; Riva et al., 2017).

For most people, ostracism is not regularly committed by those close to them or on a constant basis. However, for those who do experience chronic ostracism, the results can be devastating. Baumeister and Leary (1995) cited a significant body of research which suggests that those who feel socially isolated experience significant health risks compared to those who do not: higher risks of heart attacks (Lynch, 1979), higher levels of stress hormones (Kiecolt-Glaser et al., 1984), and higher risks of suicide (Trout, 1980). For students, feelings of ostracism and exclusion have also been linked to greater absenteeism and lower self-esteem (Liu, 2019). These negative outcomes can be exacerbated by the fact that, unlike physical pain, emotional pain caused by ostracism can be, and often is, relived by the victims (Chen et al., 2008). The sum of this research suggests that Baumeister and Leary's (1995) description of humans having a "*need to belong*" was not an arbitrary choice of words. Feelings of belonging and social inclusion are paramount to a person's physical and psychological well-being; their chronic absence can cause negative health outcomes that are on par with smoking and obesity (Holt-Lunstad, Smith, & Layton, 2010).

Social Media

The definition of "social media" which was used to inform this study is that which was proposed by Carr and Hayes (2015):

> Social media are internet-based channels that allow users to opportunistically interact and selectively self-present, either in real-time or asynchronously, with both broad and

narrow audiences who derive value from user-generated content and the perception of

interaction with others. (p.50)

This definition provides important specificity in describing exactly the types of online

interactions that are being examined in the present research. However, the present research only

examined social networking sites rather than social media at large. Notably, a site such as

Twitter falls under the definition of social media, but has some core differences from social

networking sites such as Facebook or Instagram. These two sites fall neatly under the definition

of social networking site as established by Boyd and Ellison (2007), which includes the ability to

"articulate and make visible [one's] social network." The distinction between social media and

social networking sites was made because social networking sites involve more explicit

interactions with one's social support system, which is relevant for the exploration of potentially

ostracizing events. Furthermore, it establishes a common ground which links the present research

to other social media research as well as separates it from research involving other online

interactions such as live streaming or video-sharing sites.

Historically, a significant amount of research involving social media has narrowed its

focus to Facebook (Rains & Brunner, 2015). While Facebook is certainly among the largest and

most prominent social media sites, Rains and Brunner (2015) called for future research to

examine more diverse social media platforms. This is important partially because the average

population of Facebook is different than that of other sites; on average, Facebook users are older,

more educated, and more likely to be white (Rains & Brunner, 2015). Alone, this fact would not

be particularly troublesome, as every site will have a unique user base, but attempting to

generalize findings specifically from Facebook can afford disproportionate privilege to its users

compared to users of other sites who do not necessarily share the same demographics or online

habits. Another concern of studying only one site is that social media sites have the potential to become obsolete or fall out of public favor (Boyd & Ellison, 2008). For example, if Facebook rapidly declined in users and a different social media site emerged, questions would be raised concerning whether the Facebook data is generalizable to the new site, or any other site for that matter. For these reasons, the present research has elected to examine two different social networking sites: Facebook and Instagram. This diversification will allow the research to find trends in social networking platforms more generally, rather than trends within a specific site. A survey conducted in 2019 by the Pew Research Center found that Facebook and Instagram were some of the most popular social media sites among their participants, with participant usage rates of 69% and 37% respectively. This made those two sites reasonable candidates for examination in the present study.

Nonverbal, non-textual cues such as "likes," "+1's," and "hearts" can be powerful tools in conveying interpersonal meaning through social media. These one-click communication tools have been given the label of Paralinguistic Digital Affordances (PDAs; Hayes, Carr, & Wohn, 2016). These PDAs are an example of phatic communication, which consists of small bits of communication with little to no intrinsic meaning. However, Hayes, Carr, and Wohn (2016) note that sometimes technological mechanisms can evolve from their original meaning based on the way that they are used, meaning that for social media users, PDAs or the absence thereof can carry tangible meaning. For example, Rosenthal-von der Putten et al. (2016) found that PDAs are sometimes seen as a type of social reward in the form of acknowledgement and support. In a similar vein, other research has suggested that the PDAs can be multi-purpose; sometimes they reflect approval of the content itself, sometimes they reflect support and encouragement for the poster, and sometimes both (Sumner, Ruge-Jones, & Alcorn, 2018). This logic can help one to

understand data which suggest that the presence or absence of PDAs on social media posts can influence the emotions of the poster (Hayes, Wesselmann, & Carr, 2018). The ways in which people's reactions to a post influence the poster's emotions depend on the attributions that the poster makes for the high or low numbers of PDAs. On one hand, having a post with a high number of likes results in simple interpretations; people believe that their social network is more supportive and interested in what they have to say when thinking about their posts with higher numbers of likes than those with fewer likes (Zell & Moeller, 2018). On the other hand, the absence of PDAs can be more challenging for the poster to interpret; participants interviewed by Hayes, Wesselmann, and Carr (2018) mention a variety of interpretations for a relative lack of PDAs including a negative evaluation of the content (e.g., the poster used the "wrong" filter on a photo), an indicator of the quality of their social relationships (e.g., the viewer is not as interested in what the poster had to share as the poster had expected), or simply was not seen by the people that the poster was expecting (e.g., the post was made at the wrong time or got buried by the site's timeline algorithm).

In order to contribute to the bridging of the literature between social media and ostracism, Hayes, Wesslemann, and Carr (2018) conducted a study using focus groups at a university in the midwestern United States. The facilitators allowed the discussion to flow naturally, but specifically asked questions regarding failures to obtain expected PDAs from people in the participants' lives, as well as questions modified from various ostracism scales. The researchers noted that when participants failed to receive an expected number of PDAs on their posts, they generally reported not feeling ostracized, but rather blamed external factors such as Instagram's sorting algorithm or the timing of the post. Critically, however, the participants indicated that they did feel ostracized when they did not receive expected PDAs from those with whom they

were close or who were otherwise socially important such as a significant other or someone with higher social status. Also discussed was the fact that the absence of socially relevant others was noticed even when the post received what the posters considered an appropriate raw number of PDAs, suggesting that the quality of the support (i.e., who is providing it) is more important than the quantity. These qualitative responses were not specifically hypothesized by the researchers, however, and require further systematic exploration.

Imagined Audiences and Expectancy Violations

One major way that face-to-face communication differs from communication via social media is that face-to-face communication has a clear audience, whereas communication via social media relies on an imagined audience (Litt, 2012). The imagined audience is who a person thinks that his/her message is being heard by in the absence of an explicit audience such as one might have in a face-to-face conversation or a text chat. Research suggests that about half of the time, posters on social media have an abstract, nonspecific audience in mind when they post, and half of the time they imagine a specific audience ranging from one person (e.g., their mother) to a larger but still limited group (e.g., anyone who has watched *Friends*) (Litt & Hargitti, 2016). Given how extensive social media networks can be, who a poster thinks will see their content has important implications for how their messages are presented as well as how the reactions to such posts are interpreted (Litt, 2012).

The failure of a post to receive PDAs from the poster's imagined audience is a form of expectancy violation. When a person imagines an audience for a post, they are inherently setting expectations that members of that audience will see and potentially react to the post (Litt & Hargitti, 2016). Therefore, when this expectation is not met, the poster should experience negative affect which has been established to occur in the face of violated expectancies (Burgoon

& Hale, 1988). This could help explain the findings of Hayes et al. (2018) who found that participants experienced negative affect when failing to receive PDAs from socially relevant others even when the post had received what the poster had deemed an appropriate number of other PDAs. The negative emotions from expectancy violations are likely tied to the feelings of ostracism that participants reported in such scenarios.

Relational Closeness and Relational Devaluation

The idea that social interactions may be experienced differently depending upon the quality of that specific relationship is nothing new. Among the first scholars to discuss in-depth the nature of friendly relationships that people have, Granovetter (1973) established two main types: strong ties and weak ties. Strong ties refer to close relationships such as one might have with a parent, a significant other, or a good friend. Weak ties, on the other hand, refer to those relationships which are less close, such as one might have with a neighbor, a coworker, or friend of a friend. Additionally, Granovetter describes social support as coming primarily from strong ties rather than weak ties. Naturally, this should also extend to interactions which occur via social media as well. Existing research performed focusing on social media seems to similarly imply that close ties carry much of the burden when it comes to social support (Rains & Keating, 2011).

Whenever a relationship exists, there is the potential for relational devaluation, which is described as "feeling less valued as a relational partner (e.g., friend, romantic partner, group member) than one desires" (McDonald & Leary, 2005, p.202). Research has established that relational devaluation is a natural consequence of ostracism (Wirth et al., 2010) because if a person is excluded and ignored, it means that the ostracizer does not value the relationship with the ostracized person. A criticism that has been leveled at some research involving relational

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devaluation is that the person's desire to have a relationship with the excluder is often not measured despite it being a necessary component for one to feel relational devaluation (Gerber & Wheeler, 2014). This criticism will be addressed in the present research by the participants choosing someone in their lives who is either close with them or not particularly close with them. It can be assumed that those participants who describe someone who is close with them are motivated to have a relationship with the person they select and are therefore at greater risk of relational devaluation. Participants who are assigned to choose someone who is not particularly close with them are expected to experience less relational devaluation in the face of a potentially ostracizing situation due to the fact that their relationship is less close in the first place.

The Present Research

The present research intends to explore the effects of failing to receive PDAs on one's social media posts on feelings of ostracism and relational devaluation. Relational closeness is expected to act as a predictive variable for this relationship. In essence, the amount of closeness individuals feel with a given relational partner should influence the degree of ostracism and relational devaluation that they might feel as a result of not receiving expected PDAs. Notably, existing research has suggested that basic-needs threats and relational devaluation may be difficult to tease apart. Hudd and Moscovich (2021) found that the basic needs scores that were threatened in the face of explicit relational devaluation were similarly threatened in the face of implied or potential relational devaluation, such as personal failings. The present research will attempt to expand upon this finding by asking about both basic needs and feelings of relational devaluation separately and noting the differences and similarities in answers to both prompts. To this end, the following hypotheses are presented:

H1: Failing to receive expected PDAs from a social network tie on a social media post will decrease basic needs fulfilment compared to a control group.

H2: Failing to receive expected PDAs from a strong tie on a social media post will decrease basic needs fulfillment compared to a weak tie.

H3: Failing to receive expected PDAs from a social network tie on a social media post will increase feelings of relational devaluation.

H4: Failing to receive expected PDAs from a strong tie on a social media post will cause increased feelings of relational devaluation compared to a weak tie.

CHAPTER II: METHODS

Participants and Design

Three hundred twenty-four participants were gathered online using the undergraduate students at a medium-sized Midwestern University. Of these, 273 were females, 72.7% were white, and the average age of the participants was 19.61 years old. Participants needed only to have an account with either Facebook or Instagram which they have posted on at any point. Extant research has not generally used any strict criteria for frequency of posts, but data was collected regarding how often the participants used social media generally. Full demographic information can be found in Appendix A. Participants received class credit as compensation.

Procedure

Upon providing informed consent, the participants were randomly assigned to one of three conditions: close ties, loose ties, and control. The present study utilized a reliving paradigm, which is commonly employed in ostracism research (Hales et al., 2018; Pickett, Gardener, & Knowles, 2004). Those assigned to the close ties and loose ties conditions were asked to think of someone with whom they have a strong tie or a weak tie, respectively. Strong ties and weak ties were defined in the prompt in accordance with the definition provided by Granovetter (1975) and some examples of each were provided. The participants were asked to give the chosen person's first name and their relationship to them. The purpose of this was to clarify the participant's imagined audience. Next, the participants in the experimental conditions were asked to describe in a few sentences a time in which they posted on Facebook or Instagram and did not receive an expected PDA from the person they selected. The control participants were not asked to choose a person as the experimental participants did, but instead were asked to describe in a few sentences the last time they had breakfast. This scenario is a relatively

emotionally neutral condition because the participant may have had lunch alone or with a friend, which was intended to create enough variability to represent a reasonable control against which to compare the experimental conditions.

Dependent Variables

After the participants described their assigned scenarios, they were asked to complete the Ostracism and Exclusion Needs Threat Scale (Williams, 2009). Additionally, participants completed the Relationship Value Scale (Wirth et al., 2010) twice. The first time was in reference to how the participant currently felt about their relationship and was completed immediately after naming the friend, and the second time was after they had described the potentially ostracizing event and referred to how the participant felt about their relationship at the time of the event. The Ostracism and Exclusion Needs Threat Scale is a 20-item measure used to quantify a participant's reflexive feelings of ostracism which reflect how he/she felt during the ostracizing event. The measure uses a 5-point Likert scale from 1 (*Not at all*) to 5 (*Extremely*) to specifically addresses the four fundamental needs which are hypothesized throughout ostracism literature to be threatened during episodes of ostracism: belongingness (*I feel like I belong to this group*), self-esteem (*I feel good about myself*), control (*I feel I have the power to significantly alter events*), and meaningful existence (*I feel important*). This measure has also been used in research such as Hales et al. (2018) where it was a dependent measure following participants' reliving of a cell phone-based ostracism event (Cronbach's $\alpha = .96$), which has parallels to the indirect ostracism of failing to receive social support on a social networking site. Similar to the Hales et al. (2018) research, the present research aggregated the total of the basic need measurements into a single need threat measure. The four need scores were averaged together with a lower score indicating a greater threat to the participants' basic needs and a higher score

indicating an overall satisfaction of basic needs. This is appropriate in the present research because past literature has not suggested different effects of social media-based ostracism on the different basic needs.

The Wirth et al. (2010) Relationship Value Scale consists of three items which examine how valuable, close, and important the participants feel to a specific other. This questionnaire was designed using Leary's (1999) definition of relational evaluation and has been used in existing research on relational devaluation (Hales et al., 2018; Wirth et al., 2010). These three items are rated on a scale of 1 (*not at all*) to 7(*very much so*) and were completed by participants in the experimental conditions in reference to their chosen relational partner. This measure has historically been used to measure feelings of relational devaluation after a conversational partner avoids eye contact with participants (Wirth et al., 2010; $\alpha = .92$) and after recalling an incidence of cell phone-based ostracism (Hales et al., 2018; $\alpha=.98$). The scale's usage in these studies indicated that it would be a similarly effective tool in the present study at measuring feelings of relational devaluation after participants experience a lack of PDAs, a similarly subtle cue of ostracism to those examined in the aforementioned studies. The participants were then debriefed and compensated for their time.

Data Analysis

In order to clean the raw data, several criteria were established to describe complete and appropriate data. Firstly, respondents must reach the end of the survey. Participants need not answer every question as the informed consent form allows them to skip any question they are not comfortable answering. Second, the open-ended responses must be grammatically coherent and relevant to the topic that the participant was assigned. Third, an attention check was inserted into the Basic Needs scale. The attention check specified a response for the participants to give

to ensure that they are reading the prompts carefully. Finally, the full dataset was checked by a pair of naïve coders who are unaware of the participants' condition. Any response which both coders decided failed one of the conditions was discarded. Additionally, any response that one of the coders decided failed the aforementioned conditions was reviewed and either retained or discarded at the researcher's discretion. Overall, 114 responses were discarded for failing one or more of the established criteria. Additional coding was performed after the data was collected when establishing the attribution types of the open-ended responses. This coding was performed by the primary researcher alone. More detailed information regarding the reasoning and logic behind the post-hoc coding can be found in the discussion section. The open-ended responses were coded as having face-saving attributions if they contained phrases such as "I did not care" or "it didn't matter to me," while responses were coded as containing relationship-saving attributions if they contained phrases such as "they probably didn't see it" or "they were probably too busy." Additionally, responses were coded if they contained no specific attributional information, which included phrases such as "I don't know why they didn't respond to me" or "It felt like they were purposely ignoring me."

CHAPTER III: RESULTS

In relation to hypothesis one, a one-way ANOVA suggested that there was a difference in the means of the basic needs scores between the three conditions ($F(2, 322) = 7.495$, $p=.001$, $\eta^2_{Partial}= .04$). However, a Tukey's HSD post-hoc analysis revealed that while the close ties condition ($M = 3.51$, $SD = 0.73$) and the loose ties condition ($M = 3.19$, $SD = 0.70$) had significant mean differences from each other ($p = .002$, $d = 0.45$), as did the loose ties condition and the control condition ($M = 3.50$, $SD = 0.60$) ($p = .003$, $d = 0.47$), the close ties condition and the control condition did not differ in the basic needs fulfillment of the participants ($p = .984$, $d = 0.02$). This finding technically provides support for hypothesis one with the caveat that only the loose ties showed a statistically significant difference from the control group. This ANOVA also fails to support the second hypothesis, as participants in the loose ties condition had lower basic needs fulfilment during the time of the potentially ostracizing event than those participants in the close ties condition.

With this result defying original expectations, an exploratory post-hoc analysis was performed to measure the number of face-saving and relationship-saving attributions found in the open-ended responses of the two experimental conditions. A chi-square analysis revealed that the frequency of usage of these attribution styles differed between the close- and loose-ties conditions, $\chi^2(2, 210) = 6.46$, $p = .040$. To expand upon this finding, a split-cell chi-square test was conducted to find how the frequencies of the different types of attributions varied from an expected independent distribution. This test revealed that those participants in the close-ties condition used attributions at different rates than would be suggested by an independent distribution ($\chi^2(2, 105) = 6.34$, $p = .042$). Participants in the close-ties condition utilized *no attribution* significantly more than expected, *face-saving attributions* about as often as expected,

and *relationship-saving attributions* significantly less than expected. Participants in the loose-ties condition similarly varied from an independent distribution (χ^2(2, 105) = 14.80, *p* = .001). However, these participants used *no attribution* about as often as expected, *face-saving attributions* significantly more than expected, and *relationship-saving attributions* significantly less than expected. The numerical values of the expected and actual statistics for this analysis can be found in Table 1.

Hypothesis three was tested using a paired-samples *t*-test to compare the relational evaluations of the experimental participants before and after the manipulation. The *t*-test found a significant decrease in the pre- and post-test scores (*t* (df=209) = 3.602, *p* < .001, *d* = 0.24), which means that the experimental participants felt relationally devalued between the current state of their relationship and the state of their relationship at the time of the ostracizing event. This finding provides support for the third hypothesis. Finally, a repeated-measures ANOVA was performed to test the fourth hypothesis. This analysis reaffirmed support of hypothesis three, which meant that there was a significant difference between the pre- and post-test scores of relational value for both ostracism conditions (*F*(df = 1, 208) = 12.920, *p* < .001, $\eta^2_{Partial}$ = 0.06). However, this analysis also found that there was no difference in relational value scores as a function of condition (*F*(df = 1, 208) = .131, *p* = .718, $\eta^2_{Partial}$ < 0.01). Therefore, hypothesis four is not supported.

CHAPTER IV: DISCUSSION

The present paper is an explicit attempt to expand upon the findings of Hayes, Wesselmann, and Carr (2018) in which participants alluded to the nature of relationships being important in determining one's reaction to a potentially threatening online situation. By specifically examining the closeness of the participants' relationships, the findings of this study effectively helped to elucidate the role of closeness in these settings. While it was found that participants in the loose ties condition indeed felt lower basic needs satisfaction after such an event than those in a control group, the same did not hold true for participants in the close ties group. This finding contradicts the hypothesis that participants would experience greatest need threat when experiencing a potentially ostracizing event perpetrated by someone close to them. This also seems to contradict the finding of Hayes, Wesselmann, and Carr (2018) which originally inspired this study; such a finding implies that further research is necessary to fully understand the relationship between relational closeness and basic needs threats online.

The other half of the present research focused on feelings of relational devaluation as it pertained to potentially ostracizing events on social media. Relational devaluation is an interesting concept to contrast with basic needs threat as it shifts the lens of the participants' negative feelings from themselves to the relationship as a whole. With this being said, it is also worth noting that there is evidence that the concepts of basic needs and relational devaluation are closely tied together (Hudd & Moscovich, 2021). What the present research found is that participants felt relational devaluation occur in both the close-ties and the loose-ties condition. This supports hypothesis three which suggested that relational devaluation is a likely outcome of a potentially ostracizing event. On the other hand, in a similar vein to hypothesis two, hypothesis four suggested that the relational devaluation would be more severe when the situation involved

a closer relational partner. This was expected partially due to Gerber and Wheeler (2014) noting that a solid relationship is a prerequisite for relational devaluation due to the necessity of desire to have a relationship. However, this was not supported by the data; there did not appear to be a difference in feelings of relational devaluation for the close-ties participants compared to the loose-ties participants. This is unexpected because participants in the loose ties condition reported lower levels of basic needs fulfilment but similar levels of feelings of relational devaluation. While this does not directly contradict the findings of Hudd and Moscovich (2021), it is an example of relational evaluation and basic needs threats not trending in the same direction within participants.

The post-hoc decision to code the open-ended responses by attribution types was primarily informed by Face Theory (Goffman, 1955). Face theory is a commonly used framework among research in social interactions and can help understand how people respond when they are wronged or otherwise socially threatened. Generally speaking, when a person's face is threatened, they are motivated to reestablish their face (Goffman, 1955). Strategies exist to maintain and regain one's face, such as making face-saving attributions to deflect blame or pain in the case of threatening events (Cupach & Metts, 1994 in Moore, 2017; Juvonen, 2000). Additionally, research shows that when people are in situations when they feel threatened (socially or otherwise), they may make relationship-saving attributions, which emphasize the relationship's importance and de-emphasize the severity of potentially hurtful social situations (Rusbult & Martz, 1995; George, Wesselmann, Hilgard, Young, & van Beest, 2020). Given that the participants in the loose ties condition are less emotionally attached to their social network tie than those participants in the close-ties condition, those in the loose ties condition were expected to use more face-saving attributions while the participants in the close-ties condition were

expected to make more relationship-saving attributions. This was expected to reflect the relative importance to the participant of protecting their own face (which might be more important to participants describing a looser relationship) compared to protecting their perception of the relationship (which might be more important to participants describing a closer relationship).

Contrary to the expectation that the participants in the close ties condition would utilize more relationship-saving attributions, there were very few who did so. Instead, a large number of them used no attributions at all. This means that they were feeling the full force of negative affect that comes with being ostracized rather than giving an attribution to deflect some of the pain. Many of these participants noted that they could not think of a good reason for their close tie to ignore them, and generally reported feeling quite hurt by it as a result. This is unusual because extensive research suggests that relationship-saving attributions are a way to give close ties the benefit of the doubt when a person is presented with a potentially painful situation (Camper et al, 1988). It is possible that this trend occurred because relationship-saving attributions, which mostly took the form of assuming that the chosen person simply did not see the post or were too busy to interact with it, are less plausible to make when most people are assumed to browse social media regularly and even get notifications about such posts.

The expectation that the loose-ties condition would make mostly face-saving attributions was supported by the analysis; participants in the loose ties condition made face-saving attributions at a far higher rate than either relationship-saving attributions or no attributions. As expected, the participants in this condition found it easier to report that they were not particularly bothered by this potential ostracism because the relationship was not as important to them as the relationships of those participants in the close-ties condition. Something worth noting about this finding in addition to the findings of the close ties condition is that they somewhat contradict the

results of the basic needs measures. While the basic needs scores of the participants in the close-ties condition were higher than those of the loose-ties condition, their open-ended responses contained fewer attributions and seemed to indicate more negative emotional reaction on average.

Probably the most logical explanation of the findings may lie in the organization of the research itself. The very act of asking the participants to reflect on either their close or loose ties may favor the basic needs satisfaction of those participants who reflected on their close relationships. This is because asking participants to reflect on their loose ties may cause them to expect more from those ties than they normally receive. The accidental introduction of this prime may help explain the higher basic needs satisfaction among the participants in the close ties condition. A study by Timeo, Riva, and Paladino (2020) similarly found that, after an ostracizing event, reflecting upon a close tie such as a family member resulted in more rapid recovery of basic needs fulfilment than considering a social surrogate such as a celebrity. Clearly social surrogates are not equivalent to loose ties, but following this line of reasoning, asking the participants to reflect upon closer ties may allow for easier recovery from an ostracizing event; this may help explain why basic needs scores were higher for those who reflected upon close ties.

Another possible explanation may exist in the self-esteem of the participants. Describing one's relationship with a close tie may increase the self-esteem of the participants, while describing a relationship with a loose tie likely would not have the same effect. Those with lower self-esteem levels tend to be more negatively affected by signals of ostracism online (Wohn, Carr, & Hayes, 2016). Given this, it is possible that those participants in the loose ties condition may have experienced lower self-esteem, even if only temporarily, compared to those

participants in the close ties condition. This could have caused them to be more sensitive to the feelings of ostracism that may have occurred in their relived experience, which would be reflected in their lower basic needs scores. Even with this conjecture, more research needs to be conducted in this realm to better understand the relations between relational closeness, and basic needs threats.

Limitations and Future Directions

One potential limitation that must be acknowledged regarding this research is that it took place during the COVID-19 pandemic. This event may have influenced the results since this historical event may have altered people's social network usage habits from what they normally are. Further, a more diverse age range of participants could be examined in order to assess whether the nature of virtual relationships is treated differently at different stages of life and by different age cohorts. By extension, various other demographic groups could be examined as the present research contained a relatively homogenous sample.

In addition to shoring up some of the aforementioned limitations, future research may benefit from assessing the role of attributions in a more systematic way instead of an exploratory post-hoc analysis. The present research found that participants who were reflecting on close ties indeed reported better basic needs fulfilment when ignored by a relational partner than did participants thinking about loose ties; this could be interpreted as the participants making external, unstable attributions for the potentially threatening behavior. However, the rate of relationship-saving attributions among those in the close-ties condition only slightly outnumbered those in the loose-ties condition. This implies that there is likely something else accounting for the differences in basic needs fulfilment scores than relationship-saving attributions.

Face-saving attributions, on the other hand, occurred far more often among participants in the loose-ties condition than those among the close-ties condition. Research on the topic of self-serving attributions has found that people will often downplay or deflect the causes of their own failings or any other situations that may threaten their self-identity (Juvonen, 2000; Weiner, Amirkhan, Folkes, & Verette, 1987). However, these excuses do not necessarily reflect the true beliefs of the people who give them. This is a potential explanation for the finding that participants in the loose-ties condition had lower basic needs scores than participants in the close-ties condition; although the loose-ties participants reported more face-saving thoughts, they may have actually been more hurt by the lack of social media interaction than they let on which would be reflected in their lower basic needs-fulfilment scores. However, these conjectures cannot be fully explored without a more dedicated research endeavor.

A slightly different line of research may consider the after-effects of the ostracism that this study highlighted. Lutz and Schneider (2020) found that ostracized individuals were likely to engage with others in more prosocial and interactive after an ostracizing event, which could be examined in the context of relational closeness. Perhaps after being excluded online, people may attempt to post more often or about more universally positive things in order to curry positive attention from their social networks; perhaps this varies depending upon whether the ostracizer is more closely or loosely tied to the participant as well. Given that the present study found that relational devaluation is not necessarily related to relational closeness, it may follow that posting generally positive content could bring the ostracized individual closer to both types of ties in their network.

Overall, the present research has contributed to the literature on social media interactions as well as to the literature on people's reactions to ostracism and threats to basic needs. The

exploratory analysis of attributions also functioned as a potential jumping-off point for research involving attributions and face theory as they interact with research on potentially ostracizing events. The findings of this study may also be applied in a reactionary perspective as well. A possible explanation for the basic needs findings is that reflecting upon a close tie can inure one against the negative effects of a potentially ostracizing event. This finding, in conjunction with similar findings from Timeo, Riva, and Paladino (2020), suggests that reflecting upon close social ties can help adolescents and young adults to reduce the damage done by ostracism. This is especially important in these particular age groups, when social development and expansion are occurring. With ever more real-life interactions moving onto social media, more research will inevitably need to be performed to define more clearly the ways in which ostracism may or may not take place via social media. However, the present research stands as a humble contribution to this body of literature.

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APPENDIX A: DEMOGRAPHIC STATISTICS

	18-21 years old	**22-49 years old**		
Age	292 (90.5%)	34 (9.5%)		
Gender	**Male**	**Female**	**Trans/other**	
	48 (14.7%)	273 (83.7%)	3 (0.9%)	
Race	**White**	**Black**	**Hispanic/latinx**	**Multiracial/other**
	237 (72.7%)	26 (8%)	34 (10.4%)	27 (8.3%)

	Close expected	Close actual	Difference	Loose expected	Loose actual	Difference
No attribution	35	46	+11	35	33	-2
Face-saving attribution	35	34	-1	35	52	+17
Relationship-saving attribution	35	25	-10	35	20	-15