

Read Receipts and Anxiety: Text Communication and Social Consequences

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by

Megan Bishop

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Megan Bishop

Sociotechnical advisor: Peter Norton, Department of Engineering and Society

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Imagine you've sent a text to a close friend and twenty minutes have gone by. Usually this friend responds within minutes, so you go to check the status of the message, and the indicator underneath has changed from "delivered" to "read", with a timestamp from ten minutes ago. How do you interpret this? Or, imagine that you've received a text from an acquaintance that you're trying to get to know, but you have something else that requires your attention at the moment. Do you leave them with the read receipt indicating that you've seen it, or do you pause your more important task to avoid seeming like you're ignoring them. How might they interpret your response?

Most people have had experience with read receipts. Digital messaging features can affect remote interpersonal relationships. The digital age has created an environment where people are mutually expected to be available to others in some form at all times, which can be highly distressing, particularly for those who are more inclined to social anxiety. Read receipts can often exacerbate this problem by amplifying the pressure to reply quickly, therefore forcing the recipient to be more available than they're comfortable with. That said, do read receipts have enough functionality valued by users to justify potential harm caused to those prone to social anxiety?

Data was collected by surveying and interviewing current university students. In total, 47 students completed the survey and 5 were interviewed to contextualize survey results. Questions asked are listed in appendices A and B.

Current university students have been long time participants in this environment, so they have provided crucial insight into how the mobile messaging culture has developed. Read receipts do cause some distress, especially to those who already struggle with social anxiety.

However, different methods of implementation have been able to reduce that anxiety to a palatable amount for the average user, enough to justify their continued use in mobile messaging.

Review of Research

One of the first instances of read receipts' implementation was on Japanese messaging platform Line, in response to the Great East Japan Earthquake in 2011. The intention was for users to obtain confirmation that family members had survived by providing instant notification when a message was read by the recipient. This initial use was certainly beneficial, and served to maximize connectivity in a time where it was crucial to users' health (Kato, 2017). However, with the subsequent popularization of this feature, connectivity and relationship building was changed in two important ways: availability anytime and anyplace, and instantaneous connectivity. Researchers observed anytime/anyplace availability in a 2016 study focused on adolescent relationships (Abeele, Schouten, & Antheunis, 2016). Abeele et al. found that students have a generally positive view of the constant availability, correlated with a reported higher companionship with their friends. This is unsurprising as the increase in availability for communication leads to overall higher rates of communication, and therefore faster relationship building. However, can communication taking place solely over digital messages really equate to time spent face to face? According to another study, this depends on a user's level of social anxiety (Lundy & Drouin, 2016). Researchers found that among different methods of first-time communication with a stranger, only text messaging showed any significant difference in reported connectedness with the stranger. Namely, those who had a low score on a social anxiety measure reported lower connection with their partner via text than those with high social anxiety.

Furthermore, Reid & Reid (2007) found that more socially anxious users reported cell phone use in general was likely to be used as a distraction from feelings of anxiety. Interestingly, a similar study pointed out read receipts specifically as a contributor to “problematic” cell phone use, reporting that users who knew a read notification would be sent felt more pressure to immediately respond to notifications, leading to greater overall use (Velthoven, Powell, & Powell, 2018). A similar conclusion was drawn by Mascheroni & Vincent (2016) in an adolescent interview-based study focused on teenagers’ perpetual availability via cell phones. A common theme in the interviews was the participants’ fear of missing out when they were not able to use their phones, and several reported that this anxiety was amplified both when they are reading messages and receiving read notifications.

As a potential explanation of this anxiety, a 2015 study seems to indicate that many users relate the use of read receipts to a form of trust, or as a way of gaining information about a new person, given that they were most preferred to be used in very close or more distant relationships, rather than just average friendships. Therefore, in using read receipts with a communication partner, some emotional vulnerability is entrusted or expected from the information provided (Alhddad, 2015). This is further backed up by a study on correlations of emotional reactions to read receipts (Lynden & Rasmussen, 2017). While some participants in this study reported slight positive emotions associated with information supplied by read receipts, a range of negative emotions were evoked from both the sender and receiver side. Receivers reported a pressure to respond quickly when read receipts were turned on, meanwhile, senders reported higher anxiety about receiving a reply when their message had been read. These negative reactions can potentially be explained by the results of another study, which indicated that of different text receipt indicators, the one most likely to be perceived as intentional nonresponse was the read

receipt (Earle, 2018). One interesting point to be made is the disagreement between Alhddad (2015) and Lynden & Rasmussen (2017) on how many participants were aware of their read receipts messaging feature or not. The former reported that around a third of survey participants had not even noticed them, while the latter reported that all interviewees were aware of them, though some prompted an explanation prior to agreeing. This may prompt further study of this awareness in future research to resolve the discrepancy.

Researchers are confident that text messaging changes many elements of communication. The lack of instantaneous response, or pressure to provide one, could in particular bring about extra feelings of anxiety that may not exist in other contexts. Thus, there is a clear gap in studying the direct relationship of social anxiety and the perception of read receipts. Furthermore, it seems that the majority of relevant studies seem to have been performed on adolescents, so there is room to explore these topics in the context of university students, who have been familiar with the technology much longer.

Choice of Messaging Platform

University students overwhelmingly prefer platforms on which read receipts are optional, and can be turned on or off at will. Of all survey participants, 72% responded that their primary messaging platform is implemented in this way. Of the remaining students, 63% reported that their primary messaging platform does not implement read receipts at all. Given that such a small number of participants primarily use a platform that exclusively has read receipts on, it seems that the option to personalize how read receipts are sent and received is highly valued. When viewed by groupings of high, average, or low social anxiety scores, the group that most consistently stuck to platforms with optional read receipts were the low anxiety participants. This

could be attributed to the higher reported social confidence of this group, as these students feel much more comfortable dictating their own social experiences than other groups.

University students who consider read receipts to be most important in determining their messaging platform choice are those with high social anxiety. While only 6.4% of participants indicated that the implementation (or lack thereof) of read receipts was a significant factor in platform choice, all of this minority fell in the top 30% of anxiety scores. This indicates that those with high social anxiety are the most likely to place strong value on how read receipts are handled on their platform. This makes sense, as these students' emotions can be more strongly influenced by their social interactions than those of their peers, so it's important to this group to anticipate the information sent and received with each conversation. Another commonality within the group valuing read receipt implementation is that all preferred a platform where read receipts can be individually turned on and off, indicating this group also prefers to tailor their use of read receipts per conversation.

Anxiety in Sending Versus Receiving Indicators

Reported increases in anxiety are more common with sending read receipts than with receiving them. Across all anxiety levels, a higher percentage of students reported anxiety increases when their partner can see they've read a message than when they can see their partner has read a message. As seen in prior research, this is likely due to the higher demand to respond to messages that comes with knowing the conversation partner can see when their message has been read. This is corroborated by an interviewee stating that she felt pressure to respond to messages when her status is visible, because she "feels bad about ignoring people." Meanwhile, another stated "I don't want them to see that I opened their message and then took several

minutes to respond with a single sentence. I feel accountable to overcome any anxiety I might have and just send the message.” Both these participants felt a greater responsibility within the conversation to protect an interlocutor’s image of them.

Furthermore, anxiety responses to sending read receipts were not only more common, but stronger. Reports of experiencing “significantly” rather than “slightly” increased anxiety when sending read receipts were twice as common as when receiving read receipts. One interviewee who did not seem to experience this anxiety with sending read receipts may provide more insight as to why this is. He said, “I find myself more comfortable being honest when I have read receipts on. I also tend to filter my thoughts less when I have read receipts on, as in I don’t spend forever crafting an elaborate and over thought out response.” In the eyes of that participant, sending read receipts comes with a higher degree of accountability in response times. This is likely the same perception that is working against individuals who do experience this anxiety increase, as more accountability in any task (text messaging included) generally results in higher anxiety towards it, as the task is seen as more reflective of the person performing it.

Preferences in Personalized Read Receipts

When using optional indicators, there were a variety of uses for the elective feature, but in general participants preferred to receive read receipts but not send them. Across all anxiety groups, the percentage of those who would like their conversation partner’s read receipts to be on was higher than the percentage who would like their own to be on (36% as opposed to 21%). In fact, 53.2% of all participants indicated that they prefer their own read receipts to be off as a general rule. This could perhaps be an anxiety reduction tactic in response to the higher reported anxiety in sending them. Similarly, it seems that many students prefer to see when their

conversation partner has read their message, as it can provide valuable feedback. As one interviewee described it, “It implies to me that they have nothing to hide...” He went on to state that he wants to know how the person he’s talking to truly feels, “even if all they have to say is that they don’t want to talk to me anymore, because I’d rather know than not.” While feeling rejected through a lack of response to a message can cause anxiety about the relationship, it seems that not knowing whether the person is truly disregarding the message or simply hasn’t seen it yet is even more distressing for the average student. As uncertainty is one of the main causes of anxiety, it makes sense that people across all levels of social anxiety prefer to have these indicators when they can. Read receipts provide a level of certainty that cannot be obtained without them.

Many students also base their use choices according to their conversation partner, particularly when it comes to sending read receipts. 38.3% of students said that their preference in sending indicators depended on the partner. Out of this group, the main factor in deciding when to turn on their read receipts with a specific person was how well they know them with 42.1% of responses, followed by how much they like talking to that person at 31.6%. One interviewee explained this by saying, “I make sure to turn on read receipts for people I’m romantically interested in or consider a close friend, because I don’t want to subject the people I care about to unnecessary uncertainty.” Students may be more willing to allow people that they know well to receive read receipts, as they are comfortable with holding themselves accountable for that person, and are less anxious in doing so. On the other hand, another interviewee who generally allowed her friends to see when she is online and reading messages described a situation in which she prefers to have these options off if possible. “There is someone I talk to who has a lot of mental health stuff going on and I don’t want to be the reason he feels worse.” In

this example, the participant felt responsibility towards her friend's well being, and didn't want to inadvertently upset him through read indicators. For relationships like this one, it is distressing to the person to cause harm with their read receipts, so they are kept off to avoid misunderstandings.

Social Anxiety and Perception of Read Receipts

Overall, those with the highest social anxiety scores reported the most anxiety in relation to read receipts. 73% of those in the higher social anxiety groupings saw some increase in anxiety when either sending or receiving read receipts, while 66% of the lowest anxiety grouping reported some level of anxiety increase. Note that in the low anxiety group, participants who reported any anxiety increase usually only described experiencing it for either sending or receiving read receipts (44% and 22% respectively), while those with higher anxiety scores more often reported increased anxiety for both situations.

Students of all anxiety levels generally attributed others' delay in a response to their messages to the same cause as their own delayed responses. However, a higher rate of disagreement between personal and perceived reasons not to reply was found in the higher anxiety groups at 52% of mid-range or high anxiety students as opposed to 22% of low anxiety students. The most common perception for a partner not replying was that the person was busy at 40.4%, followed by the person forgetting to reply at 25.5%, and finally that they were purposefully ignoring the message at 14.9%. This is in stark contrast to the participants' own delayed response motivation, with forgetting to reply leading at 44.7%, followed by the participant being too busy to reply at 27.7%, and finally the participant being unsure what to say at 17%. Only 4.3% of participants cited ignoring a message as the most common reason not to

reply immediately, but over 3 times as many students reported thinking that someone was ignoring them when they didn't receive a reply. This discrepancy makes it clear how the use of read receipts open up possibilities for unique misunderstandings in a conversation.

Students with low levels of social anxiety generally conclude that their conversation partner is ignoring them only when they themselves intentionally forgo replying, continuing the pattern of attributing an unresponsiveness in an interlocutor to the same cause as their own unresponsiveness. Students in this grouping seem to have confidence that others think the same way they do, and make decisions in their messaging based on this perception. This line of thinking was shown clearly by one interviewee who said, "I only turn (read receipts) off when I intend on deceiving people." He elaborated by saying that when someone he was talking to had read receipts on, "My first assumption is that they are trustworthy." Conversely, no participants in the mid-range or higher social anxiety groupings who thought their conversation partner was ignoring them reported ignoring the messages they received, going along with the answers of another interview participant who said, "I try to convince myself the person is busy. It sometimes works." of receiving a read receipt but no reply.

Conclusion

Regardless of anxiety, nobody is exempt from the increases in stress that can come from a text conversation. Results demonstrated that this holds true when it comes to the use (or lack thereof) of read receipts in these conversations. Even so, those already prone to social anxiety tend to report both more and more significant distress when read receipts become involved than their low anxiety peers. However, the majority of participants did not seem to be dissuaded from

using platforms with read receipts, even in the face of anxiety, while some even managed to find benefit or reduced stress when using read receipts in the way they wanted.

There is a strong indication that users greatly prefer when they can control read indicators to some degree. While an attitude of complete disdain for read receipts is not common, neither is a complete acceptance of their use without individual input. Given these results, it is strongly recommended that platforms currently implementing read receipts with no control to the user transfer them some element of choice.

Instant mobile messaging is still a relatively new element of socialization, especially considering how quickly it went from a luxury to an absolute necessity in the modern world. There is still plenty of room to explore how messaging can affect both relationships and social anxiety, especially where read receipts are concerned. It would be worth looking into how read receipts are perceived more situationally, not just from conversation partner to conversation partner, but from one type of conversation to another. How would the perception of read receipts change in conversations with different emotional tones? Is there any kind of consensus of what they mean in certain contexts, or is interpretation varied by individual users? As mobile messaging continues to expand, developers must monitor these questions and others to stay aware of how changes to their platforms can in turn change the culture of their use. Maintaining a healthy and productive culture of mobile text communication is a crucial part of continuously improving platforms for the users who rely on them.

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Appendix A - Survey Questions

Part 1: Demographics

1. What is your age? _____
2. What is your gender identity?
 - Male
 - Female
 - Non-binary
 - Agender
 - Genderfluid
 - Prefer not to say
3. Are you in a romantic relationship?
 - Yes
 - No

Part 2: Leary Interaction Anxiousness Scale

Statements scored on a scale of 1-5 according to the guidelines of:

1: Not at all characteristic of me.

2: Slightly characteristic of me.

3: Moderately characteristic of me.

4: Very characteristic of me.

5: Extremely characteristic of me.

4. I often feel nervous even in casual get-togethers. ____
5. I usually feel comfortable when I'm in a group of people I don't know. ____
6. I am usually at ease when speaking to a member of the other sex. ____
7. I get nervous when I must talk to a teacher or a boss. ____
8. Parties often make me feel anxious and uncomfortable. ____
9. I am probably less shy in social interactions than most people. ____
10. I sometimes feel tense when talking to people of my own sex if I don't know them very well. ____
11. I would be nervous if I was being interviewed for a job. ____
12. I wish I had more confidence in social situations. ____

13. I seldom feel anxious in social situations. ____
14. In general, I am a shy person. ____
15. I often feel nervous when talking to an attractive member of my preferred sex. ____
16. I often feel nervous when calling someone I don't know very well on the telephone. ____
17. I get nervous when I speak to someone in a position of authority. ____
18. I usually feel relaxed around other people, even people who are quite different from me.

Part 3: Read Receipts

19. Generally, are you aware of or do you pay attention to the read indicators on your messaging platform?
- Yes
 - No
20. When given the option, do you prefer to keep read receipt indicators (notification to your conversation partner that you have read their message) on or off?
- On
 - Off
 - Depends on the conversation partner.
21. (optional) If you answered "depends" on the previous question, what is the main factor in determining whether you prefer read receipts to be on?
- How well I know the person I'm talking to
 - What type of relationship I have with that person (e.g. personal vs. professional)
 - How much I like the person I'm talking to
 - How long I have known that person
 - Other _____
22. When having a conversation on a mobile messaging platform, do you prefer that your conversation partner have read receipts/indicators (notification to you that they have read your message) on or off?
- On
 - Off
 - Depends on the conversation partner.
23. If you answered "depends" on the previous question, what is the main factor in determining whether you prefer your conversation partner's read receipts to be on?
- How well I know the person I'm talking to
 - What type of relationship I have with that person (e.g. personal vs. professional)
 - How much I like the person I'm talking to

- How long I have known that person
 - Other _____
24. Which type of messaging platform would you say you use most often?
- Platforms where read receipts can be turned on and off.
 - Platforms where read receipts are always on.
 - Platforms where read receipts are not implemented.
25. Is the implementation of read receipts a significant factor in determining your preferred messaging platform?
- Yes
 - No
26. If you've been notified that the person you're speaking to has read your message but has not yet replied, what is usually your interpretation of the situation?
- They are busy and will reply later.
 - They are purposefully ignoring my message.
 - They forgot to reply, and will respond when they remember/are reminded.
 - They are unsure what to say at the moment.
 - Other... _____
27. When you read a message but do not immediately reply, what is the most common reason?
- I am busy and will reply later.
 - I am purposefully ignoring my message.
 - I forgot to reply, and will respond when I remember/am reminded.
 - I am unsure what to say at the moment.
 - Other... _____
28. If you are sending a message and receiving read indicators from your conversation partner, how does this affect your level of anxiety towards the conversation?
- Significantly decreases anxiety.
 - Slightly decreases anxiety.
 - Does not affect anxiety.
 - Slightly increases anxiety.
 - Significantly increases anxiety.
29. If you are receiving a message from your conversation partner and they can see whether you've read their message, how does this affect your level of anxiety towards the conversation?
- Significantly decreases anxiety.
 - Slightly decreases anxiety.
 - Does not affect anxiety.
 - Slightly increases anxiety.
 - Significantly increases anxiety.

Appendix B - Interview Questions

1. What's your main messaging platform?
2. Why do you choose to use the messaging platform you primarily use? What do you generally look for in a messaging platform?
3. Does that platform use read receipts? If so, are they optional?
4. How much do you pay attention to read receipts?
5. Do you feel pressured to be immediately available when people you know contact you?
Why or why not?
6. What is generally your thought process when you notice that someone has read your message without replying?
7. When given the option to turn the read receipts you send on and off, is there any person in particular you prefer to see when you've read their message? (Names aren't necessary, just the relationship of that person to you). Why or why not?
8. On the other side, is there any person you don't want to see when you've read their message? Why or why not?
9. When someone you're talking to has their read receipts on, what kind of information do you gather or what kind of assumptions do you make from receiving those indicators?
10. Do you think you behave differently in a conversation where the other person can see you've read their message? How so?