

The Relationship Between Adolescents' Likelihood to Judge, Assist, and Punish Under Omission Neglect

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Abstract

Omission neglect is the tendency to overlook the significance of missing but potentially important information when making decisions. Although it has been studied in the context of economic decision-making and consumer choice (marketing), comparatively little work has examined how this bias operates in social or interpersonal decision-making. These findings are increasingly relevant in modern society shaped by incomplete narratives in technologies such as social media and artificial intelligence. Exploring omission neglect is essential for promoting more reflective decision-making and fostering awareness of the unseen factors that shape our perceptions and actions. In this study, two surveys were conducted to elicit omission neglect: a 12 question survey assessing participants' likelihood to judge, assist, or punish without context, and a similar 18 question survey comparing responses to well-contextualized (control) versus limited-context (experimental) scenarios. The first survey showed that participants were most inclined to assist someone, followed by

punishing, and were least likely to judge. The second survey found a shift in this pattern: participants were most likely to judge, then assist, and least likely to punish. The results highlight the sensitivity of adolescents in contextual changes with a willingness to help others, though with negative judgment.

Keywords: omission neglect, psychology, school, social media, artificial intelligence.

Introduction

People's lives are shaped by their choices. Generally, decision-making involves processing information, evaluating the possible options, making the decision, then reflecting on the outcome (Müller et al., 2022). As such, the amount and quality of information can influence how we evaluate and form opinions about scenarios.

Incomplete context is unavoidable, as having all of the information related to a subject is impossible. Still, people often fail to notice that there is pertinent information that they are unaware of and subconsciously assume that necessary details are presented to them. Furthermore, individuals may even make unreliable inferences about the absent context if they do not notice its omission (Kardes & Sanbonmatsu, 2003). As they diminish the significance of missing information, they fall prey to an effect called *omission neglect* (Kardes & Sanbonmatsu, 2003; Baron & Ritov, 2004).

The effects of omission neglect have been best studied in marketing advertisements that deliberately do not mention certain aspects of a product (Mantel et al., 2022). Marketers also take advantage of consumers' neglect by creating time pressured conditions, which leads to a decreased ability to detect omissions (Kardes et al., 2006). Furthermore, advertisements

are designed to induce omission neglect by using excessive details and taking advantage of memory decay to sell products (Hernandez et al., 2023; Kardes et al., 2012). Being aware of omission neglect is crucial in the age of the internet and artificial intelligence (AI) to make well-informed choices. For example, CNN reports that on TikTok, a popular social media platform, 20% of information is inaccurate (Tucker, 2022). These inaccuracies also spread significantly faster on social media due to the ease of sharing information, repeated exposure to these falsehoods, and the novelty of fake news (Muhammed & Mathew, 2022; Vosoughi et al., 2018; Pennycook et al., 2017; Bago et al., 2020). Moreover, inaccuracies perpetuate in AI due to biased AI training (Chapman University, n.d.). The resulting misinformation and uncontextualized narratives would result in more users falling prey to omission neglect, which is exacerbated by the amount of these consumers—half of Americans now use AI (Elon University News Bureau). As making educated decisions has become more difficult due to convoluted information, it is now more critical than ever to investigate how actions are impacted by limited context.

This study examines the effects of omission neglect on adolescents' judgments and actions toward others. Middle and high school students were asked to rate how likely they would judge, punish or help when different levels of context were provided. By analyzing the responses, this study aims to understand how incomplete information shapes decision-making and social behavior.

Method

Participants

Two surveys were administered to middle and high school students living in North America.

Participant Demographics

Middle and high school students with an age range from 11 to 19 years completed this survey.

Sampling method. Participants were selected through convenience sampling.

Inclusion criteria. Inclusion criteria specified that participants must be within the specified age range and be able to complete all questions in the survey.

Survey 1

Participants filled out a questionnaire through Google Forms rating how likely they were to judge, assist, or punish someone in specific scenarios. The data was collected to test the effects of omission neglect on adolescents' social decision-making by measuring how limited information influences their likelihood of taking action versus only judging.

Survey 1 contained 12 questions, each answered on a scale from one (very unlikely) to four (very likely). The questions were divided into four sets of three questions each. Within each set, the three questions were assigned to a category: judgment, punishment, or assistance, depending on whether participants were asked to evaluate their likelihood to judge, punish, or help in the scenario. The questions within each set described situations in a school setting to retain familiarity for the participants. Additionally, some questions asked students to view a situation from a teacher's perspective to provide a variety of scenarios.

The questions were written with minimal context to elicit the effects of omission neglect.

Missing information was not emphasized.

An example set of questions was as follows. The format visible to the participants in is also shown in Figure 1:

1. Your student consistently turns in assignments late without an explanation. How likely are you to judge them for their behavior, 1 being very unlikely, 4 being very likely?
2. Imagine that you are a teacher and a student gives a flimsy excuse as to why they need an extension on an assignment. How likely are you to give them this extra time, 1 being very unlikely, 4 being very likely?
3. A student is frequently late to class. You need to determine whether or not to give them detention for tardiness. How likely are you to give them detention, 1 being very unlikely, 4 being very likely?

Figure 1

Example Question from Survey 1

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3. Your student consistently turns in assignments late without an explanation. How likely are you to judge them for their behavior, 1 being very unlikely, 4 being very likely?

	1	2	3	4	
Very unlikely	☐	☐	☐	☐	Very likely

Note. The image shows the format of a question from survey 1 as it would have been shown to a participant.

The mean of the responses from three types of questions were calculated. Differences between categories were assessed by calculating judgment minus assistance, judgment minus punishment, and assistance minus punishment, with judgment always the minuend to maintain consistency. Paired t-tests were used to assess statistical significance. Also, Cohen's *d* was used to calculate effect size.

Survey 2

To confirm that the observed differences between the judgment, punishment, and assistance categories in Survey 1 were due to a lack of information rather than the scenarios themselves, a second survey was conducted. The same age range, inclusion criteria and sampling method was used as in Survey 1.

Survey 2 contained 18 questions to be answered on a scale from one (very unlikely) to six (very likely). Half of the questions formed the experimental section in which less context was provided in order to induce omission neglect, while the other half of the questions were designed as a control group where much more context was given.

The experimental group was divided into three sets of three questions, each set describing the same scenario. Each question within asked for one of the three categories: judging, punishing, or assisting the person described. They were written to include limited context and did not significantly draw attention to the omissions. All questions were school-based to retain familiarity for the adolescent participants.

An example set of questions in the experimental section would be as follows, and the format is also shown in Figure 2:

1. A classmate you are working with for a group project is struggling with their part because they are juggling many commitments outside of school. Although you find that the project is very easy and rather simple, this is your final project that is worth half your grade. How likely are you to regard them negatively on a scale from 1 to 6?
2. In the same situation, how likely are you to talk to your teacher about this problem?
3. In the same situation, how likely are you to help your classmate without being asked?

Figure 2

Example question from survey 2

A classmate you are working with for a group project is struggling with their part because they * are juggling many commitments outside of school. Although you find that the project is very easy and rather simple, this is your final project that is worth half your grade. How likely are you to regard them negatively on a scale from 1 to 6?

	1	2	3	4	5	6	
Very unlikely	☐	☐	☐	☐	☐	☐	Very likely

Note. Example of a question in the section of the survey that lacks context as it would have been shown to a participant.

The structure of the control group questions was identical, except the participants were given more relevant information that had potential to change their course of action. The

scenarios detailed in the control section had corresponding questions in the experimental section. Additionally, the control was presented after the experimental group so that the participants would not be fully aware of possible missing context as they completed the experimental group questions. An example set of questions from the control group is shown below:

1. A classmate you are working with for a group project is struggling with their part because they are juggling extracurriculars, a new part-time job, and taking care of their siblings. However, you also remember that this has happened before in a different group project for a different class. Although you find that the project is very easy and rather simple, this is your final project that is worth half your grade. How likely are you to regard them negatively?
2. In the same situation, how likely are you to talk to your teacher about this problem?
3. In the same situation, how likely are you to help your classmate without being asked?

The mean of each group of data from the three types of questions were calculated as in Survey 1. Differences between judgment, assistance and punishment were assessed. Paired-samples t-test was used to calculate the p-value, and the effect size was calculated with Cohen's *d*. Comparisons were made within the experimental group and control group for each judgment or action category, while they were also contrasted to each other (experimental judgment category to control judgment category, etc.) to evaluate the effect of context on the participants' decision-making.

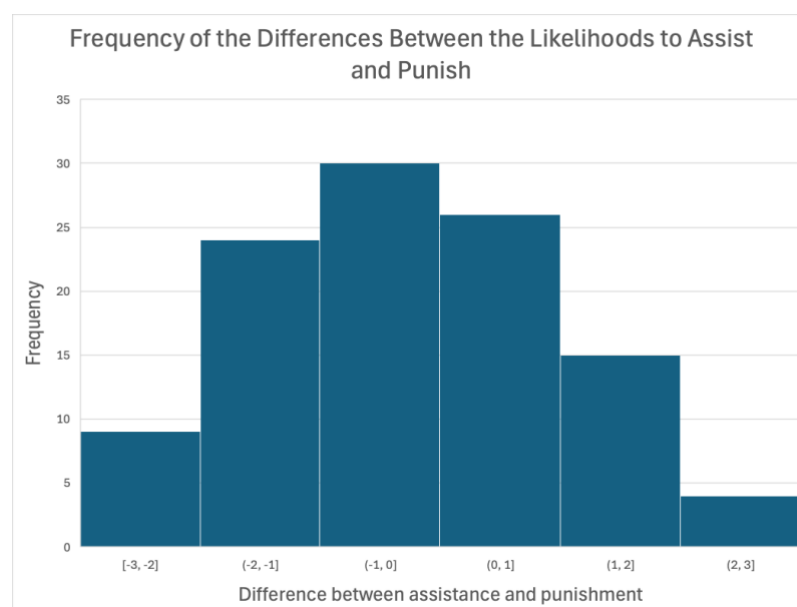
Results

Survey 1

From the first survey, 324 data points were obtained in total across 12 questions from 32 students. Although none of the comparisons were statistically significant, several trends were noted. Participants reported higher likelihood to assist ($M = 2.77$, $SD = 0.97$) than to punish ($M = 2.54$, $SD = 1.02$) as indicated by the rightward trend in Figure 3, $t(107) = 1.85$, $p = .07$, $d = 0.23$. Similarly, assistance was rated marginally higher than judgment as shown in Figure 4 ($M = 2.52$, $SD = 0.87$), $t(107) = 1.92$, $p = .06$, $d = -0.26$. Participants also showed a greater tendency toward punishment than judgment as shown in Figure 5, $t(107) = 0.13$, $p = .89$, $d = -0.02$.

Figure 3

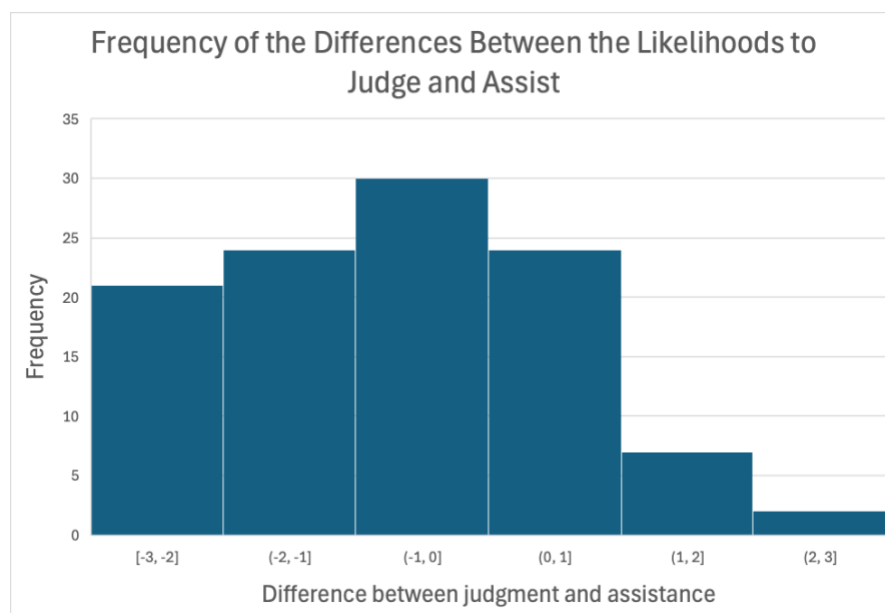
Frequency of the differences between the likelihoods to assist and punish



Note. Histogram representing the degree of variation between assistance and punishment

Figure 4

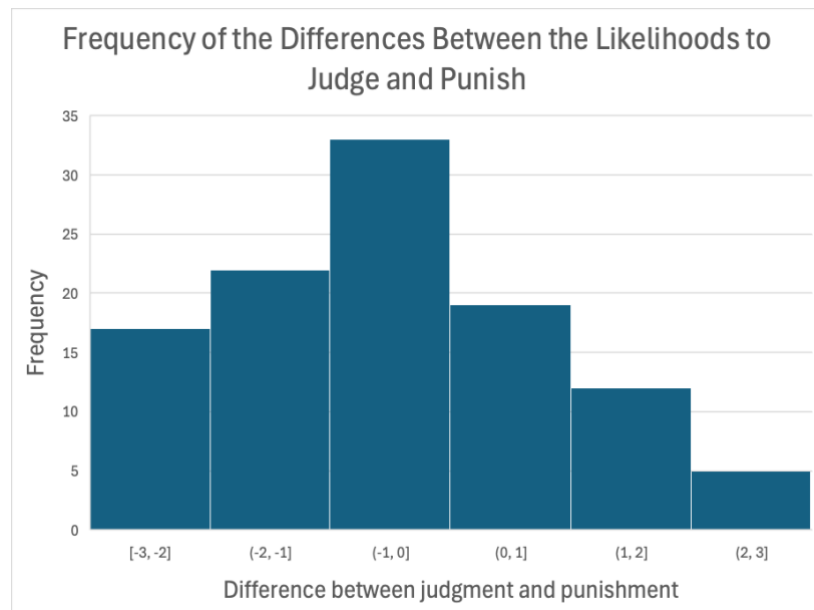
Frequency of the differences between the likelihood to judge and assist



Note. Histogram representing the degree of variation between judgment and assistance.

Figure 5

Frequency of the difference between the likelihoods to judge and punish



Note. Histogram representing the degree of variation between judgment and punishment.

Survey 2

The second survey contained 1836 data points from both control and experimental groups across 18 questions. 102 students responded, ranging in age from 12 to 18. Table 1 encapsulates these findings by expressing the differences between each category as the difference between their means.

Table 1

Differences between the means for control and experimental

Category	Mean difference (<i>p</i> value, <i>d</i> value)
Judgment (con) - Punishment (con)	0.22 (<i>p</i> = .02, <i>d</i> = 0.14)
Judgment (con) - Assistance (con)	-0.33 (<i>p</i> = .02, <i>d</i> = -0.22)
Assistance (con) - Punishment (con)	0.55 (<i>p</i> < .001, <i>d</i> = 0.34)
Judgment (exp) - Punishment (exp)	0.53 (<i>p</i> < .001, <i>d</i> = 0.32)
Judgment (exp.) - Assistance (exp)	0.28 (<i>p</i> = .06, <i>d</i> = 0.33)
Assistance (exp) - Punishment (exp)	0.25 (<i>p</i> = .04, <i>d</i> = 0.15)
Judgment (con) - Judgment (exp)	-0.47 (<i>p</i> < .001, <i>d</i> = 0.32)
Punishment (con) - Punishment (exp)	-0.16 (<i>p</i> = .02, <i>d</i> = 0.10)
Assistance (con) - Assistance (exp)	0.13 (<i>p</i> = .03, <i>d</i> = -0.09)

Note. Differences between the means for control (“con”) and experimental (“exp”) calculated between each category.

Within the experimental group, judgment ($M = 3.99$, $SD = 1.54$) was rated higher than assistance ($M = 3.72$, $SD = 1.63$, M difference = 0.28, $t(305) = 1.91$, $p = .06$, $d = 0.33$).

Conversely, in the control group where participants received more information, assistance ($M = 3.85$, $SD = 1.57$) was significantly more frequent than judgment ($M = 3.52$, $SD = 1.48$) with a small effect size ($t(305) = 2.35$, $p = .02$, $d = -0.22$). Notably, the shift was driven by the decrease in the tendency to judge from the control to the experimental group ($M = -0.47$, $t(305) = 6.33$, $p < .001$, $d = 0.32$). While assistance was more frequent in the control, the difference between the assistance categories represented a smaller statistical significance ($t(305) = 2.18$, $p = .03$, $d = -0.09$).

Although Survey 1 result did not reach a clear conclusion for judgment versus punishment, the second survey revealed that judgment ($M = 3.99$, $SD = 1.54$) was significantly more likely than punishment ($M = 3.46$, $SD = 1.70$) in the experimental questions ($M \text{ difference} = 0.53$, $d = 0.32$), $t(305) = 5.17$, $p < .001$. The gap between judgment and punishment narrowed in the control group ($M \text{ difference} = 0.22$, $d = 0.14$), $t(305) = -2.30$, $p = .02$, due to the likelihood of judgment decreasing from the experimental to control questions. Participants were less likely to punish with limited information in the experimental group ($M = 3.31$, $SD = 1.70$) than with sufficient context ($M = 3.46$, $SD = 1.57$), $t(305) = 1.65$, $p = .02$, although the effect size remained small ($d = 0.10$).

Finally, the likelihood of assistance ($M = 3.72$, $SD = 1.63$) was higher than punishment ($M = 3.46$, $SD = 1.70$) in the experimental group, albeit with a small effect size, $t(305) = 2.08$, $p = .04$, $d = 0.15$. This relationship is similar to the first survey ($M \text{ difference} = 0.20$). Additionally, in the control questions, the difference between assistance and punishment increases ($M \text{ difference} = 0.546$), $t(305) = -4.58$, $p < .001$, $d = 0.34$.

In summary, the first survey showed that judgment was the least likely, then punishment, and assistance when the context was withheld. The second survey demonstrated that judgment was the most likely when provided with limited information, but assistance remained more likely than punishment across both surveys. When sufficient context was included, punishment was the least likely, followed by judgment, then assistance.

Discussion

This study aimed to investigate the relationship between judging, assisting, and punishing in the context of omission neglect. We performed two surveys, firstly to investigate the trend in adolescents' decision-making under omission of background information and secondly, compare the adolescents' response to new scenarios with limited context to those with adequate information. The first survey demonstrated that adolescents, when faced with insufficient information, were relatively less likely to judge, followed by punishment and assistance. The second survey revealed that adolescents are less punitive and less inclined to make a negative judgment when enough context is provided. These results indicate that the participants were sensitive to omission neglect and that missing information meaningfully shapes their decisions in a social setting.

Survey 2 demonstrates that the level of context can shift individuals' responses in decision-making scenarios. When contextual information increased in the control questions, the largest effects were noted in the judgment category, while assistance and punishment showed smaller shifts. These results suggest that adolescents may adjust their behavior and willingness to act based on the context provided (Chung et al., 2021).

For this study, the initial hypothesis predicted that participants would be more likely to judge than to assist or punish. This expectation was based on omission bias, a phenomenon described by Baron and Ritov (1994) that showed people prefer harmful inaction to harmful action. The opposite result may be explained by *action bias*, a preference for action due to social norms (Zell et al., 2013). For example, in some of the scenarios in this study, omission bias may conflict with action bias in the emotional stress of bringing negative consequences upon someone. Hence, the responders may choose not to act at all. Although the small sample size of the current study and cultural factors limit the generalization of the results, they highlight the complexity of multiple biases and cognitive tendencies interacting to form decisions.

It is worth noting that in both surveys 1 and 2, assistance was a more likely action than punishment. In current literature, a definitive relationship between assisting and punishing remains inconclusive. A study performed in 2019 demonstrated that people prefer to punish perpetrators of bullying over assisting the victim. The researchers concluded that a desire to be righteous could motivate a punishment for the wrongdoer rather than sympathy for the victim (Dimitroff et al., 2019). Other studies show that the desire to help or punish is rooted in individual levels of empathy rather than a human tendency to one or the other (Hu et al., 2015), preventing a concrete consolidation of the survey data and its reliability. While it is difficult to generalize from the responders, the tendency to assist more than punish may indicate the cultural and social norm in the adolescent population.

The findings of this current study provide a useful lens for understanding and critical thinking in the digital world. Just as adolescents in the current study were more likely to

judge and punish when key contextual details were missing, online platforms routinely present with highly curated information. Social media posts often highlight the polished aspect of one's life (Chou & Edge, 2012), creating built-in omission neglect that invites rapid, and sometimes negative, judgments. These judgments are then translated into platform-specific actions—likes, dislikes, comments, reporting, or sharing, that parallel the judgment, assistance and punishment responses measured in the current study.

Moreover, the anonymity and psychological distance inherent in online interaction can amplify toxic and extreme behaviors (Suler, 2004). Prior work shows omission neglect contributes to misinterpretation and hostile behavior online (Evangelou et al., 2024), similar to our finding that missing context increases the likelihood of judgment or punishment. The result of the current study also implies that the effects of cultural norms in these online spaces can affect the behaviors of adolescents, as cognitive biases would interact to form a judgement or an action.

This study has several limitations. Using convenience samples of primarily female adolescents living in the United States of America limits the ability to generalize findings. Furthermore, the hypothetical situations could have exaggerated or diminished the reported likelihoods compared to real-world behavior. These added variables could prevent the accurate translation from a survey response to a physical action.

Further investigation is warranted to explore the relationship between punishment and judgment. Studies could also examine how explicitly prompting consideration of missing information affects moral decision-making. Finally, it is crucial to evaluate strategies to

reduce biased judgments and uninformed actions in social platforms and AI systems, fostering environments that encourage informed, ethical decision-making.

Conclusion

In this study, adolescents' responses to the surveys given shifted depending on the amount of context. When sufficient context was provided, punishment was the least likely, then judgment, then assistance. Within this survey, the absence of context results in societally "unfavorable" actions being taken more often, such as judgment or punishment. These patterns highlight how omission neglect, failing to consider missing information, can lead individuals toward less favorable social decisions.

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