Is AI "Taking Over" Our Responses to (Mis)Information?

How Artificial Intelligence and Group Membership Shape Perceptions of Political Messaging

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Abstract

This study investigated whether the use of artificial intelligence impacted people's responses to political messaging, and whether this effect was moderated by group membership. Specifically, I hypothesized that people would view messages from human sources more positively than messages from artificial intelligence sources, would view messages from their ingroup more positively than messages from their outgroup, and that the effects of group membership would be more powerful than the effects of artificial intelligence. Participants (n = 244) viewed an infographic about food insecurity that was labeled as created by either AI or human authors and as sponsored by either a Democratic or Republican politician. Participants then reported their perceptions of the infographic (including their belief in the message, trust in the source, and the perceived morality of the message), their attitude about food insecurity, and demographics. Analyses indicated that whether artificial intelligence or humans authored the infographic had the most impact on participants' perceptions of the infographic; they had more positive attitudes toward the infographic when it was created by humans than when it was created by artificial intelligence. Contrary to the hypothesis, group membership did not have significant impacts on perception. This research signals a need to further examine how AI and group membership individually and collectively affect individuals' responses to information, especially with the continual advancement of AI.

Is AI "Taking Over" Our Responses to (Mis)Information?

How Artificial Intelligence and Group Membership Shape Perceptions of Political Messaging

Artificial intelligence (AI) has been a subject of popular culture for decades, but now it is increasingly becoming a part of our everyday reality. AI can be used to generate text, photos, and videos, among other things (Benson, 2023). Because of its increasing number of applications, AI has begun taking over tasks that would otherwise be completed by humans. This has sparked various conversations – about the risks of AI to people's jobs, how AI may affect learning, and the potential for AI to increase the spread of misinformation (Mollick, 2024). People already tend to share information online without thinking about its accuracy, a problem that AI will only exacerbate (Pennycook, McPhetres, Zhang, Lu, & Rand, 2020). In 2023, for example, an AI-generated video of Joe Biden circulated through social media platforms. The video showed an AI-generated model of Biden (i.e., a "deepfake") responding to questions in real time; an individual asked the AI model of Biden questions and it responded on the spot (Benson, 2023; Sky News Australia, 2023). In the video, the Biden deepfake says he "may have a few drops of dementia here and there" but would not allow anyone to question his "intelligence or clarity of judgment" (Sky News Australia, 2023). Biden is not the only target to be the focus of AI-generated content on social media; AI-generated images of Donald Trump being arrested spread throughout the internet in 2023 (Kochi, 2023). These and similar examples of AI being used to alter or generate videos and images of public figures have led to many concerns about how AI could impact political discourse in general and the 2024 presidential election in specific (Klepper, 2024; Benson, 2023; Sky News Australia). The presence of AI in daily life –including in political information and misinformation– is becoming more apparent each day, and with it

comes a need to understand individuals' responses to AI and the factors that influence those responses.

In many contexts, individuals tend to prefer human sources to AI sources and consider the use of AI to show disrespect toward the audience (Wojcieszak et al., 2021; Narayanan, Nagpal, McGuire, Schweitzer, & De Cremer, 2023). People tend to dislike the use of AI to make decisions on both corporate and government levels due to its incapacity for emotion (Zhang, Chen, & Xu, 2022; Romero & Young, 2022). In terms of curating or creating content, people prefer that humans use AI in their work rather than AI being the sole curator of information (Wojcieszak et al., 2021). While AI is generally seen more negatively than human sources, there are factors that may affect perceptions of AI.

There are many different variables that impact whether people are welcoming or wary toward AI – one important factor may be motives related to group membership. In general, when it comes to processing information, people's motives and goals guide their thoughts, feelings, and behaviors; they will often reach the conclusions they desire to reach, and avoid conclusions they do not desire. In other words, people commonly engage in motivated reasoning (Kunda, 1990). Group membership is one factor that may powerfully motivate people's reasoning. People have a desire to belong to a group, and membership in a group typically changes people's attitudes, beliefs, and behaviors to align with other members' positions (regardless of what those attitudes, beliefs, and behaviors may be; Mackie & Cooper, 1984; Cohen, 2003). This pattern is apparent when it comes to political ideology, as individuals tend to agree with their political party's position irrespective of the content of that position (Cohen, 2003). The power of group membership in motivated reasoning may extend into people's perceptions of AI. It is possible that people's perceptions of AI-generated messages may be shaped by whether that message

aligns with or opposes their group's interests. Although there is some initial evidence that group membership tends to be a factor in perception than AI, this topic requires more investigation (Wojcieszak et al., 2021). Insight on the ways in which group membership can alter individuals' approach and use of AI sources compared to human sources is vital in understanding how people will respond to information and misinformation in a world where AI is common.

People tend to dislike AI more compared to humans, but how this effect is influenced by group membership is less known. This research aims to investigate how individuals' perceptions of these factors change when confronted with AI sources compared to human sources, and how group membership plays a role.

Perceptions of Artificial Intelligence

People generally have more negative perceptions of AI, but this is complicated by several factors. For example, people respond differently to different kinds of AI. Decision-making AI refers to computer software being used to produce decisions. Researchers have explored responses to decision-making AI in a variety of contexts (e.g., criminal sentencing, military actions, and how to best use and/or distribute resources; Zhang et al., 2022), and have found that people tend to view decision-making AI negatively. For example, over half of Americans believe AI has no place in decision-making scenarios, such as within the criminal justice system, citing that it often has biases and has caused job losses (Romero & Young, 2022). Additionally, decision-making AI is likely to make utilitarian decisions more often than humans, consistent with the idea that AI lacks "warmth" (Zhang et al., 2022). Another form of AI is generative, that is, AI software with the ability to generate various content in response to prompts. Generative AI is on the rise but is less researched. So far, research has indicated that content that has been created and/or filtered by humans is preferred over content generated by AI because people have

more trust in human sources (Wojcieszak et al., 2021). Additionally, news generated by a combination of humans and AI is viewed more positively than information generated by each source separately (Wojcieszak et al., 2021) – a finding that suggests complex responses to generative AI. In general, however, generative AI is viewed as significantly more negative compared to human sources as humans tend to perceive the use of AI as disrespectful and belittling towards them (Wojcieszak et al., 2021; Narayanan et al., 2023).

People's responses to AI also depends on what field or domain the AI is being used within. AI is widely viewed negatively for usage in many fields such as criminal justice, government organizations, news reporting, and tasks that require emotions (Laï, Brian, & Mamzer, 2020; Romero & Young, 2022; Narayanan et al., 2023; Zhang et al., 2022; Wojcieszak et al., 2021). One area where people seem to have an openness to AI is in healthcare settings – for example, AI may be useful in diagnosing illness using medical scans (Laï et al., 2020). AI is viewed more positively in healthcare settings than other domains, but many healthcare providers wonder where to draw the line and how to best protect patient confidentiality (Laï et al., 2020; Romero & Young, 2022).

The current standing of AI in our society is fairly new and understanding how we approach it is important as we figure out how to best incorporate AI into our lives and institutions in the future. It is therefore important to understand why people have negative perceptions of AI, and what specific differences exist in perceptions of human sources/content compared to AI sources. Specifically, the degree to which people believe and trust AI versus human sources and whether they see AI versus human-generated content as moral should be considered. These factors, taken together, make up one's perception of AI; the ways in which these perceptions change with the growth of AI requires more investigation.

Trust and Belief in AI

One reason that people have generally negative responses to AI is that they tend to trust AI sources less than human sources – contributing to the overall controversy of AI use. For example, AI news reporters are trusted significantly less than human news reporters (Longoni, Fradkin, Cian, & Pennycook, 2022). Additionally, people trust AI as a generator of content and as a moderator or editor of content less than AI-assisted humans and humans (Wojcieszak et al. 2021). People's mistrust of AI is fairly robust. When participants were asked to price hotel rooms using AI suggestions, the AI explaining the logic behind its suggestions did not improve the participants' trust in the AI (Westphal, Vössing, Satzger, Yom-Tov, and Rafaeli, 2023). However, having more perceived control over the final price decision improved trust in AI, rather than understanding the process behind its decisions (Westphal et al., 2023). This indicates that an issue with trust in AI is not in its ability to complete tasks, but rather a perceived loss of control and autonomy. People voice strong support for human involvement in processes of creation and moderation. People enjoy having control over situations, and they trust other humans' control more than an AI system's control.

Trust and belief in AI-generated content go hand in hand; less trust in a source often correlates with less belief of that source's message. Distrust in AI sources makes it difficult for people to believe the AI content that is being moderated or produced. This lack of belief is another way in which many individuals have a more negative perception of AI. If someone believes an article or news headline, they are more likely to share it, especially if they are asked about their perceived accuracy and intent to share (Roozenbeek, Freeman, & van der Linden, 2021). However, news was believed significantly less after it was revealed that it was generated

from an AI reporter (Longoni et al., 2022). This indicates that the use of AI in news reports is likely subject to more skepticism and criticism.

Morality in AI

In addition to distrust and a lack of belief, people often raise moral concerns about the use of AI. A common criticism of AI is its relative inability to take ethics into account. People are more likely to agree with AI suggestions when those suggestions are perceived as involving good ethics (Klockmann, von Schenk, & Villeval, 2022). When an AI system makes what people believe to be an ethical violation, trust in and agreement with AI decreases significantly (Textor et al., 2022). Moreover, it is important to note that AI systems are trained by humans. If the people training the AI are less trusted to behave morally or ethically – for example, if they are members of an outgroup – then the AI will not be trusted either (Narayanan et al., 2023). Furthermore, there are reasons to doubt that people will train AI to be ethical. In one study, when humans were placed in a simulation to train an AI system, they made selfish decisions rather than prosocial ones (Klockmann et al., 2022). People only made prosocial decisions when their decisions could potentially have negative impacts on themselves (Klockmann et al., 2022). These findings indicate that the morality of AI and moral rules about training AI are important in perception.

Group Membership

Altogether, people tend to perceive AI sources more negatively than human sources – they are less trusting, lower in belief, and have moral concerns about the use of AI. An essential question is whether these perceptions are affected by group membership. Being part of a group of any kind can influence your attitudes and behaviors, especially if your group is placed against another (Mackie & Cooper, 1984; Cohen, 2003). For example, when people were presented with

an opinion, those who were told it came from within their own group (or from a desired group) changed their beliefs to match the group's opinion (Mackie & Cooper, 1984). These patterns are consistent with the idea that people are inherently social, and that group membership is a powerful force in how people navigate their surroundings.

One powerful example of group membership is political parties, especially in recent years. Researchers in the US have been investigating the impact that political party has on people's responses to information and misinformation, including news consumption, the ability to detect fake news, and responses to AI versus human-generated news. On one hand, there are reasons to believe there may be differences in people's responses to misinformation across the ideological continuum. Democrats are more trusting of mainstream media, and are better able to detect a trustworthy source of information compared to Republicans (Pennycook & Rand, 2019). Conservatives with lower conscientiousness are more likely to share all news, both true and false (Lin, Rand, & Pennycook, 2023). On the other hand, there are some commonalities in the ways that people on the left and right respond to misinformation. Individuals are more vulnerable to misinformation when the source of the information aligns with their political ideology (Traberg & van der Linden, 2022). On both the left and right, perceived credibility of a source also plays a role in participants' ability to identify misinformation (Traberg & van der Linden, 2022). Although there are some differences between democrats and republicans in their responses to misinformation, the similarities in responses due to group membership are of focus in this paper. Group membership appears to play a role in detection of false information, which likely carries over into artificial intelligence.

Taken together, research on group membership in general and political parties in specific suggest that: across the political spectrum, the way that people respond to AI-generated content

may depend on whether that content is consistent or inconsistent with their own group memberships. Existing research has shown that people are less open to and have lower perceived credibility of information that goes against their own pre-existing positions and convictions, regardless of whether the source was AI, human, or an AI-assisted human (Wojcieszak et al., 2021). This suggests a critical point: people may be deeply tied to their pre-existing beliefs –and group memberships– even with the presence of AI. In other words, people are likely to engage in motivated reasoning about AI. More research is necessary to fully understand the role of group membership in relation to perceptions of AI-generated content. Integral aspects of perception in relation to AI –trust, belief, and morality– may differ when polarized by group memberships.

The Current Research

There has been a rise in research on artificial intelligence with its growth in popularity in recent years, but there remains gaps in the literature. Generally, AI is viewed less positively than human sources when it comes to decision-making (Narayanan et al., 2023). AI is believed to be less fair, respectful, and dignifying towards humans; the widespread belief that AI lacks a sense of morality also results in a negative perception (Narayanan et al., 2023). Though some general conclusions can be made, there needs to be more research in all of these areas. One of the most pressing gaps in the research is in comparisons between perceptions of AI sources and human sources, especially when it comes to generative AI (as argued by Narayanan et al., 2023 & Longoni et al., 2022). Past work has largely focused on decision-making AI, but generative AI is becoming increasingly popular. It is therefore important to understand how people perceive it in order to understand its impacts.

A full understanding of the relationship between perceptions of AI and group membership is yet to be determined. Although there is some evidence that initial agreement with

information is a more powerful predictor of trust in and perceived fairness of a source than the presence of AI (as noted by Wojcieszak et al., 2021), this is not focused on the specific impact of group membership. Generally, group membership leads individuals to adopt the behaviors and attitudes of their group as their own no matter what the behaviors and attitudes may be (Mackie & Cooper, 1984; Cohen, 2003). Responses to generative AI in combination with the presence of group membership should be under more investigation. This could result in the strength of group membership being more impactful than negative perceptions of AI, an idea that will be under investigation in this study.

The current research focuses on comparing perceptions of generative AI to human sources, with particular focus on group membership. Participants will view a message that is described as being created by either AI or humans, and as being authored by a member of their own political party or an opposing political party. I hypothesized that people would have more positive perceptions of messages created by human sources than artificial intelligence sources; in particular, I predicted that perceptions of trust, belief, and morality would be lower for artificial intelligence sources than for human sources. I also hypothesized that people would have more positive perceptions of a source from within their group than of sources from outside their group. Finally, I predicted that when people were presented with information about AI versus human authorship and group membership, group membership would be a stronger predictor of their perception (perceived trust, belief, and morality) of the information than artificial intelligence.

Method

Participants

Participants (n=277) were recruited through CloudResearch to complete the study. All participants were above 18 years old and were compensated $1 for their participation. Out of the

277 participants, several were excluded for not completing the open-ended question (*n*=26) and for doing the survey more than once (*n*=7). A total of 244 participants remained. The final sample's ages ranged from 18 to 71 (*M*=37.69, *SD*=11.73) and included 145 (59.4%) males, 99 (40.6%) females, and 0 participants identifying as a gender other than male or female. Socioeconomic status of participants meaningfully varied, as can be seen in Table 1. Participants reported their race as follows: 156 (63.8%) White or Caucasian, 37 (15.1%) Black or African American, 18 (7.3%) Hispanic/Latino or Chicano, 16 (6.5%) Asian or Asian American, 11 (4.4%) Multiracial, 5 (2%) Other/No response, and 1 (0.4%) Native American. See Table 2. As for political party affiliation, 125 (51.2%) identified as Democrat, 59 (24.2%) identified as Republican, and 60 (24.6%) identified as neither. See Table 3.

Design

This study was initially a 2 (Artificial intelligence: Human, AI) by 2 (Source Political Party: Democrat, Republican) fully-crossed, between-participant design. As described below, data were ultimately analyzed as a 2 (Artificial intelligence: Human, AI) by 3 (Group Membership of Source: Ingroup, Outgroup, Neither) design.

Procedure

Participants read an infographic about food insecurity that was created by the researcher and were randomly assigned to one of four versions of the infographic. Food insecurity was selected as a topic because prior research had identified it as a topic that has not been polarized (Orent & Anthony, 2022). Each infographic varied in the political party of the hypothetical politician sponsoring the infographic (Democrat or Republican) as well as the entity that generated the infographic (artificial intelligence or campaign staff), but otherwise was the exact same for each condition. Although the infographic was created for research purposes, the

information presented in it regarding food insecurity is true. See Figure 1 for the infographics from each condition.

After reading the infographic, participants answered questions about their attitude toward food insecurity as a social issue, in addition to their belief, trust, and perceived morality of the infographic. Participants then answered demographic questions, including their political party. See Appendix A for the full questionnaire. After the demographics, participants completed manipulation checks that asked if they remembered who sponsored (Democrats or Republicans) and generated (AI or humans) the infographic. Participants were fully debriefed on the true research question regarding AI once they completed the survey.

Measures

Food Insecurity Attitude. To measure participants' attitude about food insecurity, participants responded to the following item: "To what extent do you agree or disagree that food insecurity is a pressing problem that deserves greater attention?".[1] For this question, participants selected one of the following options: *Very much agree, Agree, Somewhat agree, Neither Agree nor Disagree, Somewhat Disagree, Disagree, Very much Disagree*.

Open-Ended. Participants answered the question, "Please write 3-5 sentences on your beliefs about food insecurity and your responses to the infographic you just viewed" in their own words.

Infographic Perceptions. Six items measured participants' perceptions of the infographic – specifically asking questions about their perceived belief, trust, and morality of the infographic.

[1] Regarding food insecurity, participants also answered the following items: "To what extent is your position on food insecurity: (1) important to you, (2) something that you care a lot about, (3) important compared to other issues that you're dealing with right now, (4) connected to your beliefs about fundamental right and wrong, (5) a reflection of your core moral beliefs and convictions?". These items were presented on a matrix table and the participants rated their responses from the following options: *Not at all, Slightly, Moderately, Much, Very much*. These items were not used in analyses.

Two items measured participants' belief of the source and information on the infographic. Participants rated their agreement with the following statements: "I believe the information presented in the infographic." and "I believe the source of the information presented in the infographic.". For both items, participants selected one of the following options: *Very much agree, Agree, Somewhat agree, Neither Agree nor Disagree, Somewhat Disagree, Disagree, Very much Disagree*.

Two items measured participants' trust of the source and information on the infographic. Participants responded to the following statements: "I trust the information in the infographic." and "I trust the source of the information on the infographic.". Participants selected one of the following options: *Very much agree, Agree, Somewhat agree, Neither Agree nor Disagree, Somewhat Disagree, Disagree, Very much Disagree*.

Two items were used to measure participants' perceived morality of the source and information on the infographic. Participants responded to the following statements: "The message presented in the infographic is ethical." and "The source of the message in the infographic is ethical." Participants selected one of the following options: *Very much agree, Agree, Somewhat agree, Neither Agree nor Disagree, Somewhat Disagree, Disagree, Very much Disagree* for both statements. All of these items were tailored from similar items in Bruns et al. (2023).

Four miscellaneous items were asked after the belief, trust, and morality questions. Participants rated their agreement with the following statements: "The message is relevant to me", "I can use this infographic to make good decisions", "The infographic appears authentic to me", and "The infographic is designed to manipulate me" (Reverse coded). For all items, participants selected one of the following options: *Very much agree, Agree, Somewhat agree,*

Neither Agree nor Disagree, Somewhat Disagree, Disagree, Very much Disagree. These items were adapted from Bruns et al. (2023).

A principal axis factor analysis with direct oblimin rotation was conducted for all responses to test if belief, trust, morality, and other items would load on the predicted factors. Contrary to expectations, the results indicated that the items loaded on one single factor (eigenvalue= 6.84), corresponding to a continuum of negative-positive perceptions of the infographic. For all subsequent analyses, we therefore averaged responses for all items to create one index of perceptions of the infographic. Higher scores indicated more positive impressions of the infographic, Cronbachs alpha= 0.94.[2]

Group Membership. Participants responded to the following items in order to measure political ideology: "How would you describe your political party?" Participants responded with *Republican, Democrat, Neither*.[3] Consistent with previous research, for subsequent analyses, we used whether participants were responding to a message from an ingroup member, an outgroup

[2] Participant's general perceptions of artificial intelligence were measured as well. Participants responded to 3 items: "Are you familiar with generative artificial intelligence?", "To what extent do you trust AI to write accurate information on important social issues?", and "To what extent do you think AI is capable of writing accurate descriptions of important social issues?". For these items, participants responded with one of five options: *Not at all, Slightly, Moderately, Much, Very Much*. These items were adapted from Longoni et al. (2022). A reliability analysis was conducted for all items related to the perceptions of artificial intelligence (Cronbachs alpha= 0.69). These items were not used in analysis.

[3] If the participant selected either Republican or Democrat, they answered the following question: "You indicated you were [Republican/Democrat]. How [Republican/Democrat] are you?" Participants responded with *Slightly, Moderately, Very*. If the participant selected Neither, they answered the following question: "If you had to choose between identifying as either Republican or Democrat, which one would you align yourself with?" Participants responded with *Republican, Democrat, Neither*. Participants were also asked, "How would you describe your political orientation?". Participants responded with *Conservative, Liberal, Neither*. If the participant selected either Conservative or Liberal, they answered the following question: "You indicated you were [Conservative/Liberal]. How [Conservative/Liberal] are you?" Participants responded with *Slightly, Moderately, Very*. If the participant selected Neither, they answered the following question: "If you had to choose between identifying as either conservative or liberal, which one would you align yourself with?" Participants responded with *Conservative, Liberal, or Neither*. These items were not used in analysis.

member, or neither. Participants who read the infographic from an ingroup politician (i.e., Republicans who were told Mark Henderson was a Republican and Democrats who were told Mark Henderson was a Democrat) were coded as 1. Participants who read the infographic from an outgroup politician (i.e., Republicans who were told Mark Henderson was a Democrat and Democrats who were told Mark Henderson was a Republican) were coded as 2. Participants who did not identify as either Republican or Democrat did not read the infographic from an ingroup or outgroup member and were coded as 3.

Manipulation Checks. The final two items were placed after the demographics and checked if participants paid attention to the manipulations (AI/Human; Democrat/Republican) present on the infographics. The first question asked, "Which of the following is true about the infographic you read?" Participants selected one of the following options: *It was sponsored by a member of the Democratic Party, It was sponsored by a member of the Republican Party, It was sponsored by a member of a different party, It was sponsored by an independent organization fighting food insecurity, I do not remember*. The second item asked, "Which of the following is true about the infographic you read?" Participants selected one of the following options: *The infographic was created by artificial intelligence, The infographic was created by Mark Henderson's campaign staff, I do not remember*.

Results

Descriptive Information and Correlations Among Study Variables

Tables 3 and 4 display the number of participants in each of the study conditions. There were 125 (51.2%) participants in the Democrat condition and 119 (48.8%) participants in the Republican condition. The number of participants who read an infographic from their ingroup, outgroup, or neither is as follows: 86 (35.2%) ingroup, 98 (40.2%) outgroup, and 60 (24.6%)

neither. The number (*n*) of participants in the human condition was 123 (50.4%), and there were 121 (49.6%) participants in the artificial intelligence condition.

On average, participants perceived the source and message of the infographic to be moderately believable, trustworthy, and moral ($M = 5.211$, $SD = 1.163$). Additionally, on average, participants agreed that food insecurity is a pressing problem that deserves more attention ($M = 5.93$, $SD = 1.096$).

There was a significant correlation between perceptions of the infographic and attitude toward food insecurity; those with positive perceptions of the infographic also believed that food insecurity deserved greater attention. Interestingly, age predicted perceptions of the infographic but not food insecurity attitude; older people had more negative perceptions of the infographic but did not vary in their food insecurity attitude. Details are in table 5.

In addition to examining correlations among study variables, I also examined whether demographic variables predicted perceptions of the infographic and food insecurity attitude. Females tended to have slightly higher positive perceptions of the infographic and a stronger attitude about food insecurity than males. Details are in table 6. In terms of political party, participants appeared to have somewhat differing perceptions of the infographic and attitudes about food insecurity. Democrats reported more positive perceptions of the infographic and felt most threatened by food insecurity than did non-partisans or Republicans. Details are in table 7.

In summary, there were some differences in perceptions of the infographic and of food insecurity based on demographics. While these are not the main focus of the research, they are interesting patterns to consider. To test the core hypotheses about the ways that perceptions of the infographic and attitude toward food insecurity differed based on the experimental conditions, I conducted additional analyses.

Hypothesis Tests

To review, I predicted that human sources would be significantly preferred over artificial intelligence sources, that is, that participants would have more positive perceptions of the infographic for human sources than AI sources. In addition, I predicted that group membership would matter the most when the source of the infographic aligned with their ingroup, that is, participants would have more positive perceptions of the infographic when it was sponsored by a member of their own party and negative perceptions of the infographic when it was sponsored by a member of the opposing party. Finally, I did not predict an interaction, but predicted that group membership would influence participants' attitudes towards the infographic more than the use of artificial intelligence. In addition to these primary hypotheses, I tested whether variables had an impact on food insecurity attitude. Consistent with the above hypotheses, I predicted that people's attitudes would shift more strongly for human sources than AI sources, that is, that people would feel more threatened by food insecurity when the source was human versus AI. I also predicted that ingroup sources would lead people to have stronger attitudes about food insecurity.

Tests including all participants. To begin, I tested hypotheses including all participants, regardless of whether they "passed" or "failed" manipulation checks. A two-way analysis of variance (ANOVA) tested whether perceptions of the infographic differed as a function of whether the source was AI versus human, whether the source was from the ingroup versus the outgroup, and the interaction of conditions. Contrary to hypotheses, there was no significant difference in perceptions of the infographic for participants in the human ($M = 5.314$, $SD = 1.078$) and AI ($M = 5.109$, $SD = 1.239$) conditions, $F(1, 244) = 2.114$, $p = .147$. There was also no significant difference between participants who read sources authored by ingroup sources (*M*

= 5.349, *SD* = 1.242), outgroup sources (*M* = 5.119, *SD* = 1.172), or for non-partisans (i.e., those who read sources that were authored by members of neither an ingroup or outgroup; *M* = 5.169, *SD* = 1.023), $F(2, 244) = .960$, $p = .384$. Finally, there was no interaction between the human/AI and ingroup/outgroup conditions, $F(2, 244) = .142$, $p = .868$.

Another two-way ANOVA tested the influence of source (human versus AI) and group membership on participants' attitude about food insecurity. No significant difference in attitude was found for participants in the human (*M* = 5.85, *SD* = 1.197) and AI (*M* = 6.00, *SD* = .983) conditions, $F(1, 243) = 1.251$, $p = .265$, nor between participants in the ingroup (*M* = 6.08, *SD* = 1.060), outgroup (*M* = 5.78, *SD* = 1.153), or neither (*M* = 5.95, *SD* = 1.032) conditions, $F(2, 243) = 1.795$, $p = .168$. Finally, there was no interaction between the human/artificial intelligence and ingroup/outgroup conditions, $F(2, 244) = 1.101$, $p = .334$.

These findings indicate that neither participants' perceptions of the infographic nor attitudes about food insecurity changed as a function of source or group membership. Although this initial analysis did not support the hypotheses, additional tests illustrate a clearer picture of why that may be.

Tests excluding participants who failed Manipulation Check 1. The first manipulation check tested whether participants remembered which political party sponsored the infographic; a total of 50 (20.5%) participants failed Manipulation Check 1. Because this manipulation was key to the hypotheses, we conducted additional analyses excluding participants who incorrectly identified which party created the infographic they saw. Identical to the above analysis, a two-way ANOVA tested if perceptions of the infographic differed due to whether the source was AI versus human, whether the source was from an ingroup versus an outgroup, or the interaction of conditions. A marginal main effect was found for the human/artificial intelligence conditions,

$F(1, 194) = 2.929$, $p = .089$. Participants in the human condition had slightly more positive perceptions of the infographic ($M = 5.293$, $SD = 1.091$) than participants in the artificial intelligence condition ($M = 5.015$, $SD = 1.279$). Another marginal main effect was found between the ingroup/outgroup conditions, $F(2,194) = 2.425$, $p = .091$. Participants who read an infographic from an ingroup member had slightly more positive perceptions of the infographic ($M = 5.390$, $SD = 1.293$) than those who read an infographic from an outgroup member ($M = 4.946$, $SD = 1.185$), while those who read an infographic from neither had results between the two ($M = 5.181$, $SD = .955$). There was no interaction between the human/artificial intelligence and ingroup/outgroup conditions, $F(2, 194) = .450$, $p = .638$.

Another two-way ANOVA tested the main effects and interaction of variables on participants' food insecurity attitude. No significant difference was found between the human ($M = 5.83$, $SD = 1.218$) and artificial intelligence ($M = 6.03$, $SD = .971$) conditions, $F(1, 193) = 1.302$, $p = .255$, nor in the ingroup ($M = 6.10$, $SD = 1.079$) and outgroup ($M = 5.74$, $SD = 1.159$) conditions, $F(2, 193) = 2.050$, $p = .132$. Finally, there was no interaction between the human/artificial intelligence and ingroup/outgroup conditions, $F(2, 193) = .340$, $p = .712$.

In sum, for participants who noticed and accurately reported the political party that created the infographic, slight effects on their perceptions can be seen. Participants reported slightly more positive perceptions when it was created by a human than when it was created by AI, and when it was from their ingroup than when it was from an outgroup member. This is in agreement with the initial hypotheses; small preferences for human sources and ingroups are present. However, there was no evidence that group membership overpowered attitudes towards artificial intelligence or that attitudes about food insecurity were affected by the manipulations.

Tests excluding participants who failed Manipulation Check 2. We also included a manipulation check to ensure that participants remembered whether the infographic was created by artificial intelligence or human sources; a total of 48 (19.7%) participants failed this manipulation check. Participants who misidentified whether artificial intelligence or a human made the infographic were excluded from the next set of analyses.

A two-way ANOVA tested if perceptions of the infographic changed due to whether the source was AI versus human, whether it was from the ingroup versus outgroup, or an interaction of these conditions. There was a main effect for the AI versus human author condition, $F(1, 196) = 6.122$, $p = .014$. Participants in the human condition had significantly more positive perceptions of the infographic ($M = 5.360$, $SD = 1.068$) than those in the artificial intelligence condition ($M = 4.939$, $SD = 1.245$). There was no significant difference between the ingroup ($M = 5.209$, $SD = 1.288$) and outgroup ($M = 5.117$, $SD = 1.171$) conditions, $F(2, 196) = .144$, $p = .866$, nor an interaction between human/artificial intelligence and ingroup/outgroup conditions, $F(2, 196) = .034$, $p = .967$.

Another two-way ANOVA tested if the main effects or an interaction influenced perceptions of food insecurity. There was no significant difference between the human ($M = 5.84$, $SD = 1.227$) and artificial intelligence ($M = 5.96$, $SD = 1.004$) conditions, $F(1, 195) = .716$, $p = .399$, nor between the ingroup ($M = 6.00$, $SD = 1.125$) and outgroup ($M = 5.80$, $SD = 1.107$) conditions, $F(2, 195) = .574$, $p = .564$. No significant interaction was found between the human/artificial intelligence and the ingroup/outgroup conditions, $F(2, 195) = 1.066$, $p = .346$.

In short, participants who paid attention to whether the source was human or AI significantly preferred human sources over artificial intelligence sources. This partially supports the initial hypotheses, but does not provide evidence that ingroup sources were preferred over

outgroup or that group membership impacts perceptions of the infographic. Similar to the previous results, food insecurity attitude was not affected by the manipulations.

Tests excluding those who failed either Manipulation Check. Finally, to provide the most careful look at hypotheses, we conducted analyses excluding participants who failed either manipulation check 1 or 2 (n = 86, 35.2%). A two-way ANOVA tested if perceptions of the infographic were influenced by whether the source was AI versus human, whether the source was from an ingroup versus outgroup, or an interaction of these conditions. There was a significant difference between perceptions of the infographic for the human and artificial intelligence conditions, $F(1, 158) = 6.073$, $p = .015$. Participants in the human source condition had significantly more positive perceptions of the infographic ($M = 5.337$, $SD = 1.085$) than participants in the artificial intelligence condition ($M = 4.855$, $SD = 1.273$). However, there was no significant difference found between the ingroup ($M = 5.260$, $SD = 1.363$) and outgroup ($M = 4.964$, $SD = 1.175$) conditions, $F(2, 158) = .781$, $p = .460$, nor an interaction between the two main effects, $F(2, 158) = .099$, $p = .906$.

An additional two-way ANOVA tested if the main effects or an interaction influenced attitude toward food insecurity. No significant difference was found between the human ($M = 5.85$, $SD = 1.244$) and artificial intelligence ($M = 5.95$, $SD = .999$) conditions, $F(1, 157) = .202$, $p = .653$, nor between the ingroup ($M = 6.02$, $SD = 1.152$) and outgroup ($M = 5.77$, $SD = 1.109$) conditions, $F(2, 157) = .842$, $p = .433$. Finally, there was no significant interaction between the conditions, $F(2, 157) = .455$, $p = .635$.[4]

To summarize, participants who accurately reported both the source and political party of the infographic significantly preferred human sources to artificial intelligence, but group

[4] Two-way ANOVAs excluding non-partisans (those who identified as neither Democrat or Republican) were conducted as well. The results were largely the same. See Appendix B for full results.

membership did not have an effect on perceptions of the infographic. Additionally, none of the manipulated variables affected attitudes about food insecurity. Taken together, each of these analyses indicates that artificial intelligence versus human sources impacted perceptions of the infographic the most.

Discussion

The results of this study indicated that whether the source of a message is artificial intelligence or human is a strong predictor of people's perceptions of that message, whereas group membership did not consistently predict perceptions of a message. In particular, the effect of whether a source was AI or human was more impactful than the effect of group membership – a finding that was inconsistent with the initial hypotheses. These effects were most clearly pronounced when participants paid attention to both manipulation checks; that is, when participants had noted both the political party of the source and whether the source was artificial intelligence or human. Under those circumstances, participants preferred humans over AI sources, and this preference was not significantly affected by whether the message was sponsored by a member of one's own or a competing political party.

These findings hint that the use of artificial intelligence overpowers participants' political party membership when it comes to their perceptions of a political message. Although there was a marginally significant difference in perceptions of the infographic based on group membership in one of the hypothesis tests, this effect was not as robust nor consistent as differences in perceptions based on whether the source was AI versus human. One portion of my initial hypothesis aligns with the final results; human sources are indeed preferred over artificial intelligence sources – trust, belief, and morality are lower for AI than for humans.

Implications

By explicitly comparing perceptions of generative AI sources to human sources, this research contributes to some areas of the literature that were previously missing (as noted by Narayanan et al., 2023). The results align with some of the pre-existing literature, particularly that humans generally have more negative views of artificial intelligence than they do of human sources (Narayanan et al., 2023). Interestingly, previous studies had examined trust, belief, and morality separately. Our factor analyses, however, discovered that people essentially grouped these variables together as one evaluative continuum ranging from negative to positive (which we called “infographic perceptions”). Our findings, however, are largely consistent with previous research finding that people had lower trust, belief, and moral confidence in AI sources than human sources (Longoni et al., 2022; Wojcieszak et al. 2021; Textor et al., 2022).

Interestingly, the results also indicated that food insecurity attitudes did not shift when perceptions of the infographic shifted. In other words, participants' attitude about food insecurity stayed the same despite changes in their perceptions of the infographic due to AI or political party. It may be that attitudes are harder to influence than perceptions of a source, but this raises the question of when the presence of AI and group membership shapes attitudes, if at all. In order to further understand how AI and group membership affect attitudes, future research should focus on the elements that predict attitudes when creating messaging.

The main discrepancy between this study and previous literature is the power of group membership, in this case, political party. Research shows that being placed in a group in general, but especially when it comes to political parties, can be incredibly polarizing (Mackie & Cooper, 1984; Cohen, 2003; Wojcieszak et al., 2021). People often have biases in favor of their own political party and against opposing parties, and have been shown to be less open to information

that opposes their own beliefs regardless of use of artificial intelligence (Wojcieszak et al., 2021). In this case, however, group membership did not appear to matter much at all. While political party should be considered in future studies of AI, group membership in this context could be reframed – is the prevalence of AI motivating people to think of being human as an ingroup? The simple fact that AI is inherently not human (i.e. not the same as us) could be enough for people to feel threatened by it. Although the open-ended question in our survey functioned mostly as an attention check, it did provide some interesting insights from participants related to this idea. One participant commented that the infographic "lacked human touch that could have added details to make the message more powerful." Although the infographic was created by the researcher for this study – a human source – the label claiming it was created by AI was enough to think the infographic was missing a "human touch." This belief that a "human touch" is necessary may identify a core feature of humanity that people believe artificial intelligence cannot replicate. This could be what makes artificial intelligence an outgroup to individuals. If people do see artificial intelligence as an outgroup, the increasing presence of it in our society could have significant implications for the acceptance of AI in different facets of human life. The strength of group membership in regards to artificial intelligence versus human may need to be considered in comparison with political party membership to fully understand how these variables interact (or do not interact) to impact perception.

This research has several implications for the real world in addition to the literature. Artificial intelligence is being used in contexts throughout our society – in schools, jobs, politics, and social media (Mollick, 2024). With the increase of AI in many domains, the spread of misinformation needs to be considered. In general, people are inclined to share information before thinking about its accuracy, and they are less able to determine the accuracy of a source

when asked if they will share it (Pennycook et al., 2020; Epstein, Sirlin, Arechar, Pennycook, & Rand, 2020). This could have heavy implications for a world where AI is common, especially as it becomes more realistic. Although there is some evidence that people can somewhat detect deepfake videos (as demonstrated in Groh et al., 2022), not everyone may have the skills to discern a true source from a fake one. It has been shown that expert labels, or labels placed by professionals that report the accuracy of a post, can be helpful in reducing the spread of misinformation, but these labels do not exist on every platform (Martel, Allen, Pennycook, & Rand, 2022). AI has already begun creating more believable content that some people may not be able to discern from reality. An example of this is the aforementioned AI-generated video of Joe Biden claiming he has a "few drops of dementia." Images and videos similar to this one can increase the rates of misinformation online. Individuals may have more negative perceptions towards AI than human sources but if they cannot distinguish between misinformation, AI-generated content, and real sources, these attitudes could lead to more mistrust of sources in general.

Finally, the fact that perceptions of AI-generated content are generally worse than human-generated content suggests that increased use of AI in many aspects of life may increase feelings of mistrust and disbelief in messaging in general, as well as increased doubt in the morality of messaging in general. Perceptions of AI found in this study suggest its use could be very polarizing in the future, perhaps on a similar scale to political party or other group memberships. The implications of this study suggest areas of artificial intelligence use that should be considered on a wider spectrum.

Limitations and Future Directions

Although these findings provide insight into the impact of AI and group membership, there are limitations that should be considered in order to guide future research. Notably, this study might have been a "weak test" of the group membership hypothesis. The politician sponsoring the infographic viewed by participants, Mark Henderson, is not a real politician and given a lack of a profile may be perceived as low in power. This brings up the question of whether the use of a known and/or high-power politician in the infographic would yield different results. Because Mark Henderson is entirely fictional, the influence of political party may not have been as strong as initially predicted. Well-known or high-power public figures–who are perceived as members of ingroups or outgroups–may more powerfully shape people's responses. For example, people maintain faith in high-power politicians significantly more than low-power politicians when they lie, especially when the politician is from within their own group (Wagenknechtová, 2020). It would be beneficial to investigate this concept further to gain a full understanding of how AI, political party, and power influence perception.

Additionally, the questions regarding infographic perceptions may have been interpreted by participants in a different way than anticipated. The survey questions asked if they trusted, believed, and found the source of the infographic to be ethical. The word "source" was intended to reference whether the source was AI or human source and whether the source was an ingroup or outgroup member. Nonetheless, participants might have read this phrase as referring to the source of the information and statistics used on the infographic, which was the U.S. Department of Agriculture. The questions were adapted from Bruns et al. (2023) in order to have a validated measure of perception, but the wording could have been too broad and/or vague. Future research should use more specific wording when asking about perceptions.

Another consideration is that food insecurity is a relatively non-politicized issue. This, however, may have decreased the importance of political party to the participants. I chose a non-politicized issue as a matter of experimental control to see the effects of the presence of a group membership in regards to a relatively novel topic. This may have resulted in demonstrating that AI may be stronger in predicting perceptions than initially hypothesized, which leaves room for the question: in which situations does this change? For future research, a more politically polarizing topic being presented on the infographic may change perceptions of artificial intelligence.

While this research is on generative-AI, there are other media formats aside from infographics that can be generated, most notably videos. A limitation of this study is the lack of information on people's responses to other medias used by AI, not just infographics. People may have different responses to a video or photo created by AI in comparison to a textual representation of information that can be found online, and it is important to gain an understanding of how those reactions may differ across medias. Advances in creating more realistic photos and videos with AI may result in more people feeling threatened by its presence, and these perceptions could be interesting when the spread of misinformation is considered. Use of photo or video in a similar experiment may change the perceptions of artificial intelligence, which would provide a better understanding of people's attitudes towards and understanding of generative-AI.

Future research should continue exploring whether the ingroup-outgroup is powerful at all when it comes to shaping perceptions of AI, or if being human is an overarching ingroup that trumps political party membership. Additionally, perceptions of AI may be stronger in certain situations but not others; identifying which situations evoke stronger or weaker responses could

contribute to understanding why people feel the way they do about AI. When looking into these topics, questions regarding perception should be carefully crafted to ensure there are no misinterpretations from participants. As AI continues to develop, it is necessary to track individual's understanding of its capabilities and their attitudes towards it in different situations over time.

Conclusion

Artificial intelligence is likely to remain present in society for the foreseeable future, notably in the political landscape. The AI-fabricated video of Joe Biden responding to questions in real time and photos of Donald Trump being arrested are just two examples of how this technology can impact politics and future elections. The findings of this study reinforce the idea that individuals tend to prefer human sources rather than artificial intelligence sources, and suggest that perceived trust, belief, and morality decreases for AI sources. However, this study does bring into question the role of group membership in perceptions of artificial intelligence. Because political party membership did not affect participants' perceptions of the infographic, more research on the impacts of AI use versus political party membership on perception should be conducted. As artificial intelligence evolves and further solidifies its position in our society, it is essential to evaluate how, why, and the extent to which perceptions of AI shift over time, particularly when group membership is involved.

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Table 1

Frequencies and Percentages of Socioeconomic Status

Socioeconomic Status	Frequency	Percentage
My household has a hard time buying the things we need.	23	9.4
My household has just enough money for things we need.	76	31.1
My household has enough to buy the things we need and sometimes we can also buy special things.	116	47.5
My household has enough money to buy pretty much anything we want.	29	11.9

Table 2

Frequencies and Percentages of Race

Race	Frequency	Percentage
Asian/Asian American	16	6.5
Black/African American	37	15.1
Caucasian/White	156	63.8
Hispanic/Latino or Chicano	18	7.3
Multiracial	11	4.4
Native American	1	0.4
Other/No Response	5	2

Table 3

Frequencies by political party and human versus AI condition

	Human Condition	A.I Condition	Total Participants
Democrat Condition	62	63	125
Republican Condition	61	58	119
Total participants	123	121	244

Table 4

Frequencies by group and human versus AI condition

	Human Condition	A.I Condition	Total Participants
Ingroup Condition	43	43	86
Outgroup Condition	49	49	98
Neither Condition	31	29	60
Total participants	123	121	244

Table 5

Correlations of key variables

Variable	1.	2.	4.	5.
1. Perceptions of Infographic	1.00			
2. Food Insecurity Attitude	.610**	1.00		
4. Age	-.172**	-.049	1.00	
5. Socioeconomic Status	.049	-.069	-.060	1.00

**p<0.01

Table 6

Comparisons of perceptions of the infographic, food insecurity attitudes, and gender

	Perceptions of the Infographic		Food Insecurity Attitudes	
	M	*SD*	*M*	*SD*
Male	5.035	1.241	5.81	1.184
Female	5.472	.989	6.09	.932

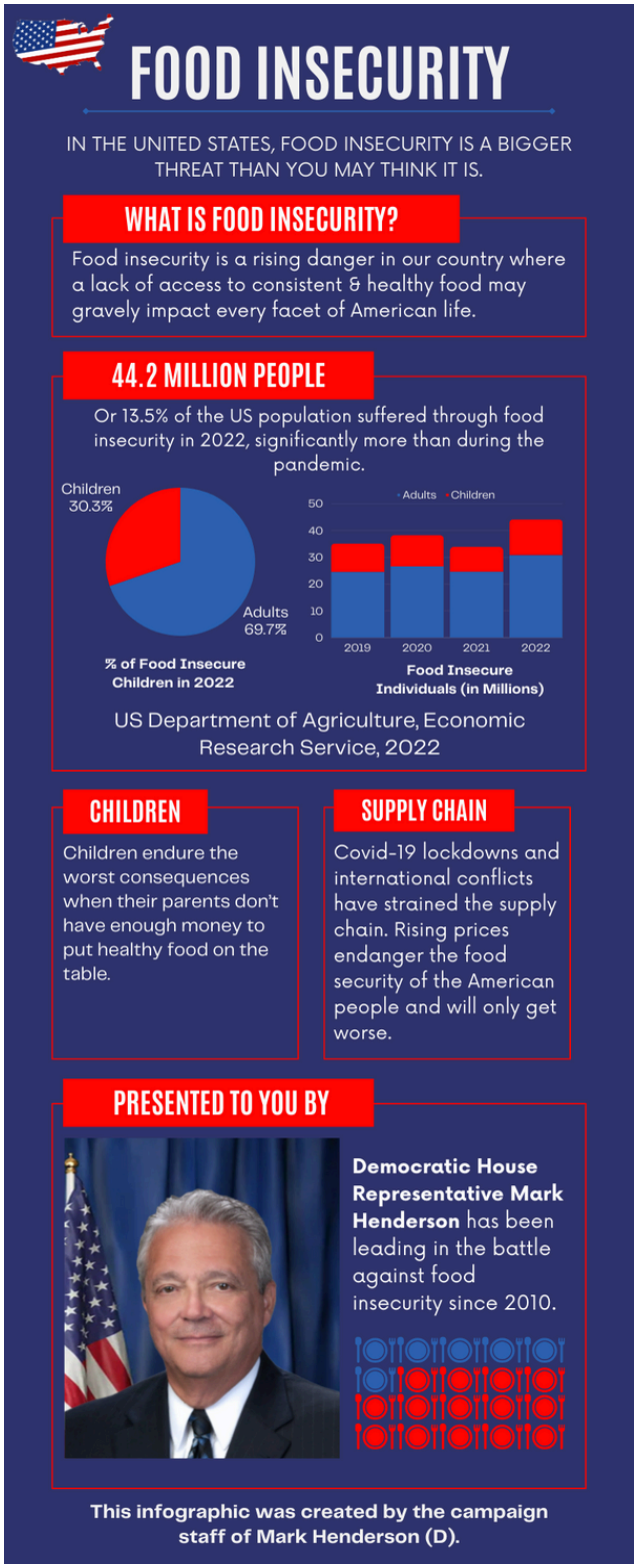
Table 7

Comparisons of perceptions of infographic, food insecurity attitudes, and political party

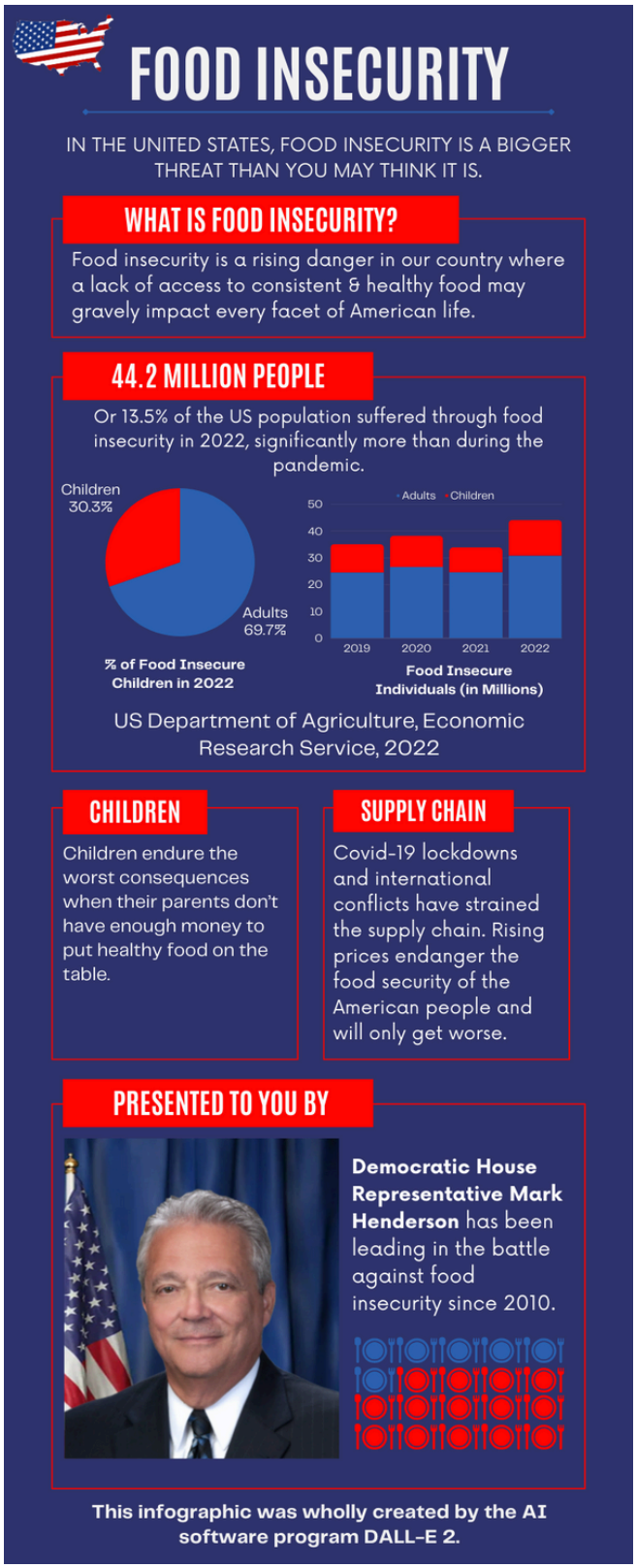
	Perceptions of the Infographic		Food Insecurity Attitudes	
	M	*SD*	*M*	*SD*
Democrat	5.287	1.094	6.05	.991
Republican	5.096	1.420	5.64	1.321
Neither	5.169	1.023	5.95	1.032

Figure 1. Study Conditions (Infographics).

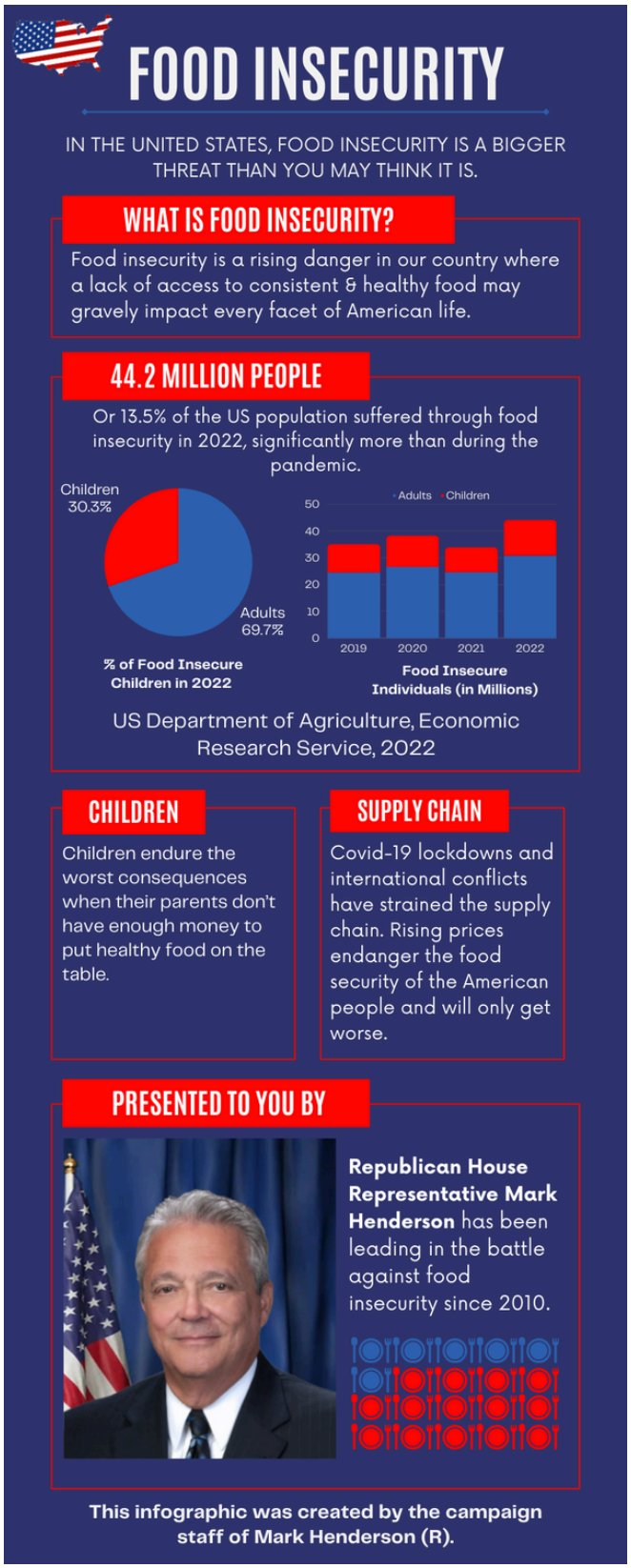
Democrat (Human)



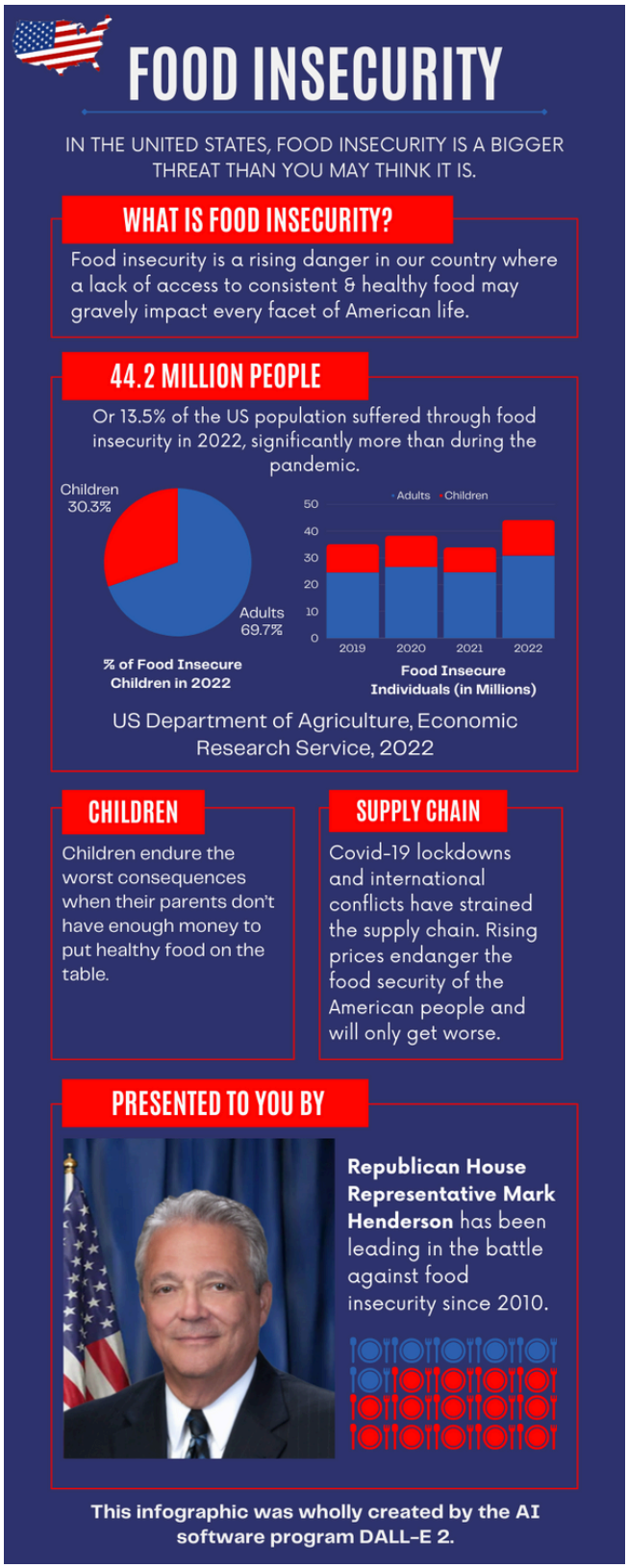
Democrat (Artificial Intelligence)



Republican (Human)



Republican (Artificial Intelligence)



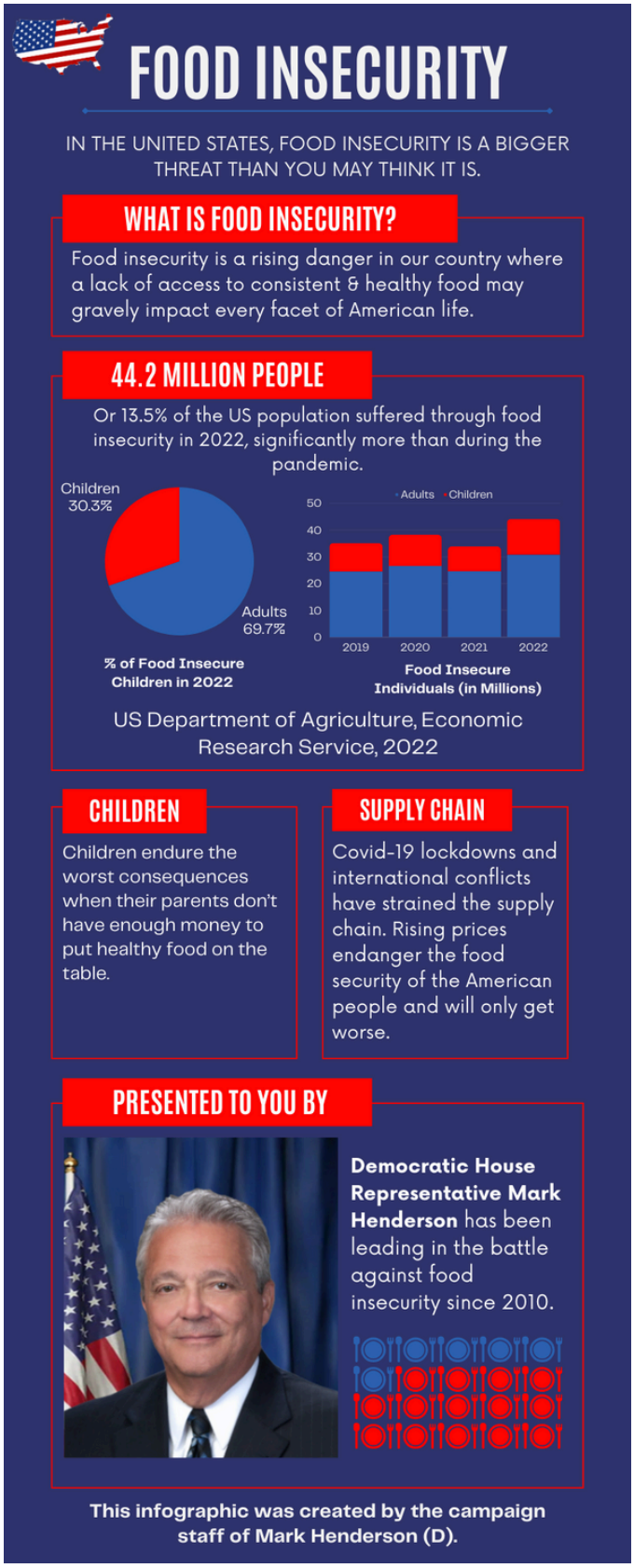
Appendix A. Questionnaire

Welcome! Thank you for your interest in our research.

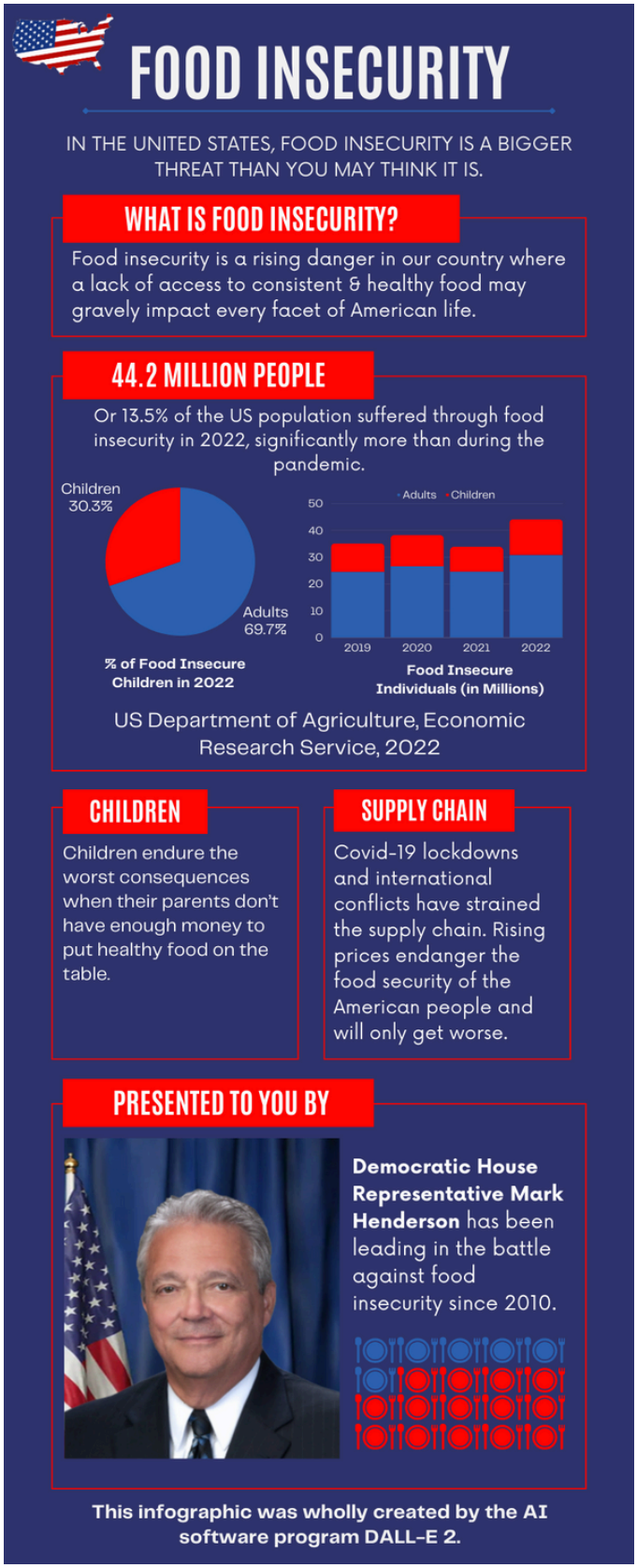
We are conducting our research on responses to food insecurity in the United States. Please read the following infographic closely and answer the following questions honestly and to the best of your ability.

[Participants will view one of the following infographics]

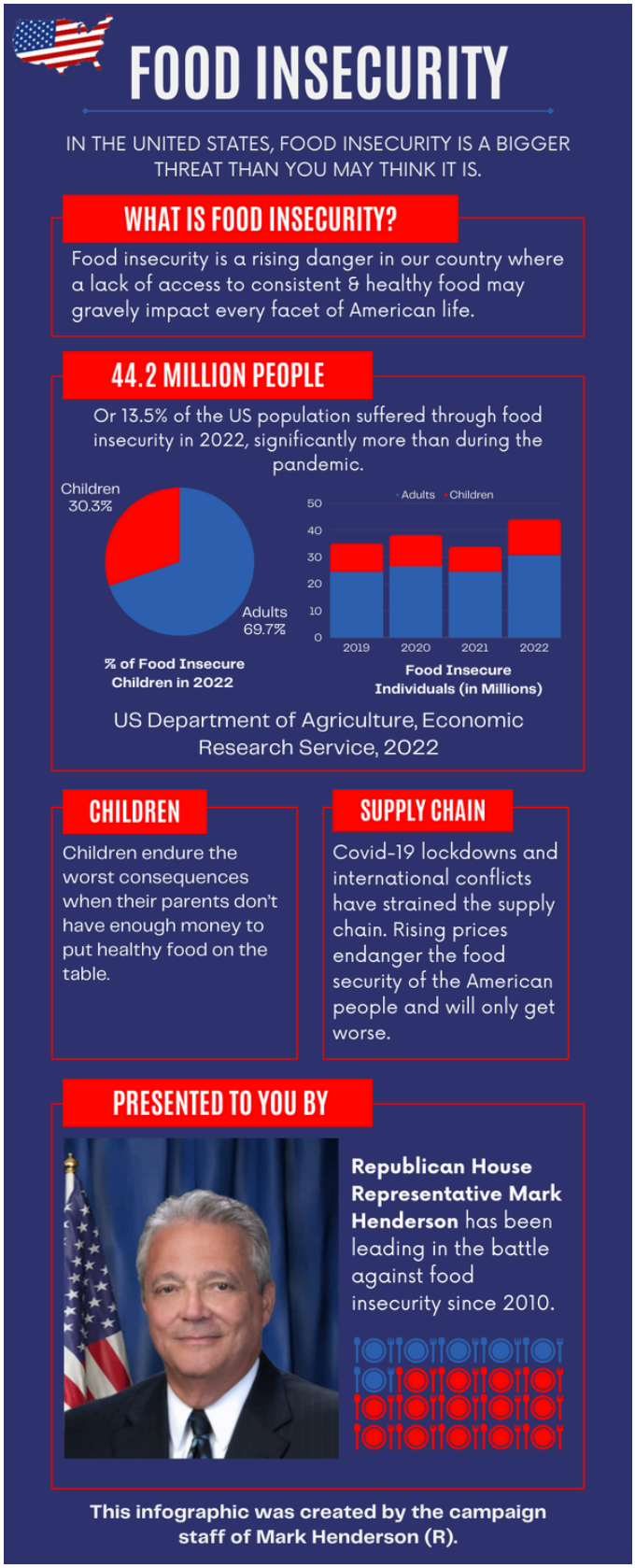
[Democratic source / Non-AI-generated]



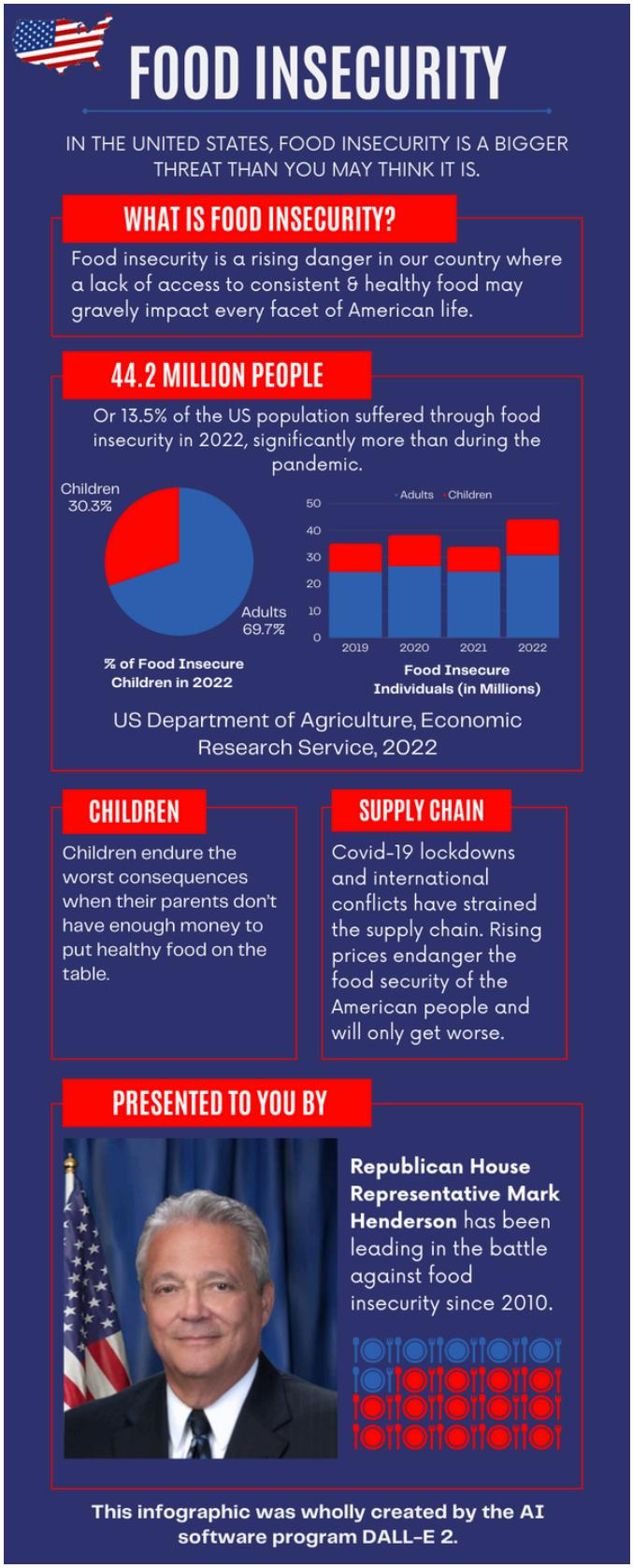
[Democratic source / AI-generated]



[Republican source / Non-AI-generated]



[Republican source / AI-generated]



[New Page]

To what extent do you agree or disagree that food insecurity is a pressing problem that deserves greater attention?

Very much agree
Agree
Somewhat agree
Neither Agree nor Disagree
Somewhat Disagree
Disagree
Very much Disagree

To what extent is your position on food insecurity:

	Not at all	Slightly	Moderately	Much	Very Much
…important to you?	◯	◯	◯	◯	◯
...something that you care a lot about?	◯	◯	◯	◯	◯
...important compared to other issues that you're dealing with right now?	◯	◯	◯	◯	◯
…connected to your beliefs about fundamental right and wrong?	◯	◯	◯	◯	◯
... a reflection of your core moral beliefs and convictions?	◯	◯	◯	◯	◯

[New Page]

Please write 3-5 sentences on your beliefs about food insecurity and your responses to the infographic you just viewed.
[Text Box]

[New Page]

Please indicate the degree to which you agree or disagree with the following statements concerning the infographic.

I believe the information presented in the infographic.

- Very Much Agree
- Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Disagree
- Very Much Disagree

I believe the source of the information presented in the infographic.

- Very Much Agree
- Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Disagree
- Very Much Disagree

I trust the information in the infographic.

- Very Much Agree
- Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Disagree
- Very Much Disagree

I trust the source of the infographic.

- Very Much Agree
- Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Disagree
- Very Much Disagree

The message presented in the infographic is ethical.

- Very Much Agree
- Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Disagree
- Very Much Disagree

The source of the message in the infographic is ethical.

- Very Much Agree
- Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Disagree
- Very Much Disagree

The message is relevant to me.

- Very Much Agree
- Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Disagree
- Very Much Disagree

I can use this infographic to make good decisions.

- Very Much Agree
- Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Disagree
- Very Much Disagree

The infographic appears authentic to me.

- Very Much Agree
- Agree

Somewhat Agree
Neither Agree nor Disagree
Somewhat Disagree
Disagree
Very Much Disagree

The infographic is designed to manipulate me.
Very Much Agree
Agree
Somewhat Agree
Neither Agree nor Disagree
Somewhat Disagree
Disagree
Very Much Disagree

[New page]

Are you familiar with generative artificial intelligence?
Not At All
Slightly
Moderately
Much
Very Much

To what extent do you trust AI to write accurate information on important social issues?
Not At All
Slightly
Moderately
Much
Very Much

For this question, please select the option "Moderately".
Not At All
Slightly
Moderately
Much
Very Much

To what extent do you think AI is capable of writing accurate descriptions of important social issues?

Not At All
Slightly
Moderately
Much
Very Much

[New Page]

We have just a few more questions! Once again, please answer honestly and to the best of your ability.

What is your age?
[Text box]

What is your racial/ethnic identity?
[Text box]

What is your gender identity?
○ Male
○ Female
○ Other [Text Box]

What is your current employment status?
○ Employed full time
○ Employed part time
○ Student
○ Unemployed
○ Retired
○ Homemaker

Which of the following best describes your household situation?
○ My household has a hard time buying the things we need.
○ My household has just enough money for the things we need.
○ My household has enough to buy the things we need and sometimes we can also buy special things.
○ My household has enough money to buy pretty much anything we want.

Are you eligible to vote in elections in the United States?
○ Yes
○ No

Regardless of your eligibility to vote, we are interested in your responses to the following questions.

How would you describe your political party?
○ Republican
○ Democrat
○ Neither

[If a participant selected neither Republican nor Democrat, then they will answer the next question]

If you had to choose between identifying as either Republican or Democrat, which one would you align yourself with?
○ Republican
○ Democrat
○ Neither

[If a participant selected either Republican or Democrat, then they will answer the next question]

You indicated you were [Republican/Democrat]. How [Republican/Democrat] are you?
○ Slightly
○ Moderately
○ Very

How would you describe your political orientation?
○ Conservative
○ Liberal
○ Neither liberal nor conservative

[If a participant selected neither liberal nor conservative, then they will answer the next question]

If you had to choose between identifying as either conservative or liberal, which one would you align yourself with?
○ Conservative
○ Liberal
○ Neither

[If a participant selected either conservative or liberal, then they will answer the next question]
You indicated you were [conservative/liberal]. How [conservative/liberal] are you?
○ Slightly

○ Moderately
○ Very

[New page]

Which of the following is true about the infographic you read?
○ It was sponsored by a member of the Democratic Party.
○ It was sponsored by a member of the Republican Party.
○ It was sponsored by a member of a different party.
○ It was sponsored by an independent organization fighting food insecurity.
○ I do not remember.

Which of the following is true about the infographic you read?
○ The infographic was created by artificial intelligence.
○ The infographic was created by Mark Henderson's campaign staff.
○ I do not remember.

Appendix B. Tests Focused Only on Partisans.

The following tests included only those who identified with a political party, Democrat or Republican. Participants who identified as "Neither" when asked their political party in the study were excluded.

Tests including participants who failed manipulation checks. After excluding only non-partisans and no other participants, a two-way ANOVA tested if participants' perceptions of the infographic was influenced by whether the source was AI versus human, whether the source was from an ingroup versus outgroup, or an interaction between these variables. There was no significant difference in the human/artificial intelligence conditions, $F(1, 184) = .908$, $p = .342$, nor in the ingroup/outgroup conditions, $F(1, 184) = 1.664$, $p = .199$. Finally, there was no interaction between the main effects, $F(1, 184) = .072$, $p = .789$. Another two-way ANOVA tested if perceptions of food insecurity were influenced by the conditions or an interaction. There was no significant difference in the human/AI conditions, $F(1, 183) = .928$, $p = .337$. There was, however, a marginal main effect in the ingroup/outgroup conditions, $F(1, 183) = 3.434$, $p = .065$. Participants who viewed an infographic from within their group had slightly more positive perceptions of food insecurity ($M = 6.08$, $SD = 1.060$) than those who viewed an infographic from outside their group ($M = 5.78$, $SD = 1.153$). There was no interaction between the main effects, $F(1, 183) = 2.131$, $p = .146$.

Tests excluding participants who failed Manipulation Check 1. Participants who incorrectly identified which party created the infographic they saw and non-partisans were excluded from the following tests. A two-way ANOVA tested whether perceptions of the infographic differed as a function of whether the source was AI versus human, whether the source was from the ingroup versus the outgroup, or the interaction of conditions. There was no

significant difference in the human/artificial intelligence conditions, $F(1, 147) = 1.115$, $p = .293$. However, there was a significant difference in the ingroup/outgroup conditions, $F(1, 147) = 4.351$, $p = .039$. Participants who read an infographic from within their group had significantly more positive perceptions of the infographic ($M = 5.390$, $SD = 1.293$) than those who read an infographic from outside their group ($M = 4.946$, $SD = 1.185$). Finally, there was no significant interaction between human/artificial intelligence conditions and ingroup/outgroup conditions, $F(1, 147) = .466$, $p = .496$. Another two-way ANOVA tested if the main effects had an influence on perceptions of food insecurity. There was no significant difference in the human/artificial intelligence conditions, $F(1, 146) = 2.348$, $p = .128$. There was, however, a significant difference in the ingroup/outgroup conditions, $F(1, 146) = 3.985$, $p = .048$. Participants who read an infographic from within their group had significantly more positive perceptions of food insecurity ($M = 6.10$, $SD = 1.079$) than those who read an infographic from outside their group ($M = 5.74$, $SD = 1.159$). Finally, there was no interaction between the two conditions, $F(1, 146) = .069$, $p = .793$.

Tests excluding participants who failed Manipulation Check 2. Participants who misidentified whether artificial intelligence or a human made the infographic and non-partisans were excluded from the two following tests. A two-way ANOVA tested whether perceptions of the infographic differed as a function of whether the source was human/artificial, whether the source was from an ingroup/outgroup, or an interaction. There was a marginal main effect in the human/artificial intelligence conditions, $F(1, 150) = 3.888$, $p = .051$. Participants who read an infographic by a human source had slightly more positive perceptions of the infographic ($M = 5.363$, $SD = 1.153$) than those who read an infographic from an artificial intelligence source ($M = 4.968$, $SD = 1.265$). There was no significant difference in the ingroup/outgroup conditions, $F(1,$

150) = .167, p = .684, nor was there an interaction between the conditions, $F(1, 150) = .001$, p = .975. Another two-way ANOVA tested the influence of the main effects and interaction on participants' perceptions of food insecurity. There was no significant difference in the human/artificial intelligence conditions, $F(1, 149) = .567$, p = .453, nor in the ingroup/outgroup conditions, $F(1, 149) = 1.122$, p = .291. Finally, there was no interaction between the conditions, $F(1, 149) = 2.147$, p = .145.

Tests excluding those who failed either Manipulation Check. Both non-partisans and those who failed either manipulation check were excluded from the following two tests. A two-way ANOVA tested whether a source was human versus artificial intelligence, whether the source was from an ingroup versus outgroup, or whether an interaction had an influence on participants' perceptions of the infographic. There was a significant difference in the human/artificial intelligence conditions, $F(1, 121) = 4.280$, p = .041. Participants who read an infographic from a human source had significantly more positive perceptions of the infographic (M = 5.333, SD = 1.167) than those who read an infographic from an artificial intelligence source (M = 4.853, SD = 1.339). There was no significant difference in the ingroup/outgroup conditions, $F(1, 121) = 1.399$, p = .239, and there was not an interaction between the conditions, $F(1, 121)$ = .175, p = .676. Another two-way ANOVA tested the influence of the main effects and interaction on participants' perceptions of food insecurity. There was no significant difference in the human/artificial intelligence conditions, $F(1, 120) = .739$, p = .392, nor in the ingroup/outgroup conditions, $F(1, 120) = 1.615$, p = .206. Finally, there was no interaction between the human/artificial intelligence conditions and the ingroup/outgroup conditions, $F(1, 120) = .503$, p = .480.

CITI PROGRAM

Completion Date 22-Jan-2024
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This is to certify that:

Grace Rinehart

Not valid for renewal of certification through CME.

Has completed the following CITI Program course:

Responsible Conduct of Research (RCR)
(Curriculum Group)
Basic RCR + Human Subjects
(Course Learner Group)
1 - Basic Course
(Stage)

Under requirements set by:

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