RURAL POLL

2025 NEBRASKA RURAL POLL RESEARCH REPORT

Algorithms

The Rural Poll now offers a way for you to find the exact data you're looking for, for your research, policy decisions, or business proposals.
To purchase questions for the 2026 Poll, contact Survey Manager Becky Vogt at rvogt2@unl.edu.

Nebraska Rural Poll Research Report 25-6, December 2025.

Cover photo used with permission from Craig Chandler, University Communications.

All of the research reports detailing Nebraska Rural Poll results are located on its webpage at: http://ruralpoll.unl.edu

Funding for this project was provided by Nebraska Extension's Rural Prosperity Nebraska of the Institute for Agriculture and Natural Resources at the University of Nebraska–Lincoln.

TABLE OF CONTENTS

The demographic profile of **Rural Poll Resondents** can be found at *allthingsnebraska.unl.edu*

EXECUTIVE SUMMARY

Algorithms are sets of rules that help computers perform tasks or solve problems, and they are now part of many everyday tools, like apps, online shopping, and banking. They can make tasks faster and more accurate, but they can also cause problems if they are not used in a transparent manner or if they contain biases. Because they affect so many parts of life, it's important to make sure algorithms are used responsibly. Given these challenges and opportunities, how aware are rural Nebraskans of the use of algorithms in online media content? What opinions do they have about the use of algorithms? How do they feel the Internet has impacted their communications and social interactions? This paper provides a detailed analysis of these questions.

This report details 943 responses to the 2025 Nebraska Rural Poll, the 30th annual effort to understand rural Nebraskans' perceptions. Respondents were asked a series of questions about algorithms. Comparisons are made among different respondent subgroups, that is, comparisons by age, occupation, region, etc. Based on these analyses, some key findings emerged:

- **Most rural Nebraskans are aware that algorithms are used to recommend online media content, that they are used to prioritize certain content above others, and that they are used to tailor content to them.** At least six in ten rural Nebraskans say they are very or completely aware of the following: algorithms are used to tailor certain online media content to me (67%), algorithms are used to prioritize certain online media content above others (65%), and algorithms are used to recommend online media content to me (63%).
    - Younger persons are more likely than older persons to say they are very or completely aware that algorithms are used to recommend online media content to them, that they are used to prioritize certain content above others, and that they are used to tailor content. As an example, almost nine in ten persons aged 19 to 29 (86%) are very or completely aware that algorithms are used to recommend media content, compared to just over three in ten persons aged 65 and older (31%).
- **Most rural Nebraskans have some concerns about algorithms – that they make it harder to distinguish between reliable and unreliable information online, that they might limit the diversity of information they are exposed to online, and the influence they have on news and information they receive online about current events.** At least six in ten rural Nebraskans agree or strongly agree with the following: I am concerned that algorithms are making it harder to distinguish between reliable and unreliable information online (74%), I am concerned that algorithms might limit the diversity of information I am exposed to online (69%), and I am concerned about the influence of algorithms on news and information I receive online about current events (68%).
    - Persons with at least some college education are more likely than persons with lower education levels to agree that they are concerned that algorithms are making it harder to distinguish between reliable and unreliable information online. At least three-quarters of persons with at least some college education agree with that statement, compared to just over six in ten persons having a high school diploma or less education (62%).

EXECUTIVE SUMMARY

- **Rural Nebraskans have mixed opinions about some impacts of algorithms, such as if they personalize online information in a beneficial way, if they help discover new information or perspectives they might not have encountered, and if they make it easier to find information by promoting the most relevant information.** For those statements the proportions agreeing are less than one in four: I think algorithms can make it easier to find information by categorizing and promoting the most online information that is relevant to me (37%), I think algorithms might help me discover new information or perspectives online that I might not have otherwise encountered (36%), and I think algorithms personalize the information I see online in a way that is beneficial to me (25%).
    - Younger persons are more likely than older persons to agree that algorithms might help them discover new information or perspectives online that they might not have otherwise encountered. Approximately two-thirds of persons aged 19 to 29 (66%) agree with this statement, compared to just over two in ten persons aged 65 and older (23%).
- **When asked if they consciously train algorithm recommender systems to achieve various objectives such as maintaining consistency with their beliefs and interests or aligning with their personal values, many rural Nebraskans neither agree nor disagree.** At least four in ten answer neither to these statements: I often consciously train algorithm recommender systems to make the online media content more aligned with my preferences (46%), I often consciously train algorithm recommender systems on online media to maintain consistency with my beliefs and interests (44%), and I often consciously train algorithm recommender systems to make the online media content more aligned with my personal values (42%).
- **Rural Nebraskans have mixed opinions about online communities.** More than four in ten rural Nebraskans disagree that they feel they belong to an online community on the Internet (43%). Just over one-third (35%) disagree that they can find people who share their exact interests more easily on the Internet than they can in daily life, compared to just under three in ten who agree (29%). However, just under four in ten agree that the Internet has allowed them to communicate with all kinds of interesting people they otherwise would never have interacted with (39%), compared to one-quarter (25%) who disagree.
    - Younger persons are more likely than older persons to say they can find people who share their exact interests more easily on the Internet than they can in their daily life. One-half of persons aged 19 to 29 agree with this statement, compared to less than two in ten persons aged 65 and older (15%).
    - Younger persons are more likely than older persons to agree that the Internet has allowed them to communicate with all kinds of interesting people they otherwise would have never interacted with. Over six in ten persons aged 19 to 29 (63%) agree with this statement, compared to just over one-quarter of persons aged 65 and older (26%).

REPORT

INTRODUCTION

Algorithms are sets of rules that help computers perform tasks or solve problems, and they are now part of many everyday tools, like apps, online shopping, and banking. They can make tasks faster and more accurate, but they can also cause problems if they are not used in a transparent manner or if they contain biases. Because they affect so many parts of life, it's important to make sure algorithms are used responsibly. Given these challenges and opportunities, how aware are rural Nebraskans of the use of algorithms in online media content? What opinions do they have about the use of algorithms? How do they feel the Internet has impacted their communications and social interactions? This paper provides a detailed analysis of these questions.

This report details 943 responses to the 2025 Nebraska Rural Poll, the 30th annual effort to understand rural Nebraskans' perceptions. Respondents were asked a series of questions about algorithms.

Methodology and Respondent Profile

This study is based on 943 responses from Nebraskans living in 86 counties in the state.[1] A self-administered questionnaire was mailed in June and July to 6,745 randomly selected households. Metropolitan counties not included in the sample were Cass, Douglas, Lancaster, Sarpy, Saunders, Seward and Washington. The 14-page questionnaire included questions pertaining to well-being, community, energy resources, agricultural security, trust in institutions, algorithms, and trade policy. This paper reports only results from the energy resources section.

A 14% response rate was achieved using the total design method (Dillman, 1978). The sequence of steps used follow:

1. A pre-notification letter was sent requesting participation in the study.
2. The questionnaire was mailed with an informal letter signed by the project manager approximately two weeks later.
3. A reminder postcard was sent to those who had not yet responded approximately two weeks after the questionnaire had been sent.
4. Those who had not yet responded within approximately 30 days of the original mailing were sent a replacement questionnaire.

Appendix Table 1 shows demographic data from this year's study and previous rural polls, as well as similar data based on the entire nonmetropolitan population of Nebraska (using the latest available data from the 2019 - 2023 American Community Survey). As can be seen from the table, there are some marked differences between some of the demographic variables in our sample compared to the Census data. Thus, we suggest the reader use caution in generalizing our data to all rural Nebraska. However, given the random sampling frame used for this survey, the acceptable percentage of responses, and the large number of respondents, we feel the data provide useful insights into opinions of rural Nebraskans on the various issues presented in this report. The margin of error for this study is plus or minus three

1 In the spring of 2013, the Grand Island area (Hall, Hamilton, Howard and Merrick Counties) was designated a metropolitan area, though Howard County was no longer considered a metropolitan county in 2023. To facilitate comparisons from previous years, these four counties are still included in our sample. In addition, the Sioux City area metropolitan counties of Dixon and Dakota were added in 2014 because of a joint Metro Poll being conducted by the University of Nebraska at Omaha to ensure all counties in the state were sampled. Although classified as metro, Dixon County is rural in nature. Dakota County is similar in many respects to other "micropolitan" counties the Rural Poll surveys.

percent.

Since younger residents have typically been under-represented by survey respondents and older residents have been over-represented, weights were used to adjust the sample to match the age distribution in the nonmetropolitan counties in Nebraska (using U.S. Census figures from 2020).

The average age of respondents is approximately 50 years. Sixty-seven percent are married (Appendix Table 1) and 64 percent live within the city limits of a town or village. On average, respondents have lived in Nebraska 43 years and have lived in their current community 26 years. Fifty percent are living in or near towns or villages with populations less than 5,000. Ninety-seven percent have attained at least a high school diploma.

Sixteen percent of the respondents report their 2024 approximate household income from all sources, before taxes, as below $40,000. Seventy percent report incomes over $60,000. Seventy-eight percent were employed in 2024 on a full-time, part-time, or seasonal basis. Seventeen percent are retired. Twenty-eight percent of those employed reported working in a management, professional, or education occupation. Ten percent indicated they were employed in agriculture. Just under three in ten (29%) have any ownership in a farm or ranch.

AWARENESS OF ALGORITHMS

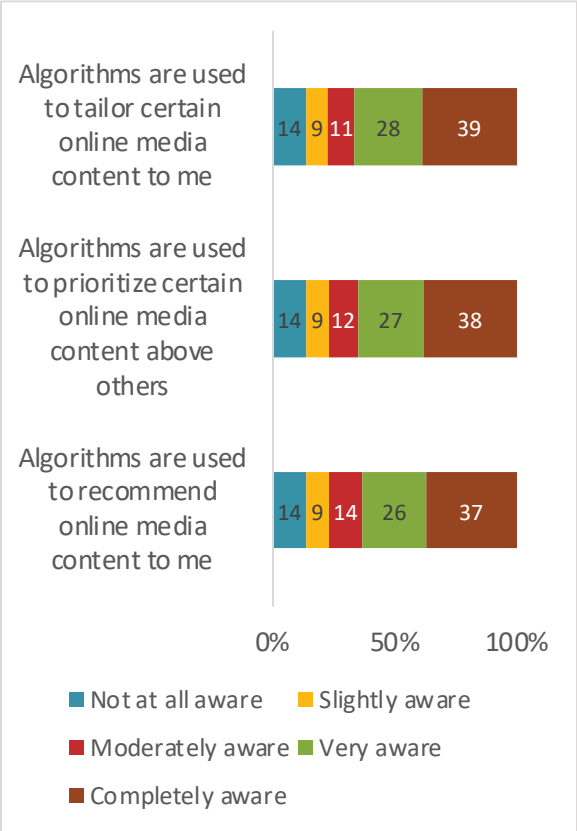
Algorithms are a sequence of step-by-step instructions given to a computer to perform a task or solve a problem. They use data about media users to personalize their online experiences.

Respondents were given some statements about their awareness of algorithms in online media content. Most rural Nebraskans are aware that algorithms are used to recommend online media content, that they are used to prioritize certain content above others, and that they are used to tailor content to them. At least six in ten rural Nebraskans say they are very or completely aware of the following: algorithms are used to tailor certain online media content to me (67%), algorithms are used to prioritize certain online media content above others (65%), and algorithms are used to recommend online media content to me (63%) (Figure 1).

The responses to these questions are analyzed by community size, region, and various individual attributes (Appendix Table 2). Some differences are detected.

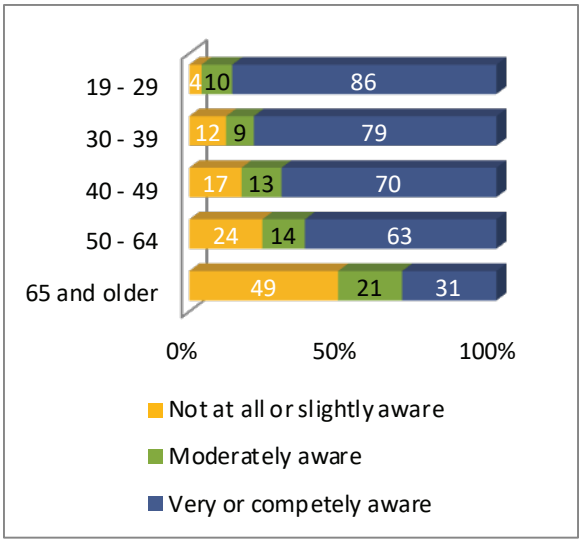
Younger persons are more likely than older persons to say they are very or completely aware that algorithms are used to recommend online media content to them. Almost nine in ten persons aged 19 to 29 (86%) are very or completely aware that algorithms are used to recommend media content, compared to just over three in ten persons aged 65 and older (31%) (Figure 2).

Figure 1. Awareness of Algorithms in Online Media Content



Persons with higher education levels are more likely than persons with less education to be at least very aware that algorithms are used to recommend online media content to them. Three-quarters of persons with at least a four-year college degree (75%) are at least very aware that algorithms recommend online media content, compared to just over one-

Figure 2. Awareness that Algorithms are Used to Recommend Online Media Content by Age



third of persons having a high school diploma or less education (34%).

The other groups most likely to say they are very or completely aware that algorithms are used to recommend online media content to them include persons with higher household incomes and persons who have never married.

When comparing responses by occupation, the groups least likely to say they are at least very aware that algorithms recommend online media content are persons with food service or personal care occupations and persons with occupations in agriculture. Just over one-half of these two occupation groups say they are very or completely aware of this.

These same groups are those most likely to be very or completely aware that algorithms are used to prioritize certain online media content above others. Over eight in ten persons aged 19 to 39 are at least very aware of this, compared to just over one-third of persons aged 65 and older. Persons with higher household incomes, persons with at least a four-year college degree, and persons who have never married are the other groups most likely to be very or completely aware of this. And, persons with food service or personal care occupations are less likely than persons with different occupations to be at least very aware that algorithms are used to prioritize online content.

The same trends hold true when asked how aware they are that algorithms are used to tailor certain online media content to them. Persons with higher household incomes, younger persons, persons with at least a four-year college degree, persons who have never married, and married persons are the groups most likely to be very or completely aware of this. And, once again persons with food service or personal care occupations are the occupation group least likely to be at least very aware that algorithms are used to tailor online content.

OPINIONS ABOUT ALGORITHMS AND ONLINE COMMUNITIES

Next, respondents were given a list of statements about algorithms and online communities. They were asked to indicate the extent to which they disagree or agree with each.

Most rural Nebraskans have some concerns about algorithms – that they make it harder to distinguish between reliable and unreliable information online, that they might limit the diversity of information they are exposed to online, and the influence they have on news and information they receive online about current events. At least six in ten rural Nebraskans agree or strongly agree with the following: I am concerned that algorithms are making it harder to distinguish between reliable and unreliable information online (74%), I am concerned that algorithms might limit the diversity of information I am exposed to online (69%), and I am concerned about the influence of algorithms on news and information I receive online about current events (68%) (Figure 3).

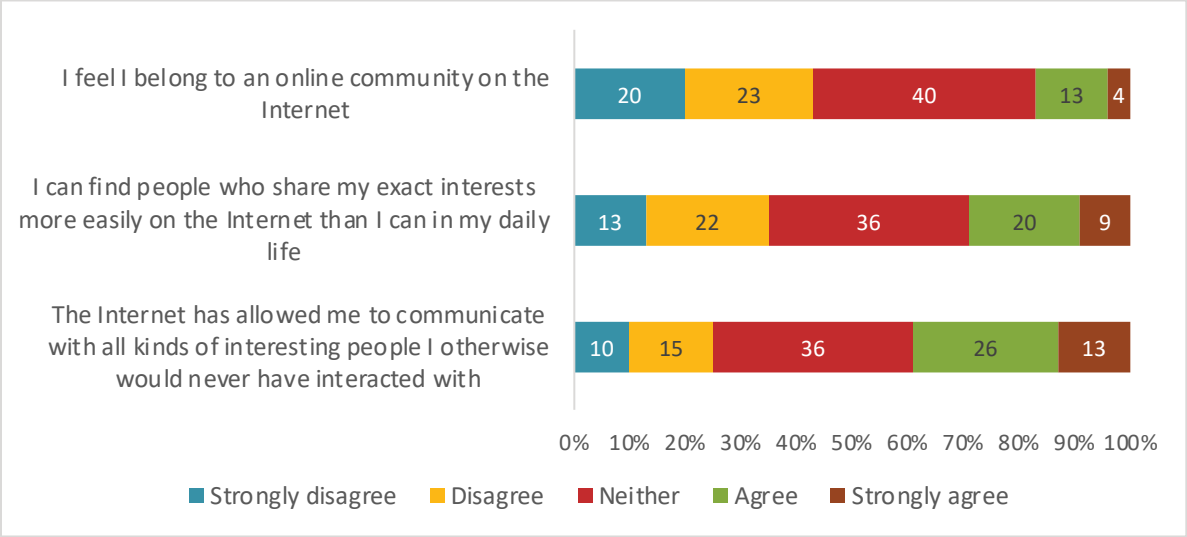
Rural Nebraskans have mixed opinions about some impacts of algorithms, such as if they personalize online information in a beneficial way, if they help discover new information or perspectives they might not have encountered, and if they make it easier to find information by promoting the most relevant information. For those statements the proportions agreeing are less than one in four: I think algorithms can make it easier to find information by categorizing and promoting the most online information that is relevant to me (37%), I think algorithms might help me discover new information or perspectives online that

Figure 3. Opinions About Algorithms

I might not have otherwise encountered (36%), and I think algorithms personalize the information I see online in a way that is beneficial to me (25%).

When asked if they consciously train algorithm recommender systems to achieve various objectives such as maintaining consistency with their beliefs and interests or aligning with their personal values, many rural Nebraskans neither agree nor disagree. At least four in ten answer neither to these statements: I often consciously train algorithm recommender systems to make the online media content more aligned with my preferences (46%), I often consciously train algorithm recommender systems on online media to maintain consistency with my beliefs and interests (44%), and I often consciously train algorithm recommender systems to make the online media content more aligned with my personal values (42%).

Figure 4. Opinions About Online Communities



Rural Nebraskans have mixed opinions about online communities. More than four in ten rural Nebraskans disagree that they feel they belong to an online community on the Internet (43%) (Figure 4). Just over one-third (35%) disagree that they can find people who share their exact interests more easily on the Internet than they can in daily life, compared to just under three in ten who agree (29%). However, just under four in ten agree that the Internet has allowed them to communicate with all kinds of interesting people they otherwise would never have interacted with (39%), compared to one-quarter (25%) who disagree.

The opinions about both algorithms and online communities are examined by community size, region, and individual attributes (Appendix Table 3). Many differences are found.

Younger persons are more likely than older persons to agree that algorithms personalize the information found online in a beneficial way. Just over four in ten persons aged 19 to 29 (43%) agree with this statement, compared to just over one in ten persons aged 65 and older (12%).

The other groups most likely to agree that algorithms personalize online information in a beneficial way include persons living in or near the smallest communities and persons with construction, installation or maintenance occupations.

Persons with higher education levels are more likely than persons with less education to agree that they are concerned that algorithms might limit the diversity of information they are exposed to online. Just over three-quarters of

persons with at least a four-year college degree (76%) agree with this statement, compared to just over one-half of persons having a high school diploma or less education (53%).

The other groups most likely to agree that they are concerned that algorithms may limit the diversity of online information they see include: persons with the highest household incomes; persons aged 30 to 64; females; persons who have never married; persons with management, professional, or education occupations; and persons with production, transportation, or warehousing occupations.

Persons who have never married are more likely than the other marital groups to agree that they often consciously train algorithm recommender systems on online media to maintain consistency with their beliefs and interests. Just over four in ten persons who have never married (44%) agree with this statement, compared to one in ten widowed persons. When comparing age groups, persons aged 30 to 39 are the group most likely to say they train algorithm recommender systems to maintain consistency with their beliefs and interests.

The youngest persons are more likely than older persons to agree that they feel they belong to an online community on the Internet. Three in ten persons aged 19 to 29 agree with this statement, compared to eight percent of persons aged 40 to 49.

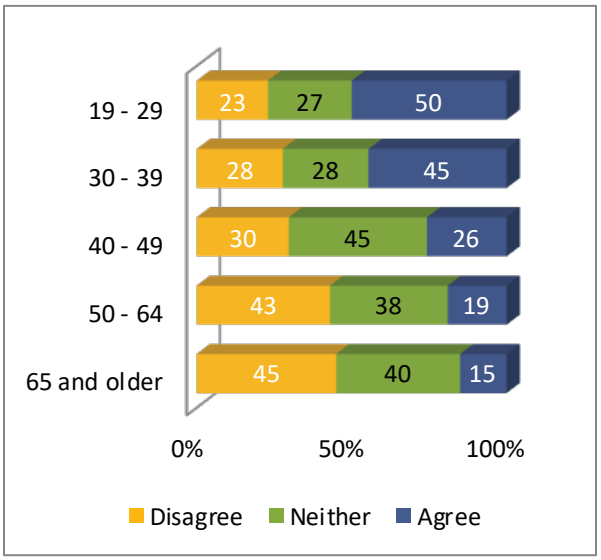
Persons having a high school diploma or less education, persons who have never married, and persons with food service or personal care occupations are the other groups most likely to feel they belong to an online community.

Younger persons are more likely than older persons to say they train algorithm recommender systems to make the media content more aligned with their personal values. Just under four in ten persons aged 19 to 29 (37%) agree with this statement, compared to approximately one in ten persons aged 50 and older.

Persons who have never married, persons with management, professional or education occupations, and persons with production, transportation or warehousing occupations are the other groups most likely to train algorithm recommender systems so that information is more aligned with their personal values.

Younger persons are more likely than older persons to say they can find people who share their exact interests more easily on the Internet than they can in their daily life. One-half of persons aged 19 to 29 agree with this statement, compared to less than two in ten persons aged 65 and older (15%) (Figure 5).

Figure 5. Can Find People with Exact Interests More Easily on Internet than in Daily Life by Age



The other groups most likely to agree they can find people who share their interests more easily on the Internet than they can in daily life include: persons living in or near larger communities, persons who have never married, and persons with food service or personal care occupations.

Younger persons are more likely than older persons to agree that algorithms might help them discover new information or perspectives online that they might not have otherwise encountered. Approximately two-thirds of persons aged 19 to 29 (66%) agree with this statement, compared to just over two in ten persons aged 65 and older (23%).

The other groups most likely to agree that algorithms might help them discover new information or perspectives include: females, persons with at least some college education, persons who have never married, and persons with food service or personal care occupations.

Persons living in or near larger communities are more likely than persons living in or near smaller communities to agree that they are concerned about the influence of algorithms on news and information they receive online about current events. Just over seven in ten persons living in or near communities with populations of 5,000 or more agree with this statement, compared to approximately six in ten persons living in or near communities with populations under 1,000.

The other groups most likely to agree that they are concerned about the influence algorithms might have on the information they receive online about current events include: persons with higher household incomes, persons aged 30 to 64, persons with higher education levels, and persons with sales or office support occupations.

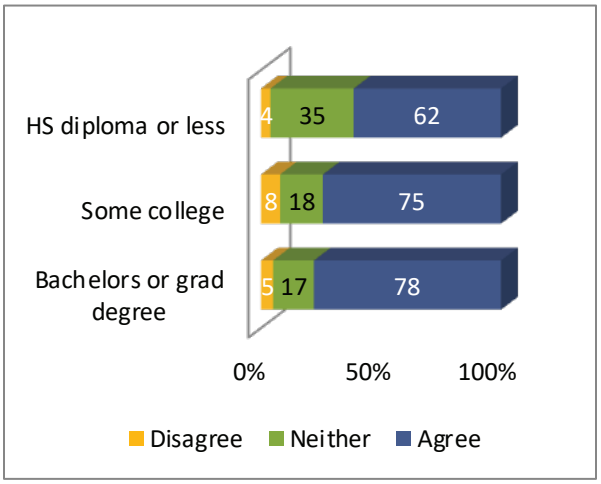
Persons living in or near the smallest communities, persons under the age of 40, persons with at least a four-year college degree, and persons who have never married are the groups most likely to agree that they think algorithms make it easier to find information by categorizing and promoting the information most relevant to them.

Younger persons are more likely than older persons to agree that the Internet has allowed them to communicate with all kinds of interesting people they otherwise would have never interacted with. Over six in ten persons aged 19 to 29 (63%) agree with this statement, compared to just over one-quarter of persons aged 65 and older (26%).

The other groups most likely to agree that the Internet has allowed them to communicate with all kinds of people they might not otherwise include persons who have never married, persons with food service or personal care occupations, and persons with production, transportation, and warehousing occupations.

Persons with at least some college education are more likely than persons with lower education levels to agree that they are concerned that algorithms are making it harder to distinguish between reliable and unreliable information online. At least three-quarters of persons with at least some college education agree with that statement, compared to just over six in ten persons having a high school diploma or less education (62%) (Figure 6).

Figure 6. Concerned Algorithms are Making it Harder to Distinguish Between Reliable and Unreliable Information Online by Education Level



Females are more likely than males to agree that they are concerned that algorithms are making it harder to distinguish between reliable and unreliable information online. When comparing marital groups, the widowed persons are the group least likely to agree with this statement.

The groups most likely to agree that they often consciously train algorithm recommender systems to make the online media content more aligned with their preferences include younger persons and persons who have never married.

CONCLUSION

Most rural Nebraskans are aware that algorithms are used to recommend online media content, that they are used to prioritize certain content above others, and that they are used to tailor content to them. This is especially true of younger persons who are more likely than older persons to be aware of algorithm use in online media content.

Most rural Nebraskans have some concerns about algorithms – that they make it harder to distinguish between reliable and unreliable information online, that they might limit the diversity of information they are exposed to online, and the influence they have on news and information they receive online about current events. Persons with at least some college education are more likely than persons with less education to agree that algorithms are making it harder to distinguish between reliable and unreliable information online.

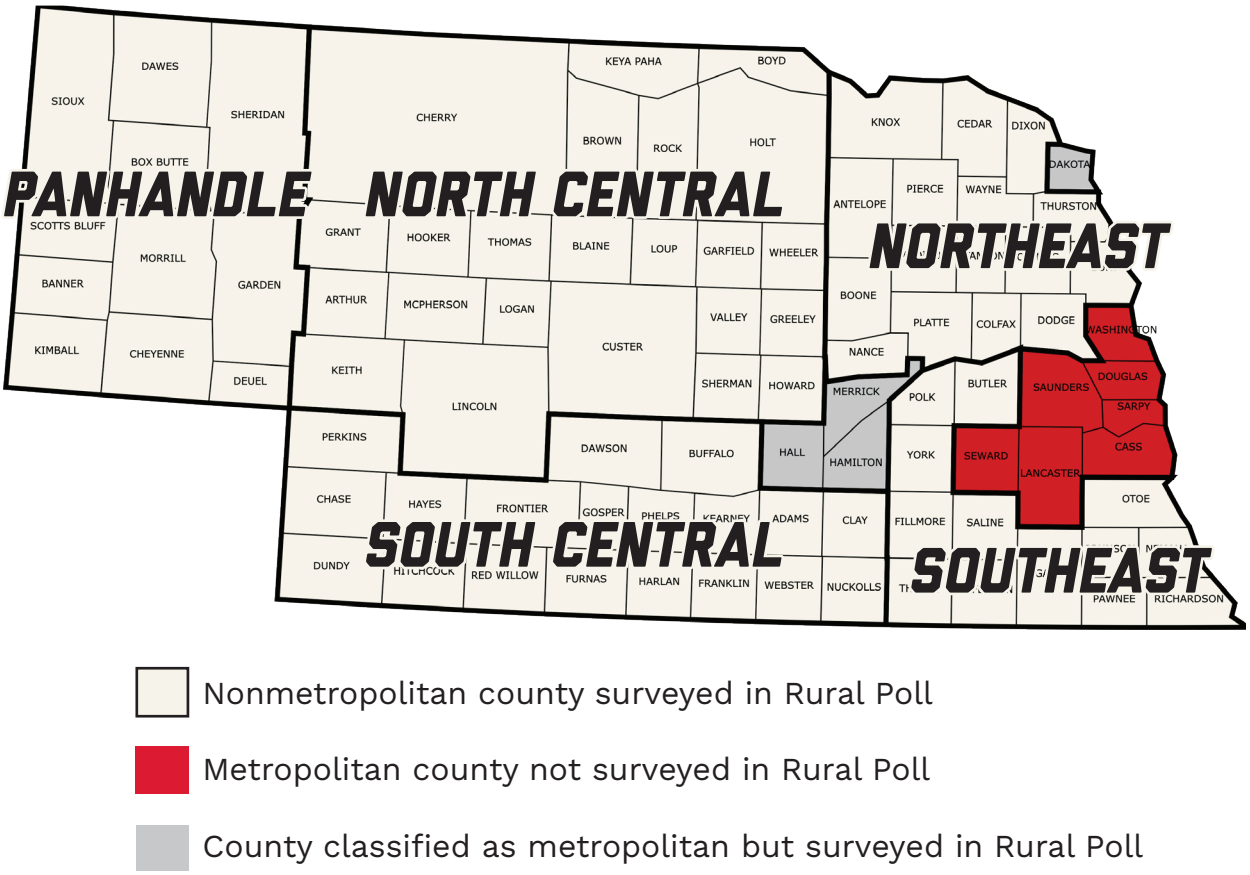
Rural Nebraskans have mixed opinions about some impacts of algorithms, such as if they personalize online information in a beneficial way, if they help discover new information or perspectives they might not have encountered, and if they make it easier to find information by promoting the most relevant information. However, younger persons are more likely than older persons to agree that algorithms might help them discover new information or perspectives online that they might not have otherwise encountered.

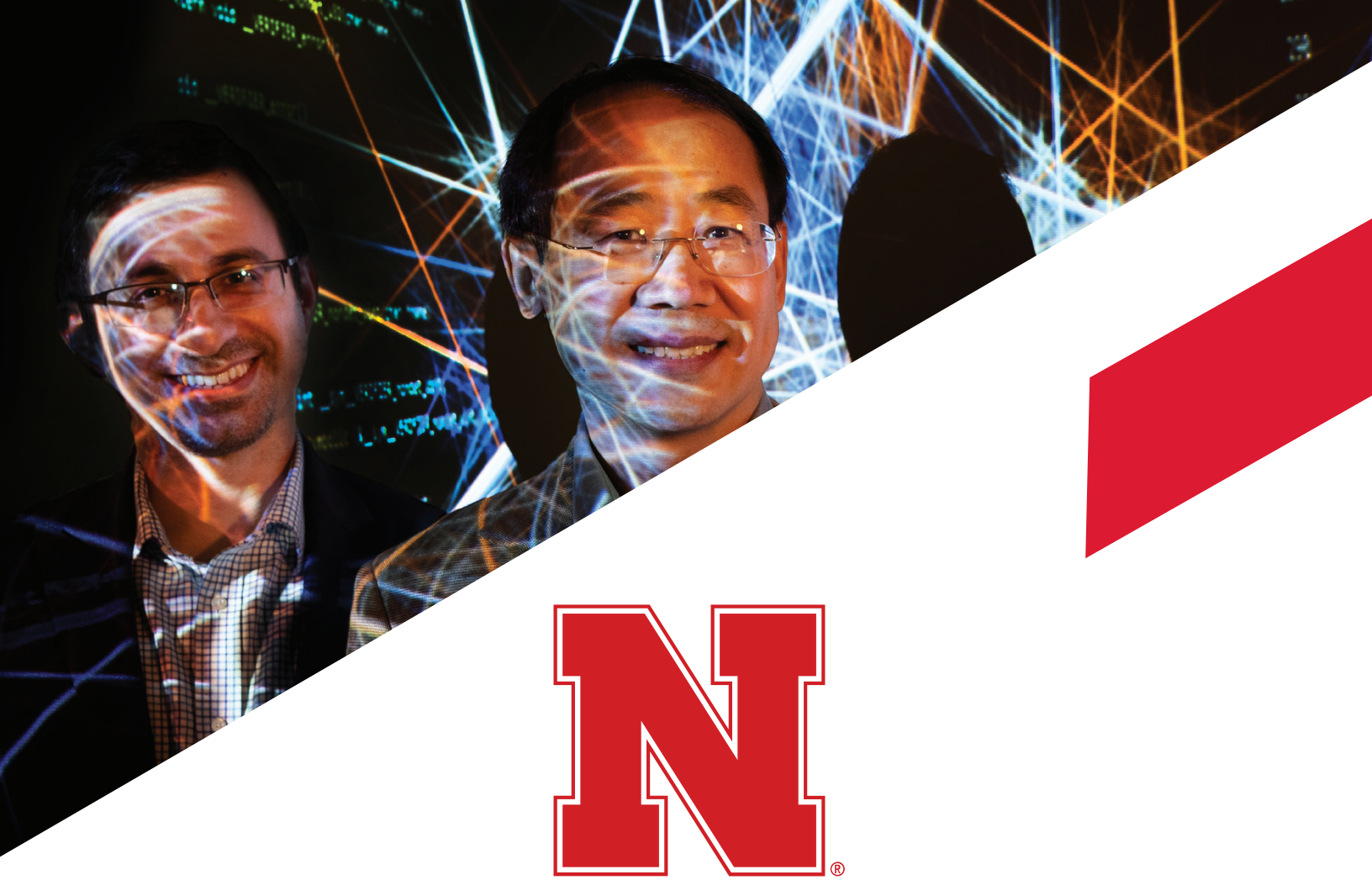
When asked if they consciously train algorithm recommender systems to achieve various objectives such as maintaining consistency with their beliefs and interests or aligning with their personal values, many rural Nebraskans neither agree nor disagree. This may be caused by many not being familiar with such systems.

Rural Nebraskans have mixed opinions about online communities. More than four in ten rural Nebraskans disagree that they feel they belong to an online community on the Internet. Just over one-third disagree that they can find people who share their exact interests more easily on the Internet than they can in daily life, compared to just under three in ten who agree. However, just under four in ten agree that the Internet has allowed them to communicate with all kinds of interesting people they otherwise would never have interacted with, compared to one-quarter who disagree.

Younger persons are more likely than older persons to find positive impacts from online communities. They are more likely to say they can find people who share their interests more easily online and that the Internet has allowed them to communicate with interesting people they would not have otherwise.

Appendix Figure 1. *Regions of Nebraska*





RURAL POLL

Nebraska Rural Poll Research Report 25-5 results compiled by:

Heather Akin
Cheryl Burkhart-Kriesel
Mary Emery
Katelyn Larson
Bradley Lubben
L.J. McElravy
Rebecca Vogt