Responsive Management™

WASHINGTON RESIDENTS' OPINIONS ON BEAR AND WOLF MANAGEMENT AND THEIR EXPERIENCES WITH WILDLIFE THAT CAUSE PROBLEMS

Conducted for the Washington Department of Fish and Wildlife

by Responsive Management

2014

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EXECUTIVE SUMMARY

INTRODUCTION AND METHODOLOGY

This study was conducted for the Washington Department of Fish and Wildlife (hereinafter referred to as the Department) to determine residents' opinions on bear and wolf management, their opinions on management of predators in general, their experiences with wildlife that cause problems, and their participation in outdoor recreation. The study entailed a telephone survey of Washington residents from across the state.

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones among Washington residents (both landlines and cell phones were called). Additionally, telephone surveys, relative to mail or Internet surveys, allow for more scientific sampling and data collection, provide higher quality data, obtain higher response rates, are more timely, and are more cost-effective. Telephone surveys also have fewer negative effects on the environment than do mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires.

The telephone survey questionnaire was developed cooperatively by Responsive Management and the Department. The sample was developed using Random Digit Dialing, the most effective way to ensure that all residents have an equal chance of being selected, with landlines and cell phones included in their proper proportions so that the sample as a whole was representative of all residents across the state.

Telephone surveying times are Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. The software used for data collection was Questionnaire Programming Language. Responsive Management obtained a total of 904 completed interviews.

The analysis of data was performed using Statistical Package for the Social Sciences as well as proprietary software developed by Responsive Management. Throughout this report, findings of the telephone survey are reported at a 95% confidence interval. For the entire sample of

Washington residents 18 years old and older, the sampling error is at most plus or minus 3.26 percentage points.

PROBLEMS WITH WILDLIFE

- More than a quarter of Washington residents (29%) have had problems with wild animals or birds in the past 2 years.
  - Deer and raccoons were the most commonly named species as causing problems (35% of those who said they had problems cited deer, 25% cited raccoons), followed by bear (14%), geese (13%), and coyotes (10%).
    - The overwhelmingly most common problem caused by deer and elk was that they ate gardens and landscaping (88% of those with deer/elk problems). Other deer/elk problems include annoyance in general from such things as droppings (15%), eating crops (7%), and vehicle collisions (also 7%).
    - The bear problems that were cited include getting into trash (44% of those who had bear problems), damaged structures/getting on porches/getting into things (other than trash) (31%), and eating or damaging landscaping, trees, and gardens (25%).
    - Problems caused by cougars and wolves include chasing/killing livestock (53% of those who had cougar/wolf problems), that there are simply too many of them (24%), and getting too close to humans/danger to humans (20%).

- Of those 29% of residents who had problems with wildlife including wild birds, about 1 in 6 of them contacted the Department for assistance.
  - Common responses/services received, among those who contacted the Department, include having a Department employee attempt to remove the wildlife, information or advice over the telephone, or a visit from a Department employee to discuss the problem or attempt to remove the wildlife.
  - Of those who contacted the Department, 60% are satisfied with the responses/services that they received from the Department. Nonetheless, 21% are dissatisfied.

- Although most commonly respondents did not know what rating to give the Department's management of problems caused by wildlife (33% did not know), they otherwise are positive: 51% give a rating of *excellent* or *good*, and only 6% give a rating of poor.

- Information about how Washington State manages human-wildlife conflicts is largely unknown to residents: 71% had not, previous to the survey, heard or seen any information about how Washington manages those conflicts. Meanwhile, 28% indicate having heard or seen something.
  - Residents' preferred ways to be provided with information about human-wildlife conflicts are direct mail (25%), the Internet in general (23%), newspapers (23%), television (23%), and e-mail (17%).

APPROVAL OR DISAPPROVAL OF HUNTING

- While most Washington residents approve of legal, regulated hunting (88% do so), there are some who disapprove (7%).

- The survey asked eight questions about support for or opposition to hunting for various purposes. For each question, respondents indicated their support or opposition, and the results to all the questions in the series are examined relative to one another. (Note that the questions were asked regardless of people's previous responses about approval or disapproval of hunting.)
  - Concerns related to ecologic impacts were relatively more important to respondents than were concerns related to impacts on humans. The highest support was for hunting to prevent the spread of animal diseases, to prevent damage to habitat caused by wildlife, and to control animal populations in a way that benefits other wildlife. The lowest support was for hunting to reduce animal-vehicle collisions and to control damage to private property.

PREDATOR MANAGEMENT

- There is much more support for (70%) than opposition to (15%) maintaining sustainable populations of predators in Washington.
  - The most common reason for support of having sustainable populations of predators is that predators are necessary for the ecosystem.

- Regarding *reducing* predator populations to prevent the loss of domestic animals, including pets: support (48%) and opposition (39%) are both substantial, indicating that there is no consensus on this issue.

- There is much more support for (68%) than opposition to (19%) *reducing* predator populations to protect threatened or endangered species.

- Respondents were first informed that the overall health of deer and elk populations can vary because of factors including severe winters or poor habitat conditions. They were further informed that, when deer or elk populations are depressed, predators can hinder the population's ability to rebound. Respondents were then asked about their support for or opposition to *reducing* predator populations to increase deer or elk herds that are below population objectives. In these cases, support (71%) far exceeds opposition (15%).
  - Of those who oppose reducing predator populations to increase deer and elk herds that are below population objectives, the most common reasons are that they want nature to take its own course or that they are against the hunting of predators (or hunting entirely).

MANAGEMENT OF BLACK BEARS AND PROBLEMS CAUSED BY BLACK BEARS

- Opposition to (70%) far exceeds support for (17%) the lethal removal of black bears to prevent damage to timber on commercial timberlands.
  - A follow-up question asked whether, in the event that the Department does allow lethal removal of black bears, respondents think the removal should be done by hunters, by contracted professional sharpshooters, or a combination of the two. Most commonly, they want it done solely by hunters (36%). Otherwise, the percent wanting a combination (17%) is about the same as the percent wanting it done solely by professional

sharpshooters (15%). A quarter of respondents (25%) said that they favored neither approach.

SUPPORT FOR OR OPPOSITION TO WOLF RECOVERY IN WASHINGTON

- The most basic question about the recovery of wolves asked if residents supported or opposed it. There is much more support for (64%) than opposition to (27%) the recovery of wolves in Washington.
  - A follow-up question asked about support for or opposition to wolf recovery if it resulted in some localized declines in elk and deer populations: 57% support, while 28% oppose.

- Residents were asked if they would support or oppose, once the wolf population in the state meets recovery population objectives, removing wolves from the state endangered species list. Support for this (73%) far exceeds opposition (15%).

RATINGS OF THE DEPARTMENT'S MANAGEMENT OF WOLVES IN WASHINGTON

- When residents are asked to rate the Department's management of wolves in Washington, the majority (53%) do not know what rating to give. Otherwise, they are fairly evenly split, with 23% saying *excellent* or *good* (the upper half of the scale), and 23% saying *fair* or *poor* (the lower half of the scale). Despite the mixed results, note that only 10% rated the Department's management of wolves as *poor*.
  - Reasons for not giving a higher rating (among those who did not give a rating of *excellent*) include the feeling among residents that there are too many wolves, that they disagree with having wolves in Washington, the feeling that there are not enough wolves, that the Department does not communicate effectively about wolves, and that wolves cause problems.

OPINIONS ON MANAGEMENT OF HUMAN-WOLF CONFLICTS

- While there is a majority of Washington residents in support of wolf recovery, there is also a majority who would support having the Department provide cost share funding to landowners to prevent wolves from attacking livestock: 61% support such cost share funding; however, 26% oppose.
  - A follow-up question adds a nuance to such cost share funding, and it was asked only of those who supported having the Department provide cost share funding to landowners to prevent wolves from attacking livestock. The question asked those who supported in the previous question whether they would support or oppose the provision of cost share funding as the *primary* strategy to address potential human conflicts with wolves. In this question, there is some erosion of support: 65% of them still support, but for 35%, their support either turns to opposition (20% of them) or turns to a neutral answer.

- Again, while a majority of Washington residents support wolf recovery, there is also a majority who support (63%) some level of lethal wolf control to protect livestock in Washington. However, 28% of residents oppose lethal wolf control.

- Finally in this section, the survey asked about support for or opposition to some level of lethal wolf control to protect deer, elk, and moose populations in Washington: on this question, 55% support, while 32% oppose.

OPINIONS ON IMPACTS OF A FULLY RECOVERED WOLF POPULATION IN WASHINGTON

- While a majority of residents say that they are concerned about the impact wolves might have on elk populations (58% are concerned), most of that concern consists of those saying that they are *somewhat* concerned or *a little* concerned. Only 20% are *extremely* or *very* concerned. At the other end, 35% are *not at all* concerned.

- A similar question to the one above asked about concern regarding the impact wolves might have on livestock. On this question, there is a bit more concern: 71% are concerned, including 29% who are *extremely* or *very* concerned. Those who are *not at all* concerned make up 22%.

OPINIONS ON A HUNTING SEASON FOR WOLVES

- Given the scenario where wolves are fully recovered, have reached population objectives, and have been removed from the state endangered species list, a majority of residents would support (63%) the establishment of a wolf hunting season; nonetheless, 28% would oppose.
  - Those who opposed were asked to rate the importance that a general opposition to hunting plays in their reason for opposing a hunting season for wolves: about a quarter of those who oppose a hunting season for wolves are opposed because of a general opposition to hunting.
  - A similar question asked those who oppose to rate the importance of this reason: that they do not support the hunting of wolves specifically. This reason is much more important than a general anti-hunting stance: nearly all those who oppose gave this reason a rating of the midpoint or higher.

- Several questions asked about support for or opposition to a wolf hunting season for various reasons.
  - A wolf hunting season to maintain population objectives is supported by 69%, while it is opposed by 23%. This is the reason for hunting wolves with the highest level of support, of the four questions discussed here.
  - A wolf hunting season to provide a recreational hunting opportunity has less support (38%) than opposition (53%). Most opposition is *strong* opposition. Of the four reasons, this has, by far, the lowest support.
  - A wolf hunting season to address livestock attacks or depredation is supported by 65% and opposed by 25%.
  - Finally, a wolf hunting season to address impacts wolves have on other wildlife populations, such as deer, elk, and moose, is supported by 61% and opposed by 29%.

PARTICIPATION IN HUNTING AND OUTDOOR ACTIVITIES

- A little more than half of Washington residents have gone hiking in the past 2 years (57%), with wildlife viewing (47%), camping (45%), and fishing (42%) close behind in their participation rates. Rounding out the outdoor activities asked about are boating (39%), swimming in natural waters (34%), and hunting (17%).

- About three quarters of Washington residents (77%) indicate having participated in outdoor recreation on state-owned land in the past 2 years.

- Some additional questions were asked about hunting.
  - About a third of Washington residents (35%) say that they have gone hunting at some time in their lives. (The question did not define hunting strictly as physically carrying a firearm or bow, so those who have accompanied others may have answered yes to this question. This could slightly raise the actual rate over a more restrictive definition of participation in hunting.)
  - Among those who had been hunting in Washington, 81% of them indicate having purchased a hunting license in Washington at some time.
  - The most popular species to hunt, by far, are white-tailed deer, elk, and mule deer.
  - About a fifth of Washington residents have hunted outside of Washington at some time in their lives.
  - A final question about hunting asked residents to indicate where they fell within hunting categories, with one category being a non-hunter. About half of residents indicate not being a hunter and being unlikely to ever be a hunter (48% said this best defined them). Another 13% indicate not being a hunter but say they might consider becoming one. At the other end, 20% consider themselves to be a current hunter, while 13% say that they hunted in the past but no longer do so.

MEMBERSHIP IN CONSERVATION ORGANIZATIONS

- A quarter of Washington residents (25%) say that they are members of or have donated to an organization that promotes wildlife conservation or habitat enhancement.

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INTRODUCTION AND METHODOLOGY

This study was conducted for the Washington Department of Fish and Wildlife (hereinafter referred to as the Department) to determine residents' opinions on bear and wolf management, their opinions on management of predators in general, their experiences with wildlife that cause problems, and their participation in outdoor recreation. The study entailed a telephone survey of Washington residents from across the state. Specific aspects of the research methodology are discussed below.

USE OF TELEPHONES FOR THE SURVEY

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones among Washington residents (both landlines and cell phones were called). Additionally, telephone surveys, relative to mail or Internet surveys, allow for more scientific sampling and data collection, provide higher quality data, obtain higher response rates, are more timely, and are more cost-effective. Telephone surveys also have fewer negative effects on the environment than do mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires.

QUESTIONNAIRE DESIGN

The telephone survey questionnaire was developed cooperatively by Responsive Management and the Department, based in part on previous surveys and also based on the research team's familiarity with outdoor recreation and natural resources. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey.

SURVEY SAMPLE

The sample of Washington residents was obtained from SSI, a company that specializes in providing scientifically valid samples for public opinion research. The sample was developed using Random Digit Dialing, the most effective way to ensure that all residents have an equal chance of being selected, with landlines and cell phones included in their proper proportions so that the sample as a whole was representative of all residents across the state.

The sample was stratified regionally to ensure that enough respondents would be in each region for statistically valid results. The regional samples were then compiled for the statewide results, properly weighted so that each region matched the proportion of the state's population made up of that region.

TELEPHONE INTERVIEWING FACILITIES

A central polling site at the Responsive Management office allowed for rigorous quality control over the interviews and data collection. Responsive Management maintains its own in-house telephone interviewing facilities. These facilities are staffed by interviewers with experience conducting computer-assisted telephone interviews on the subjects of outdoor recreation and natural resources.

To ensure the integrity of the telephone survey data, Responsive Management has interviewers who have been trained according to the standards established by the Council of American Survey Research Organizations. Methods of instruction included lecture and role-playing. The Survey Center Managers and other professional staff conducted a project briefing with the interviewers prior to the administration of this survey. Interviewers were instructed on type of study, study goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey questionnaire, reading of the survey questions, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey questionnaire.

INTERVIEWING DATES AND TIMES

Telephone surveying times are Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. The survey was conducted in May 2014.

TELEPHONE SURVEY DATA COLLECTION AND QUALITY CONTROL

The software used for data collection was Questionnaire Programming Language (QPL). The survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with manual data entry. The survey questionnaire was programmed so that QPL branched, coded, and substituted phrases in the survey based on previous responses to ensure the integrity and consistency of the data collection.

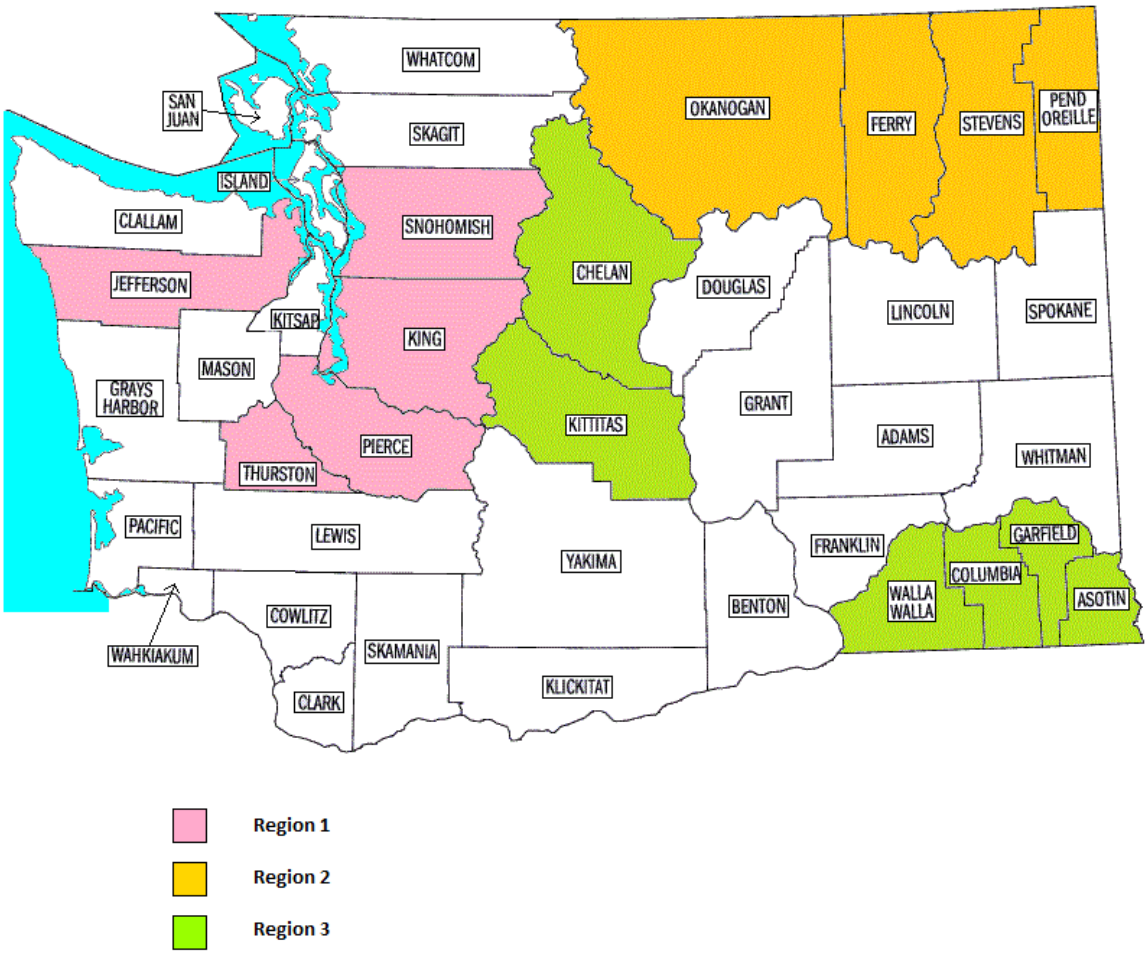
The Survey Center Managers and statisticians monitored the data collection, including monitoring of the actual telephone interviews without the interviewers' knowledge, to evaluate the performance of each interviewer and ensure the integrity of the data. The survey questionnaire itself contains error checkers and computation statements to ensure quality and consistent data. After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness. Responsive Management obtained a total of 904 completed interviews.

DATA ANALYSIS

The analysis of data was performed using Statistical Package for the Social Sciences as well as proprietary software developed by Responsive Management. The results were weighted by demographic and geographic characteristics so that the sample was representative of residents of Washington as a whole.

The data analysis included some crosstabulations by regions. The analysis looked at each region versus those not in that region (see map on the following page), and a fourth analysis looked at one of those regions versus another of those regions (Region 2 versus Region 3), and the last crosstabulation was east versus west, as defined by the Cascade Crest.

WASHINGTON REGIONS FOR WILDLIFE OPINION SURVEY



This map is presented here in color; for those looking at a black and white version of the report, the counties in each region are listed below.

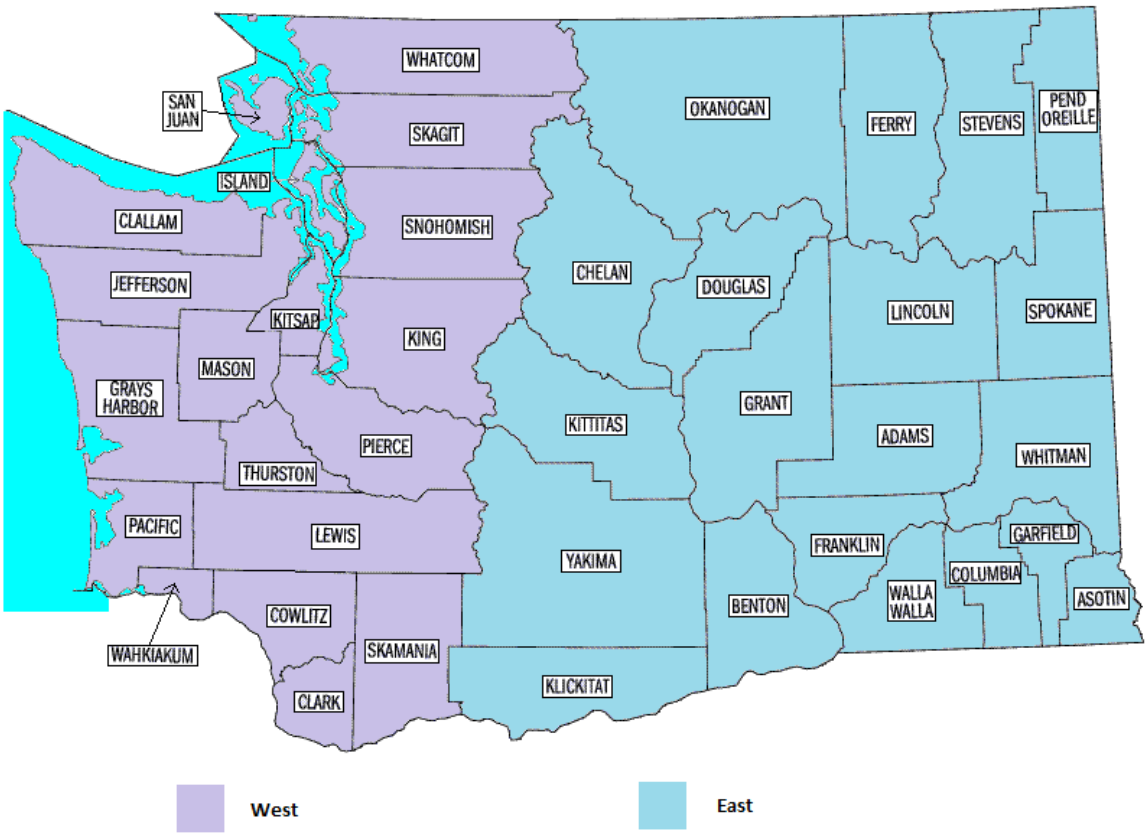
Region 1 consists of selected counties near the Puget Sound: Jefferson, Snohomish, King, Pierce, and Thurston.

Region 2 consists of the northeastern counties: Okanagan, Ferry, Stevens, and Pend Oreille.

Region 3 consists of the southeastern counties and two central counties: Walla Walla, Columbia, Garfield, Asotin, Chelan, and Kittitas.

The map below shows the division of East Region versus West Region in the analysis.

East-West Split of Washington for Wildlife Opinion Survey



SAMPLING ERROR

Throughout this report, findings of the telephone survey are reported at a 95% confidence interval. For the entire sample of Washington residents 18 years old and older, the sampling error is at most plus or minus 3.26 percentage points. This means that if the survey were conducted 100 times on different samples that were selected in the same way, the findings of 95 out of the 100 surveys would fall within plus or minus 3.26 percentage points of each other. Sampling error was calculated using the formula described below, with a sample size of 904 and a population size of 5,143,187 residents 18 years old or older.

Sampling Error Equation

$$B = \left(\sqrt{\frac{\frac{N_p(.25)}{N_s} - .25}{N_p - 1}} \right) (1.96)$$

Where: B = maximum sampling error (as decimal)
N_P = population size (i.e., total number who could be surveyed)
N_S = sample size (i.e., total number of respondents surveyed)

Derived from formula: p. 206 in Dillman, D. A. 2000. *Mail and Internet Surveys*. John Wiley & Sons, NY.

Note: This is a simplified version of the formula that calculates the maximum sampling error using a 50:50 split (the most conservative calculation because a 50:50 split would give maximum variation).

ADDITIONAL INFORMATION ABOUT THE PRESENTATION OF RESULTS IN THE REPORT

In examining the results, it is important to be aware that the questionnaire included several types of questions:

- Open-ended questions are those in which no answer set is read to the respondents; rather, they can respond with anything that comes to mind from the question.
- Closed-ended questions have an answer set from which to choose.
- Single or multiple response questions: Some questions allow only a single response, while other questions allow respondents to give more than one response or choose all that apply. Those that allow more than a single response are indicated on the graphs with the label, "Multiple Responses Allowed."
- Scaled questions: Many closed-ended questions (but not all) are in a scale, such as excellent-good-fair-poor.
- Series questions: Many questions are part of a series, and the results are primarily intended to be examined relative to the other questions in that series (although results of the questions individually can also be valuable). Typically, results of all questions in a series are shown together.

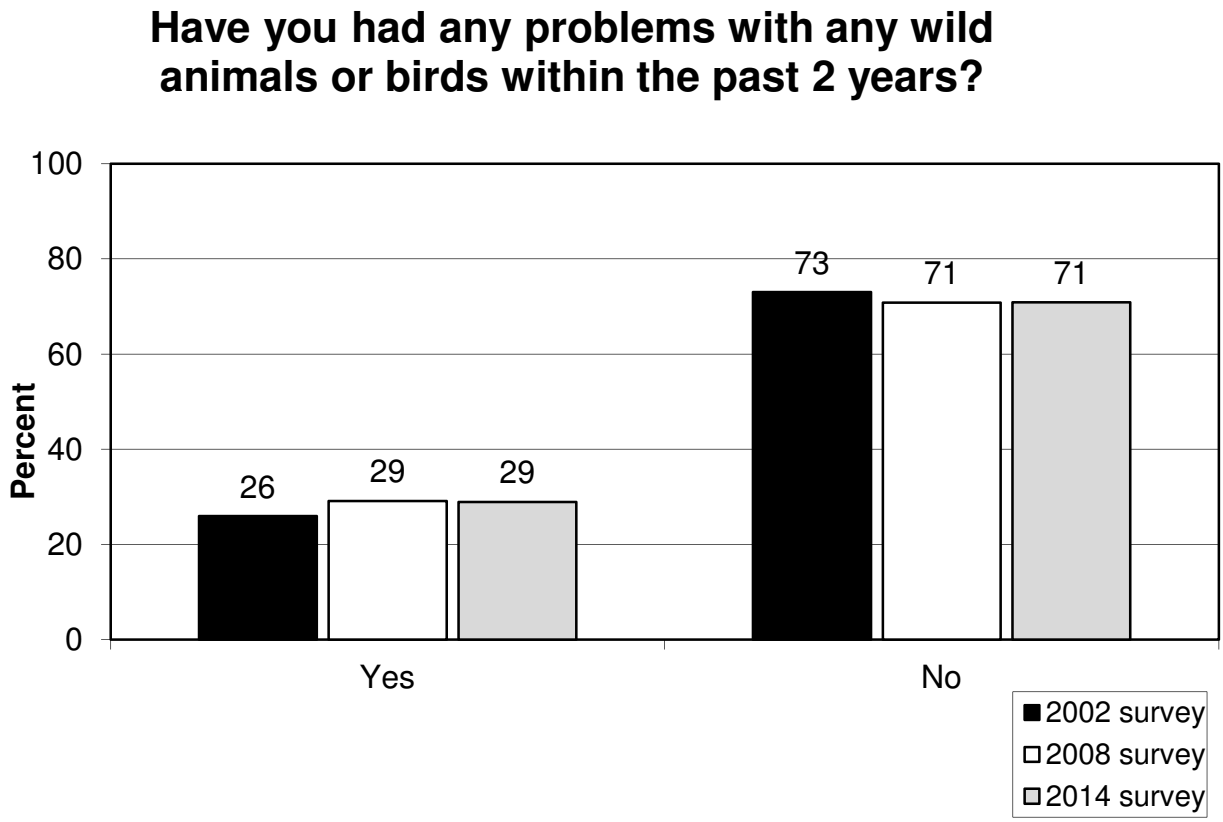
Most graphs show results rounded to the nearest integer; however, all data are stored in decimal format, and all calculations are performed on unrounded numbers. For this reason, some results may not sum to exactly 100% because of this rounding on the graphs. Additionally, rounding may cause apparent discrepancies of 1 percentage point between the graphs and the reported results of combined responses (e.g., when "strongly support" and "moderately support" are summed to determine the total percentage in support).

PROBLEMS WITH WILDLIFE

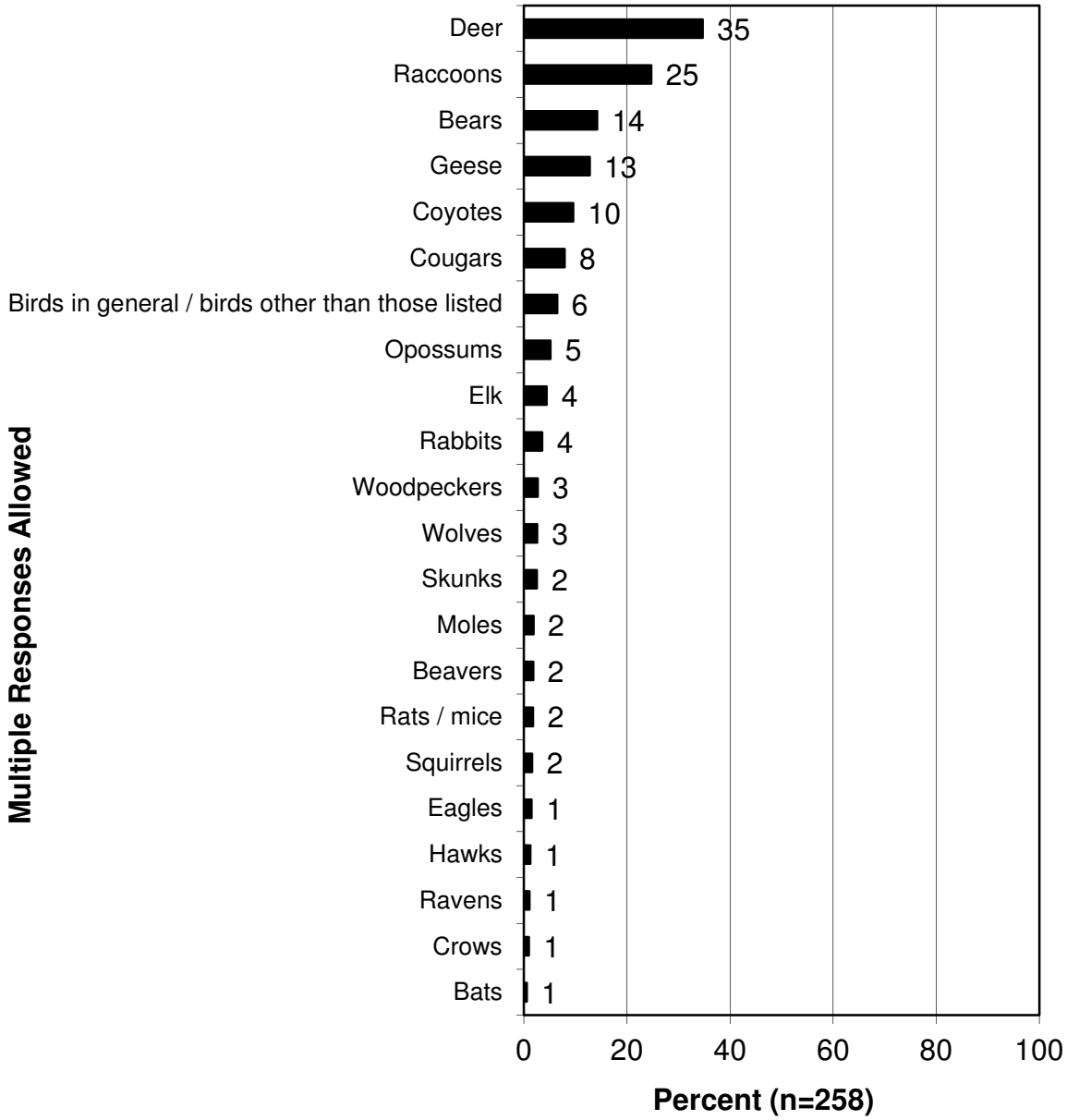
PROBLEMS EXPERIENCED

- More than a quarter of Washington residents (29%) have had problems with wild animals or birds in the past 2 years.
  - Deer and raccoons were the most commonly named species as causing problems (35% of those who said they had problems cited deer, 25% cited raccoons), followed by bear (14%), geese (13%), and coyotes (10%). The graph shows the full list; note that respondents could name multiple species.
    - The overwhelmingly most common problem caused by deer and elk was that they ate gardens and landscaping (88% of those with deer/elk problems). Other deer/elk problems include annoyance in general from such things as droppings (15%), eating crops (7%), and vehicle collisions (also 7%).
    - The bear problems that were cited include getting into trash (44% of those who had bear problems), damaged structures/getting on porches/getting into things (other than trash) (31%), and eating or damaging landscaping, trees, and gardens (25%).
    - Problems caused by cougars and wolves include chasing/killing livestock (53% of those who had cougar/wolf problems), that there are simply too many of them (24%), and getting too close to humans/danger to humans (20%).
  - The trend shows that people having problems with wildlife has remained at about the same rate over the three surveys (26%, 29%, and 29% in the surveys).

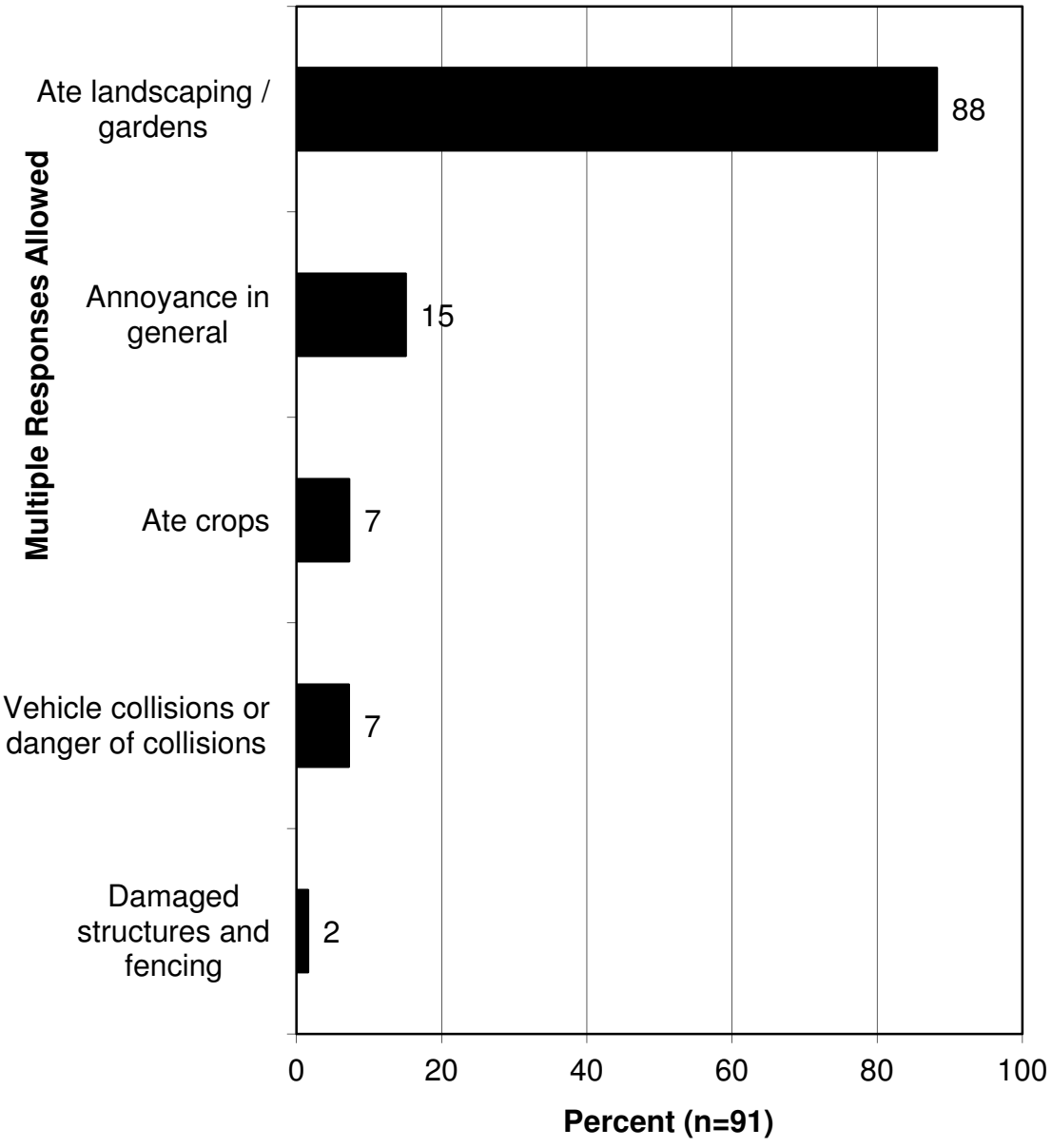
Q14. Have you personally had any problems with any wild animals or birds within the past 2 years?


Have you had any problems with any wild animals or birds within the past 2 years?
100
80
60
40
20
0
Percent
26
29
29
73
71
71
Yes
No
2002 survey
2008 survey
2014 survey

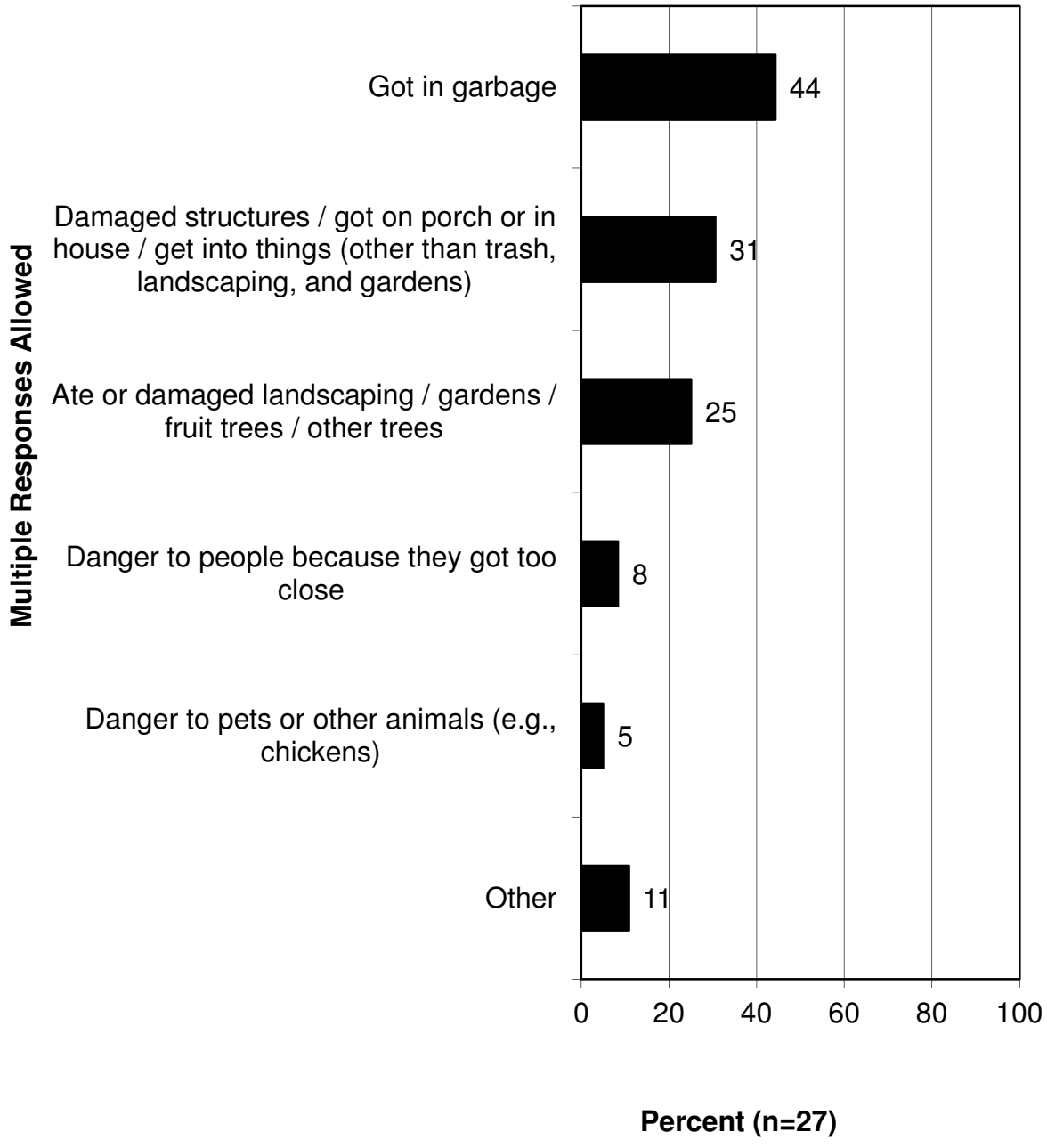
Q17. Which wild animals or birds caused you problems? (Asked of those who had problems with wild animals or birds in the past 2 years.)



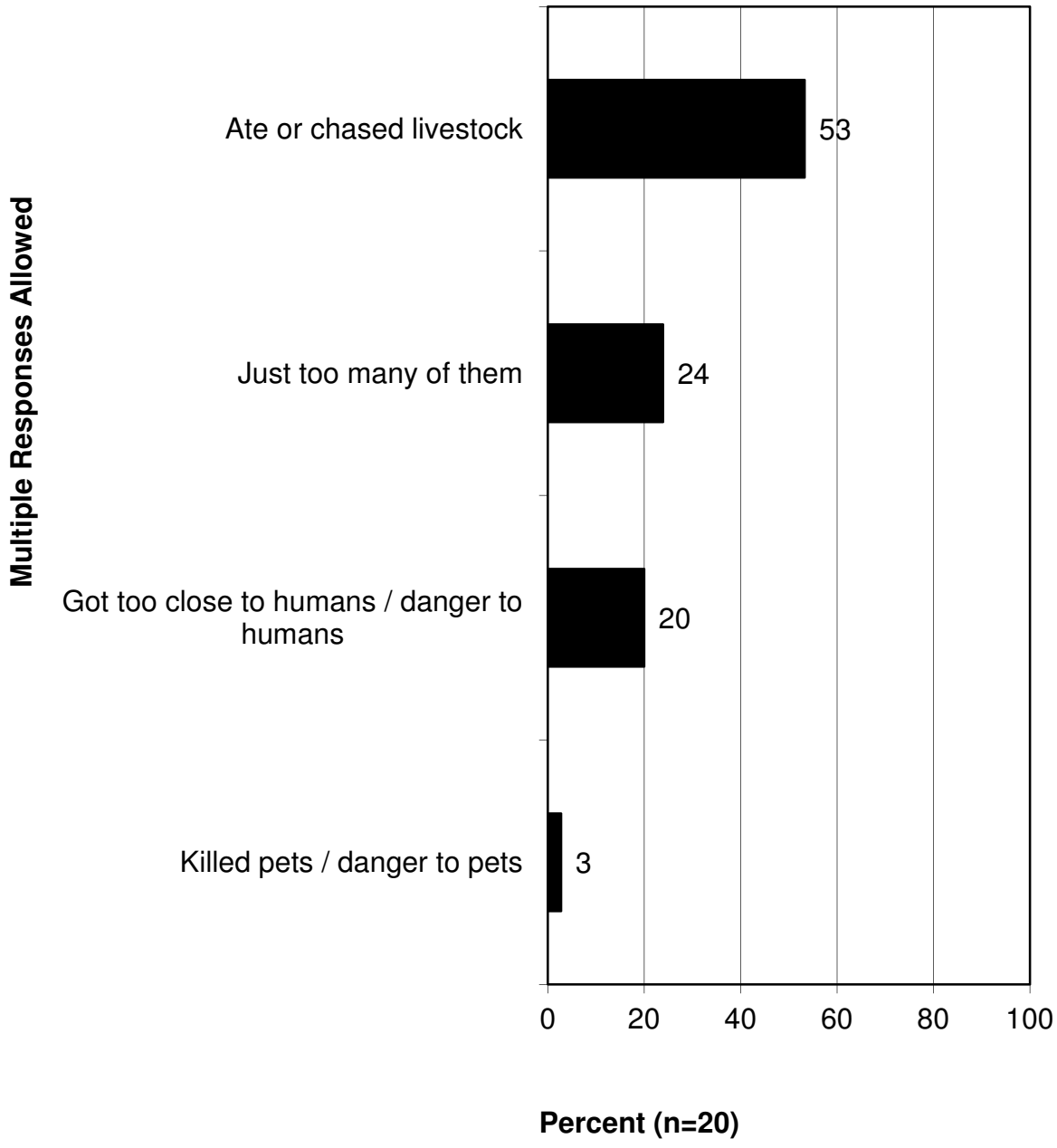
Q19. You said that deer or elk caused you problems. What problems did they cause? (Asked of those who said that deer or elk caused problems.)



Q20. You said that bears caused you problems. What problems did they cause? (Asked of those who said that bears caused problems.)



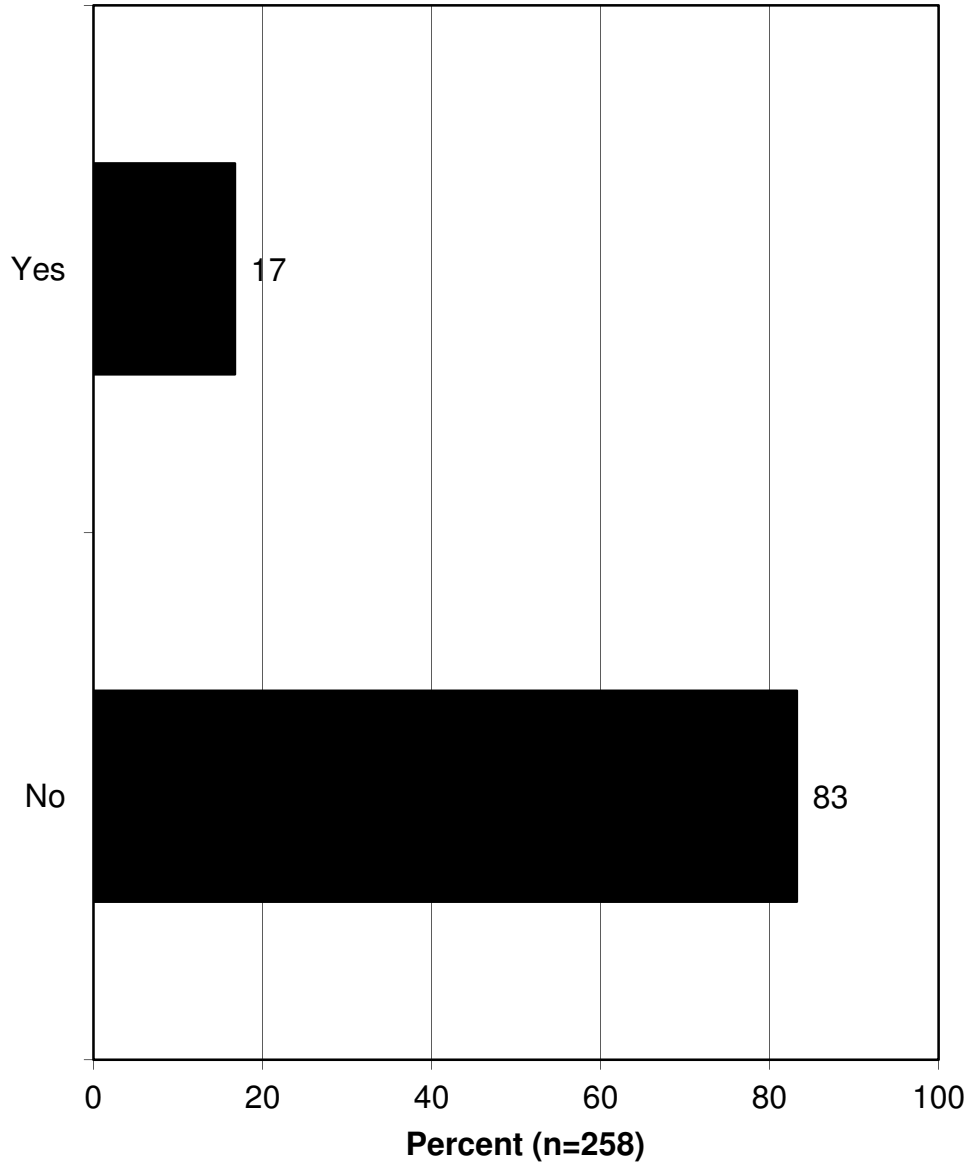
Q21. You said that cougars or wolves caused you problems. What problems did they cause? (Asked of those who said that cougars or wolves caused problems.)



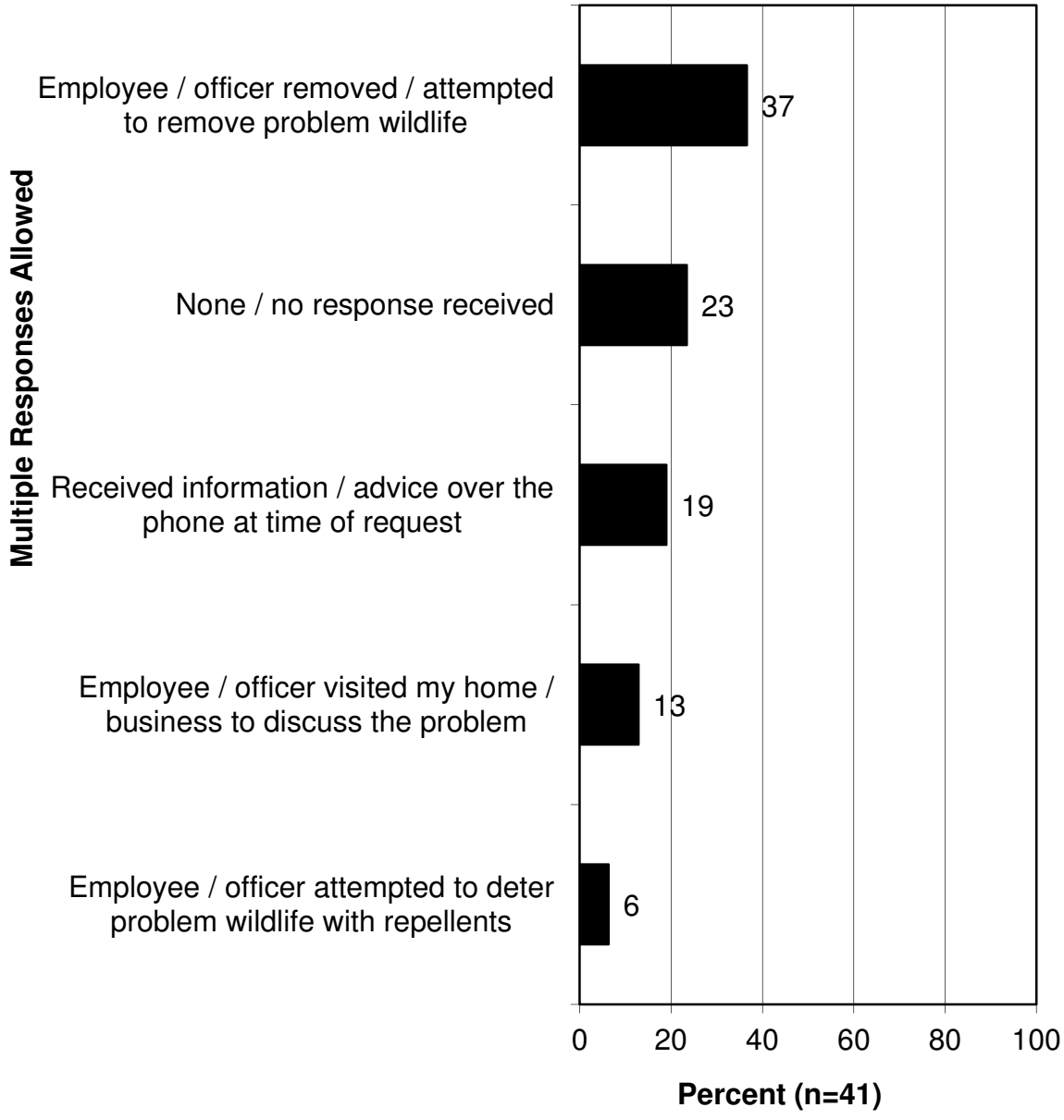
CONTACTING THE DEPARTMENT REGARDING PROBLEMS WITH WILDLIFE

- Of those residents who had problems with wildlife including wild birds (recall from the previous section of the report that 29% of all respondents had experienced problems), 17% of them contacted the Department for assistance.
  - Common responses/services received, among those who contacted the Department, include having a Department employee attempt to remove the wildlife, information or advice over the telephone, or a visit from a Department employee to discuss the problem or attempt to remove the wildlife. A little less than a quarter of those who contacted the Department say that they received no services. (Note, however, that the question is a skip-out of a skip-out, so the sample size upon which the results are based is low.)
  - Of those who contacted the Department, 60% are satisfied with the responses/services that they received from the Department. Nonetheless, 21% are dissatisfied. (The remainder answered neutrally.)

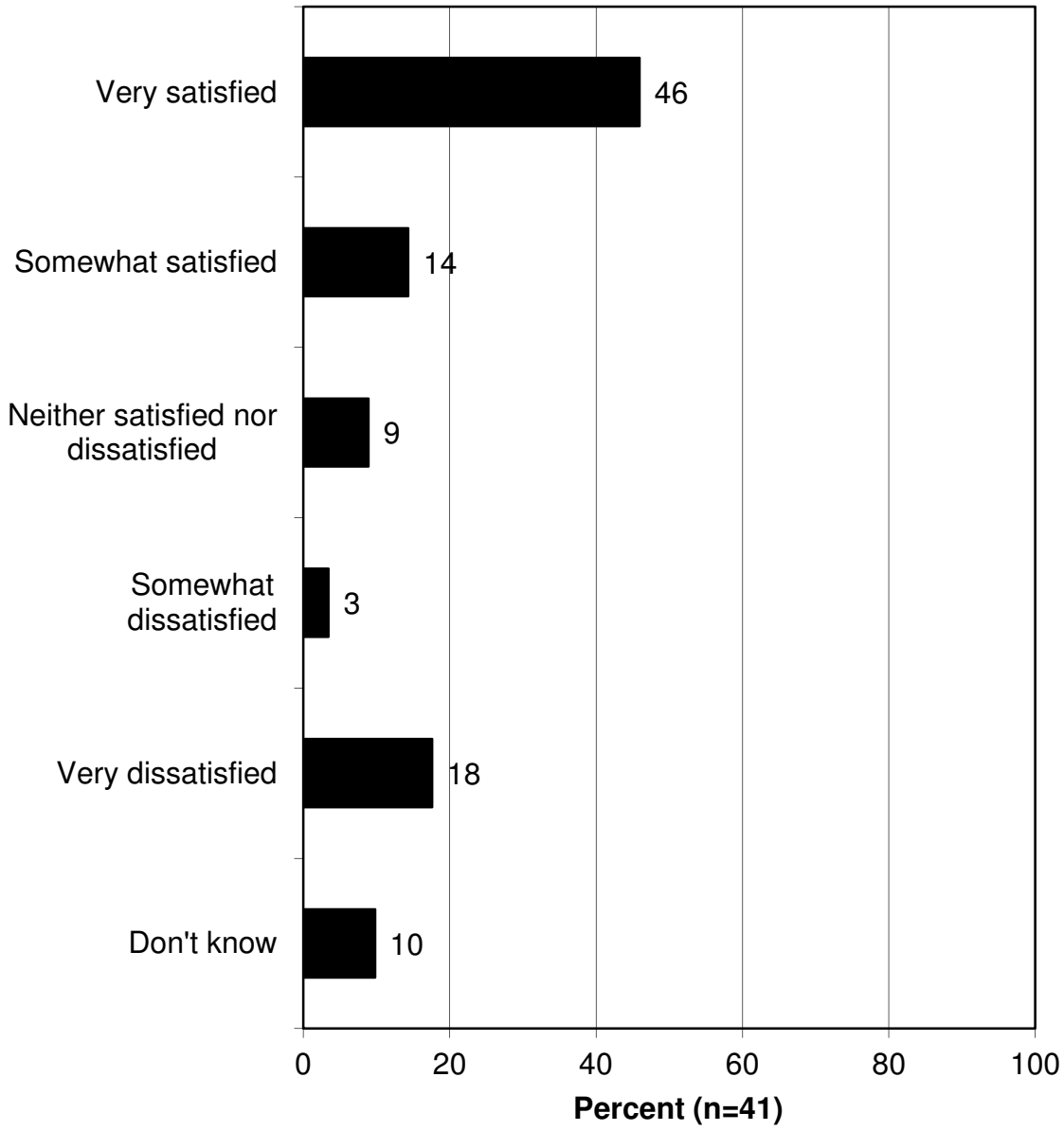
Q22. Did you contact the Department for information about or assistance with any wildlife that caused conflicts or problems in the past 2 years? (Asked of those who had problems with wild animals or birds in the past 2 years.)



Q25. What response or services did you receive from the Department? (Asked of those who had problems about which they called the Washington Department of Fish and Wildlife.)



Q27. Overall, would you say you were satisfied or dissatisfied with the responses or services you received from the Department? (Asked of those who had problems about which they called the Washington Department of Fish and Wildlife.)

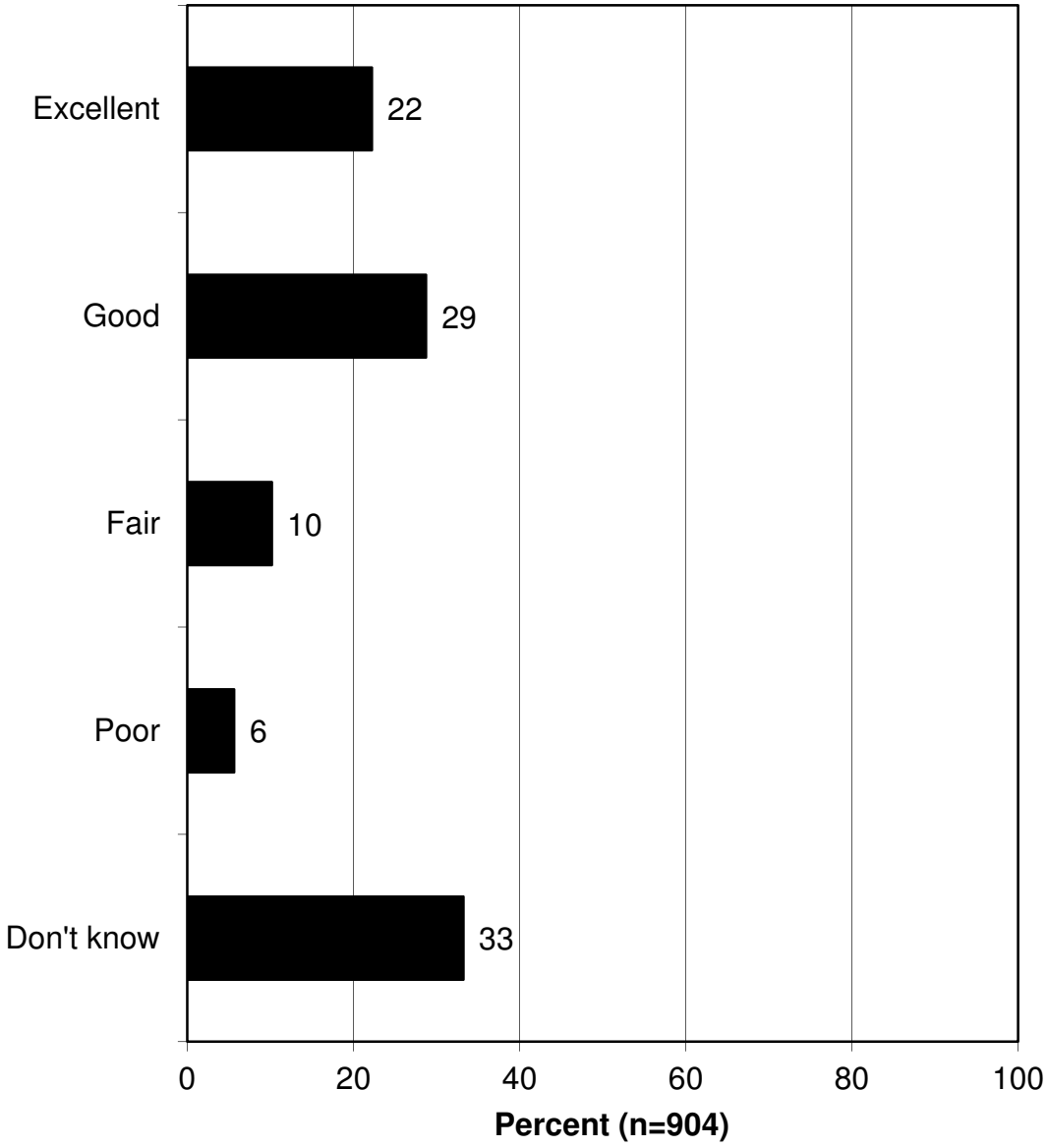


THE DEPARTMENT'S MANAGEMENT OF PROBLEMS CAUSED BY WILDLIFE

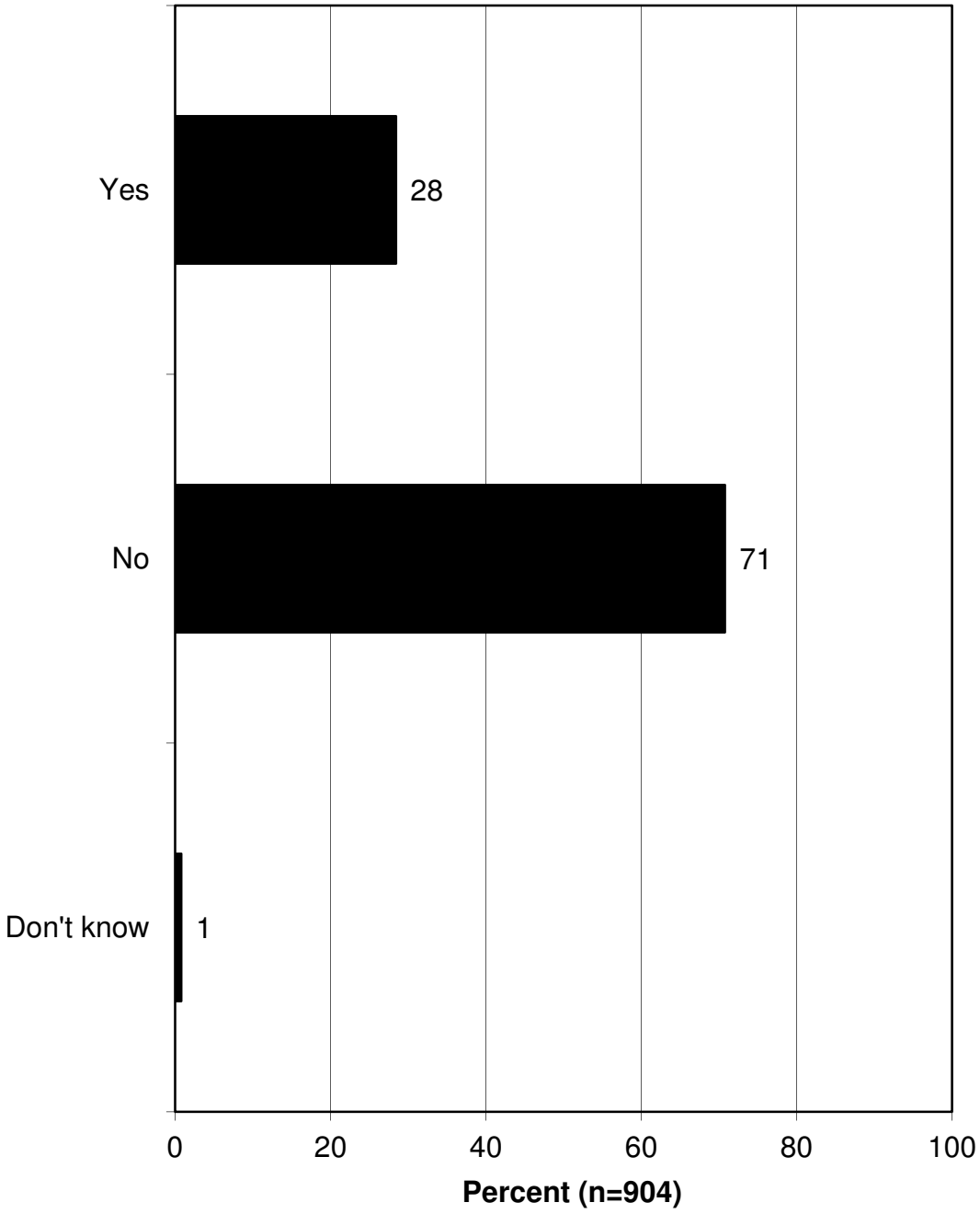
- Although most commonly respondents did not know what rating to give the Department's management of problems caused by wildlife (33% did not know), they otherwise are positive: 51% give a rating of *excellent* or *good*, and only 6% give a rating of poor.

- Information about how Washington State manages human-wildlife conflicts is largely unknown to residents: 71% had not, previous to the survey, heard or seen any information about how Washington manages those conflicts. Meanwhile, 28% indicate having heard or seen something.
  - The trend shows little substantive change between 2008 and 2014 on seeing or hearing about how the state manages human-wildlife conflict.
  - Residents' preferred ways to be provided with information about human-wildlife conflicts are direct mail (25%), the Internet in general (23%), newspapers (23%), television (23%), and e-mail (17%).

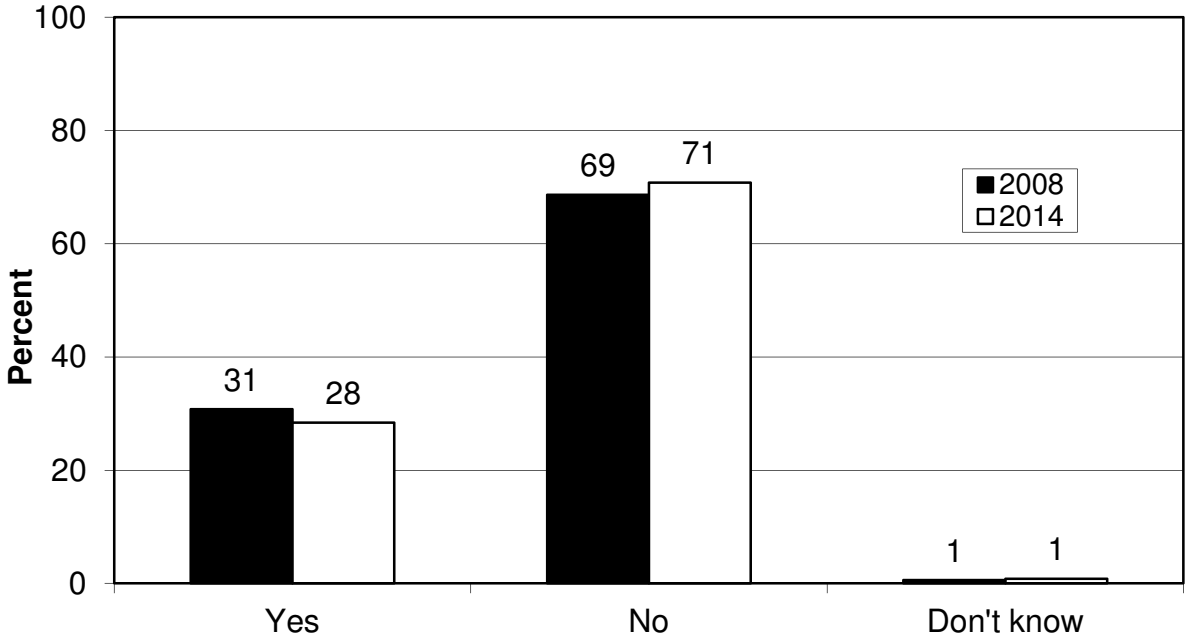
Q13. Sometimes people have problems with wildlife in their neighborhoods or around their homes. Overall, how would you rate the Washington Department of Fish and Wildlife's management of problems caused by wildlife?



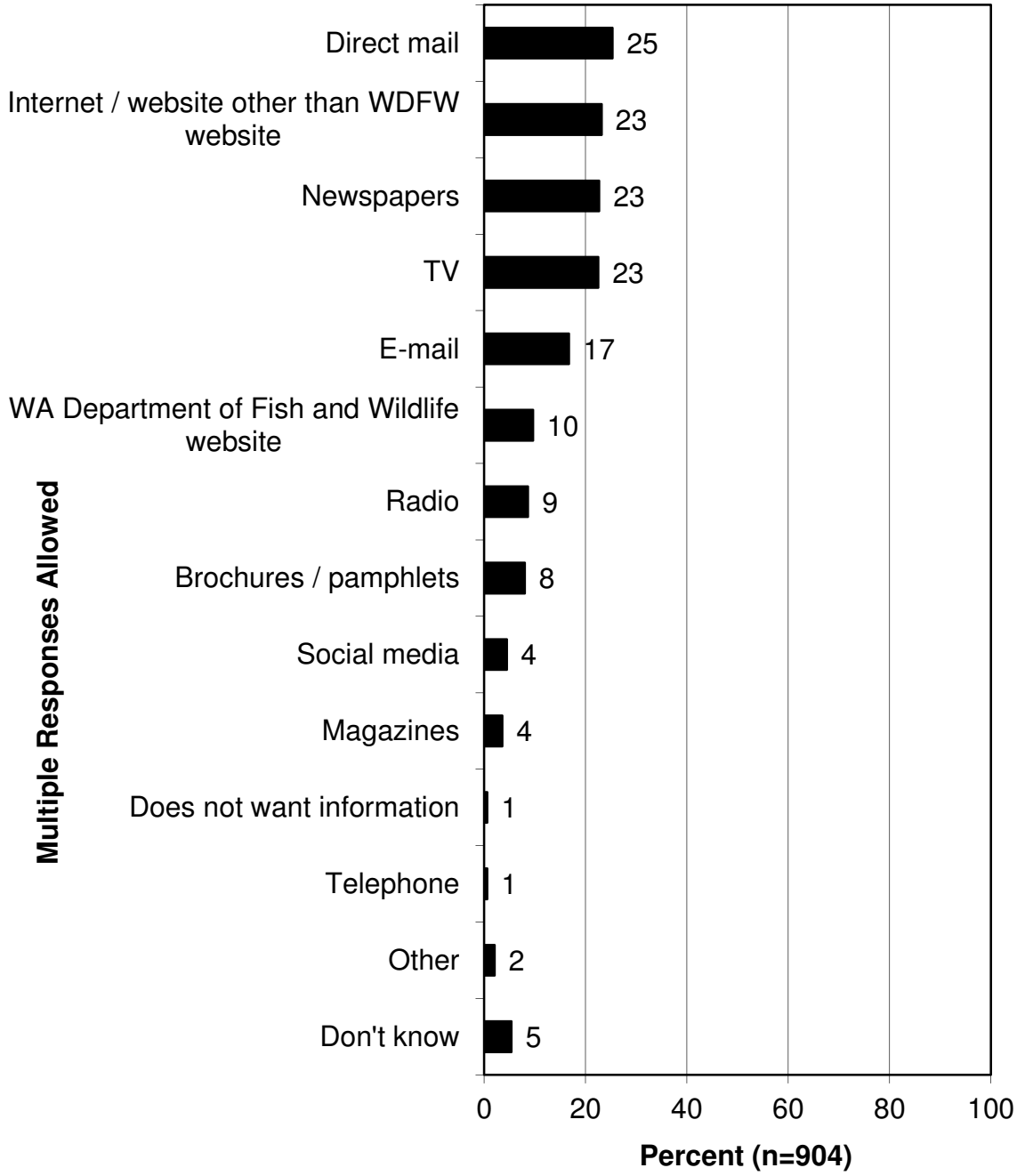
Q28. Have you ever heard or seen, outside of this survey, any information about how Washington State manages wildlife conflicts?



Q28. Have you ever heard or seen, outside of this survey, any information about how Washington State manages wildlife conflicts?



Q31. What is the best way to provide you with information about wildlife conflicts?



APPROVAL OR DISAPPROVAL OF HUNTING

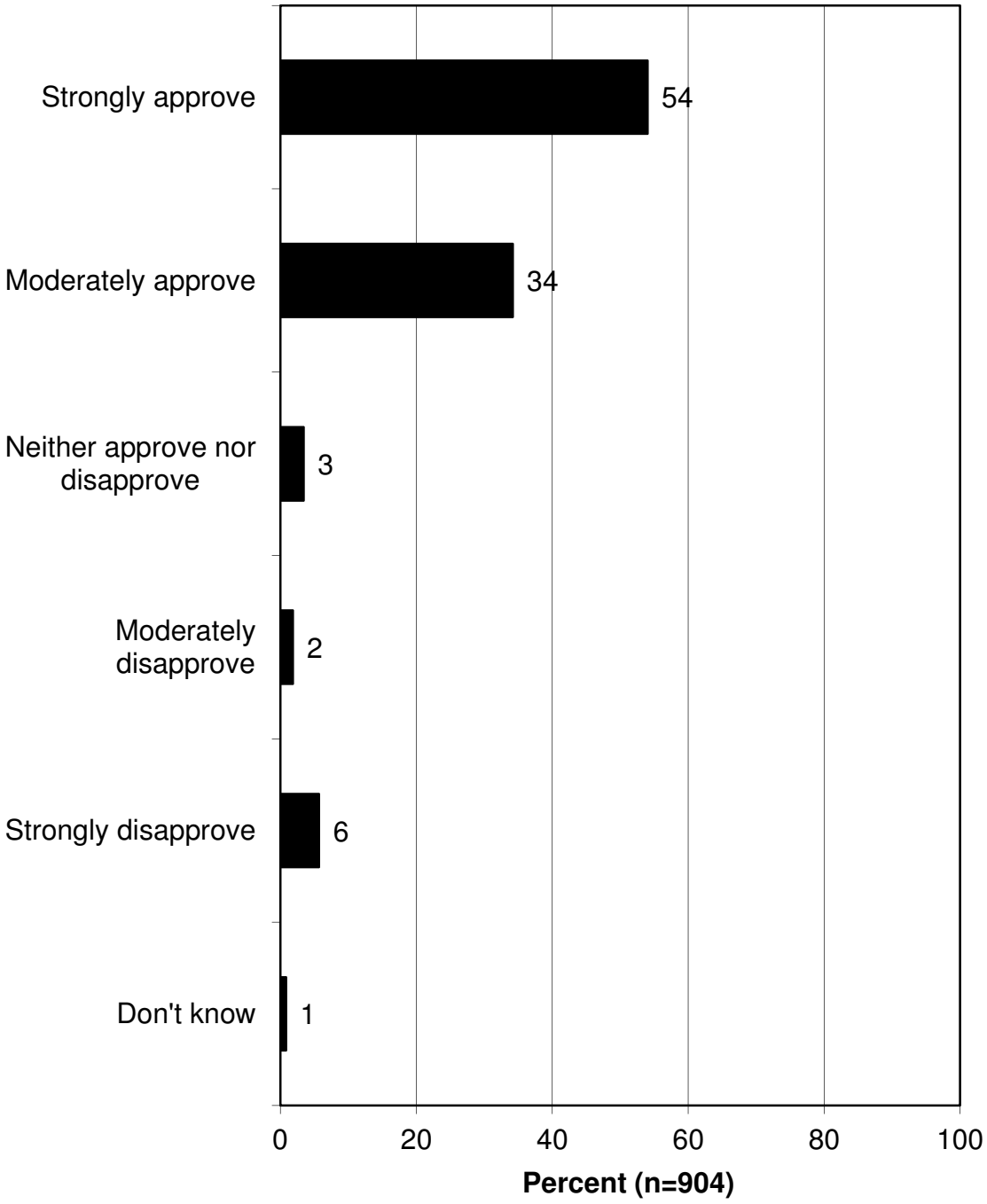
- While most Washington residents approve of legal, regulated hunting (88% do so), there are some who disapprove (7%*). Opinion on this is somewhat polarized, as most of those who approve or disapprove *strongly* approve or disapprove.
    - * Rounding on the graph causes the apparent discrepancy in the sum; the calculation was made on unrounded numbers.
    - A trend graph shows that the current survey had just a slightly higher percent of residents approving of hunting than did the 2002 or 2008 surveys.
    - The follow-up questions about reasons for disapproving of hunting and any things that would change respondents' minds about their disapproval did not have enough people for statistically valid results, so graphs are not shown. The listed reasons for disapproving include a general disapproval of hunting (the most common reason) and safety fears. The most important other thing mentioned that might garner more approval of hunting among those who currently disapprove is having hunters use all the meat they harvest. (Note that the "requirement" that hunters use all the meat they harvest generally would preclude the hunting of wolves.)

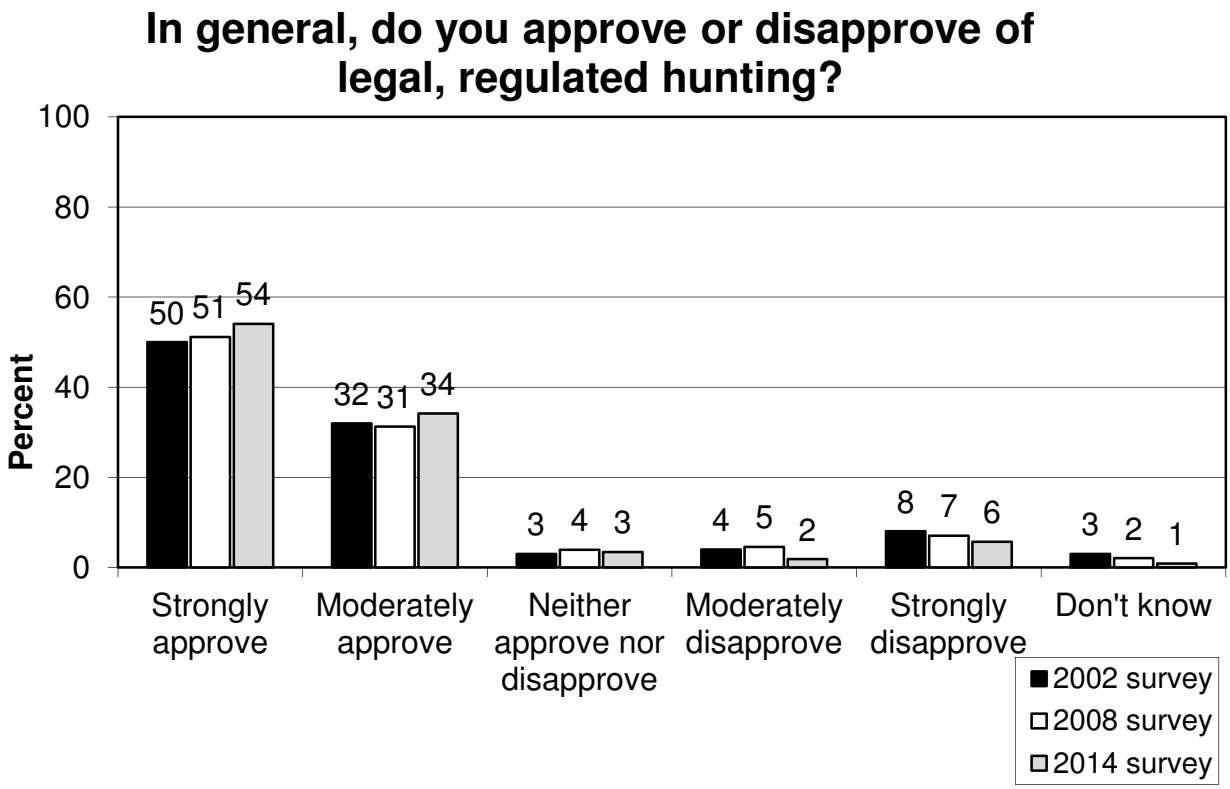
- The survey asked eight questions about support for or opposition to hunting for various purposes. For each question, respondents indicated their support or opposition, and the results to all the questions in the series are examined relative to one another. (Note that the questions were asked regardless of people's previous responses about approval or disapproval of hunting.)
    - Concerns related to ecologic impacts were relatively more important to respondents than were concerns related to impacts on humans. The highest support was for hunting to prevent the spread of animal diseases, to prevent damage to habitat caused by wildlife, and to control animal populations in a way that benefits other wildlife. The lowest support was for hunting to reduce animal-vehicle collisions and to control damage to private property.
        - One of the questions within the series was asked in the 2002, 2008, and 2014 surveys. The graph of these trends shows that support for hunting to address human-wildlife conflicts has fluctuated considerably in the three surveys. There are majorities in

support in the 2002 and 2014 surveys, but a little less than half in support in the 2008 survey.

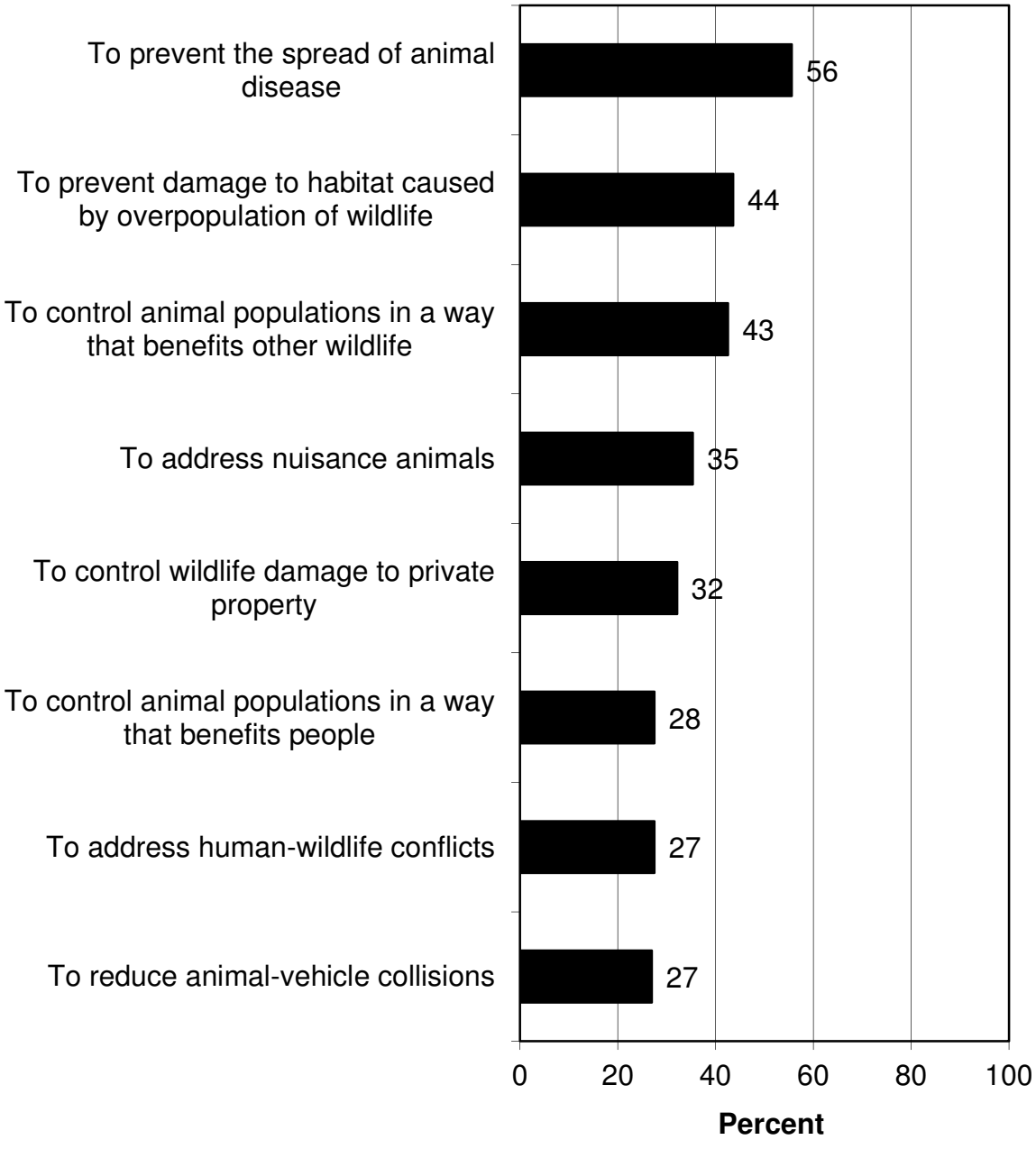
- Three questions have data for 2008 and 2014. Support has increased for hunting for all three reasons for which trends data are available: hunting to prevent the spread of animal disease, to reduce animal-vehicle collisions, and to prevent habitat damage caused by overpopulation of wildlife.

Q33. In general, do you approve or disapprove of legal, regulated hunting?

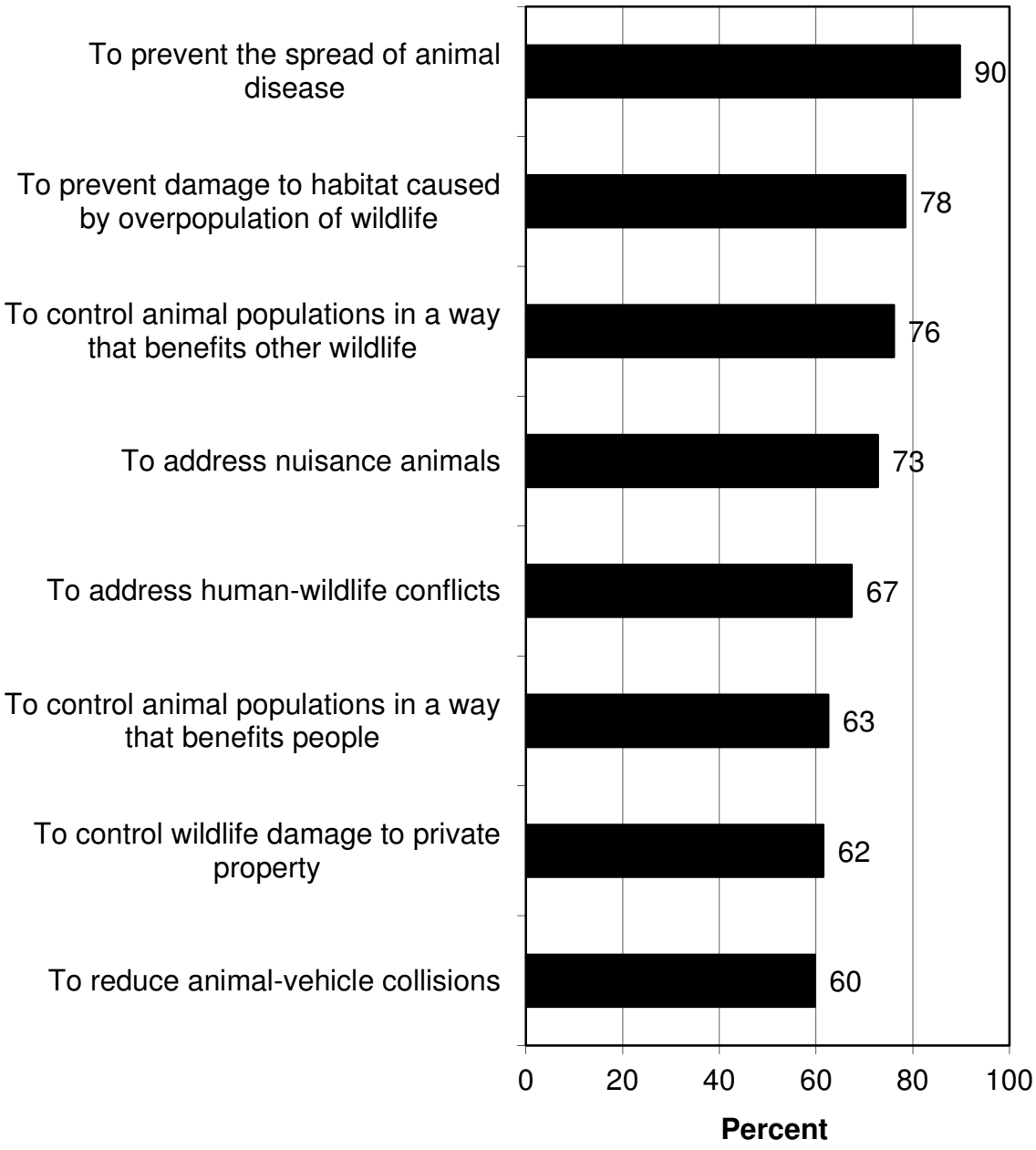



In general, do you approve or disapprove of legal, regulated hunting?
Percent
100
80
60
40
20
0
50 51 54
32 31 34
3 4 3
4 5 2
8 7 6
3 2 1
Strongly approve
Moderately approve
Neither approve nor disapprove
Moderately disapprove
Strongly disapprove
Don't know
2002 survey
2008 survey
2014 survey

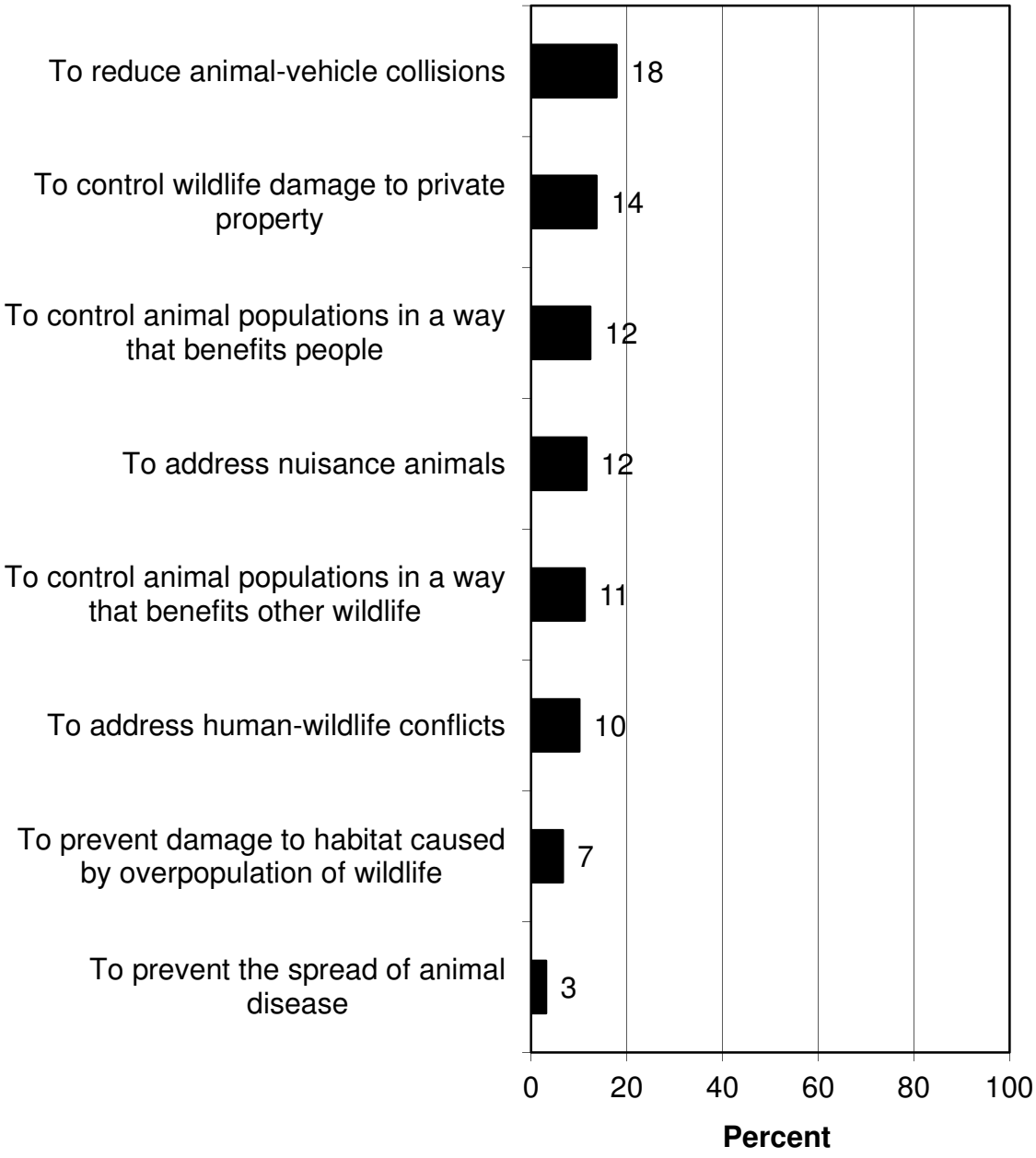
Q39-Q46. Percent of respondents who strongly support each of the following as a reason for hunting:



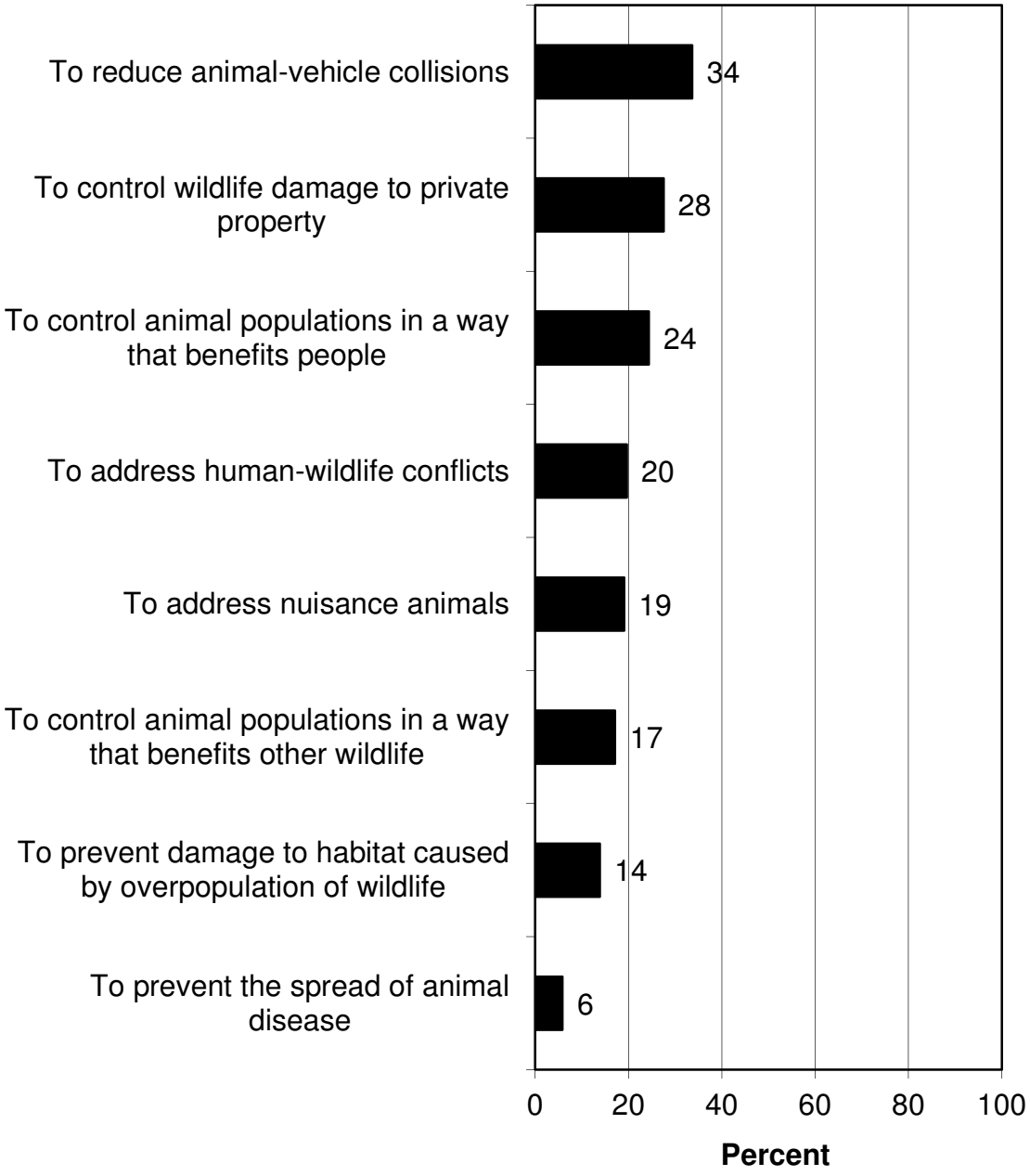
Q39-Q46. Percent of respondents who strongly or moderately support each of the following as a reason for hunting:

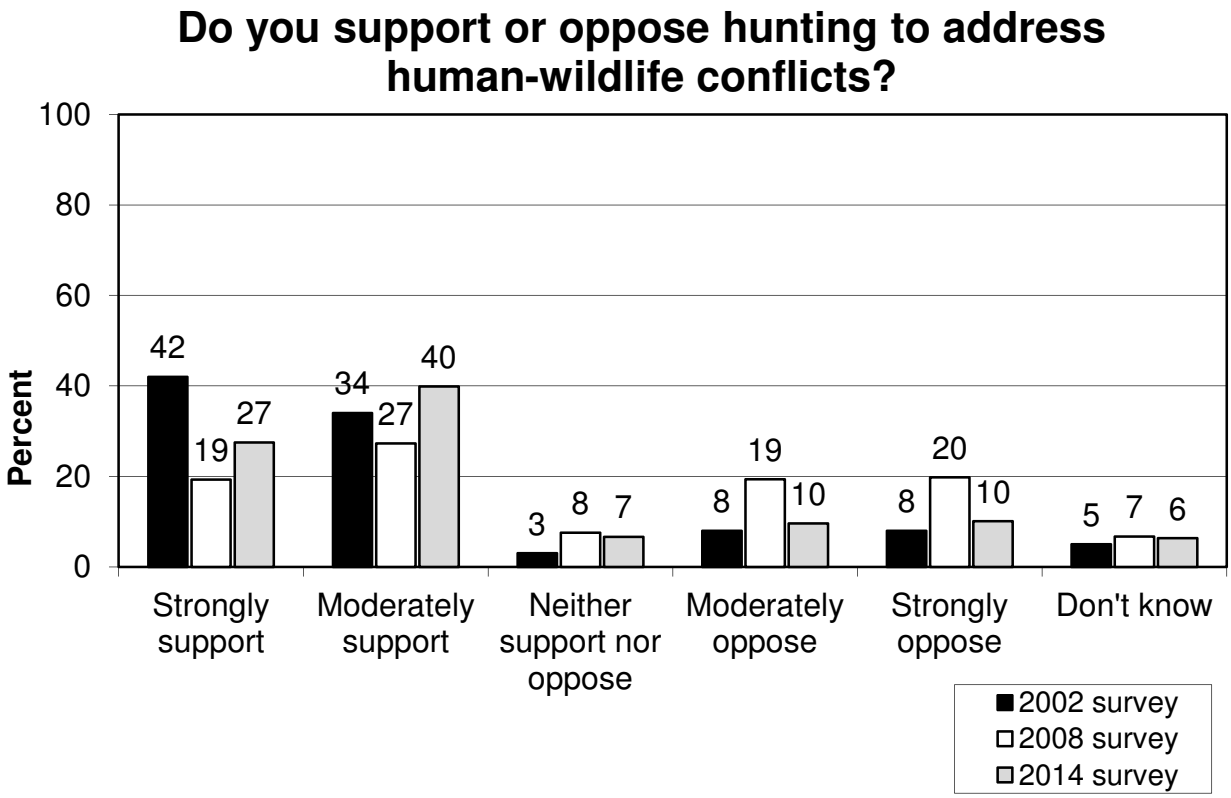


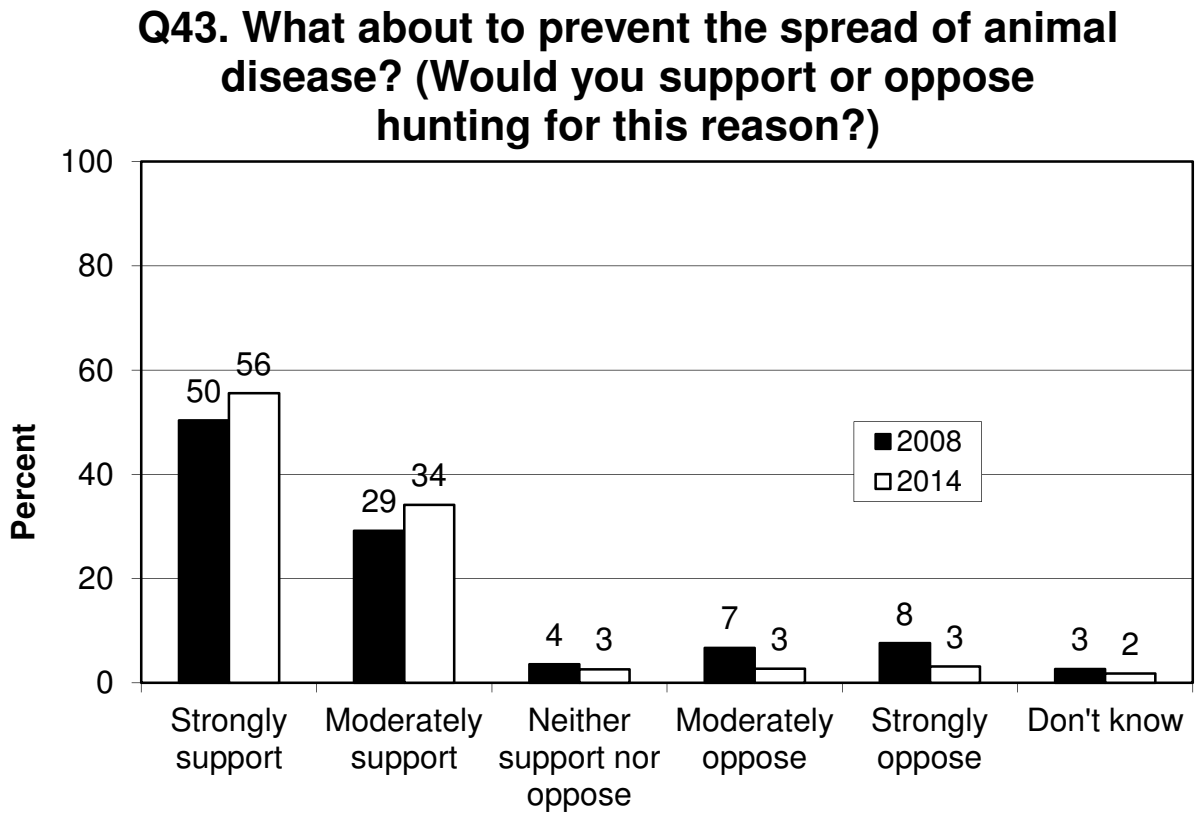
Q39-Q46. Percent of respondents who strongly oppose each of the following as a reason for hunting:

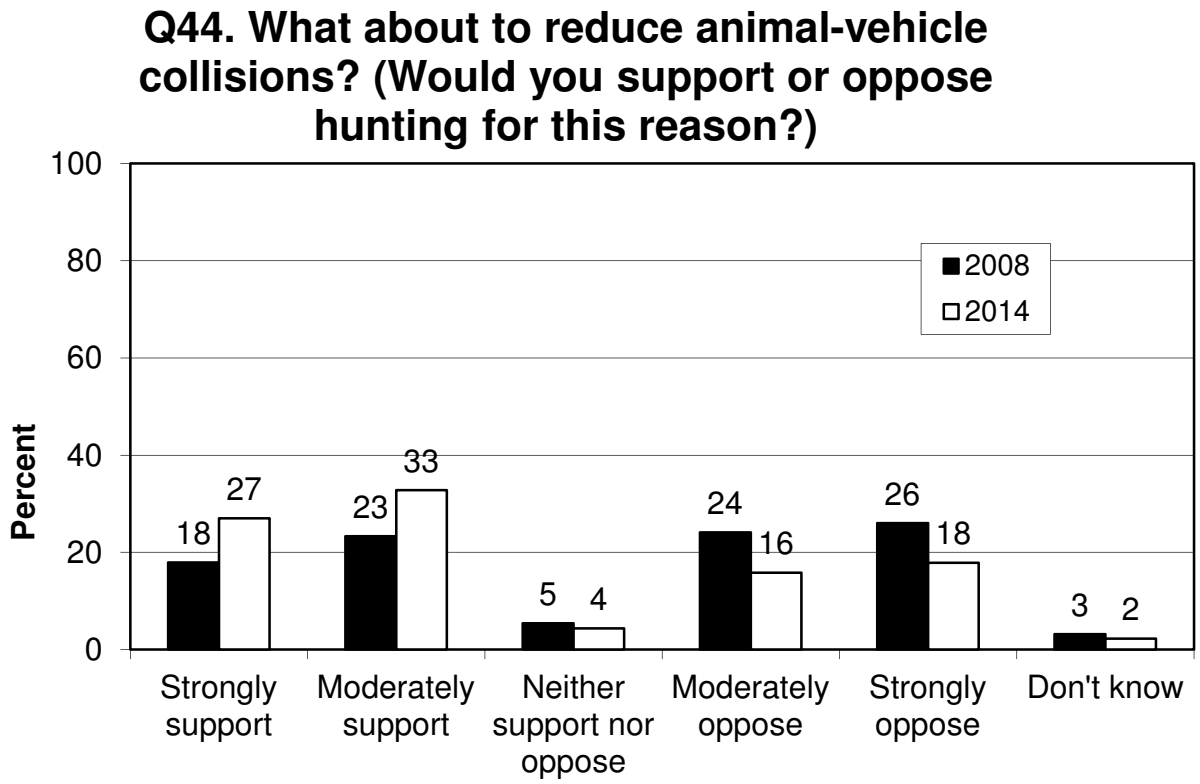


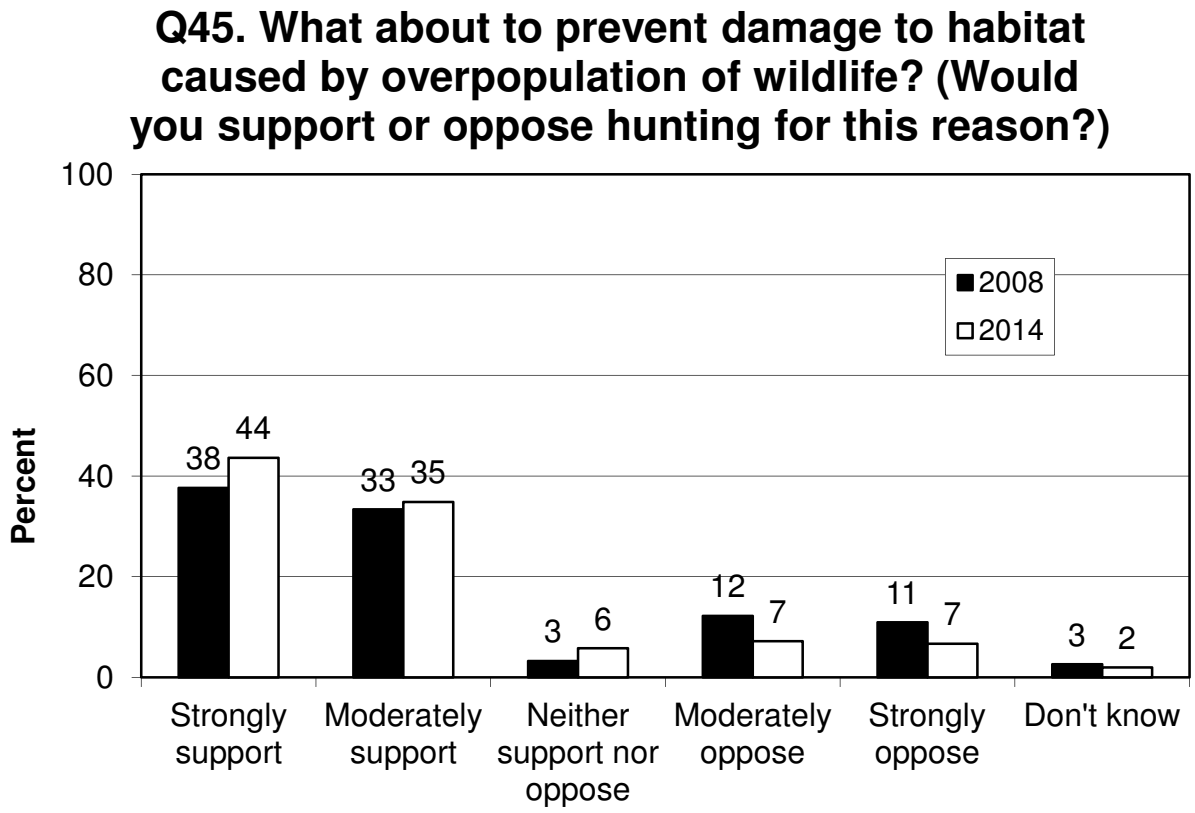
Q39-Q46. Percent of respondents who strongly or moderately oppose each of the following as a reason for hunting:




Do you support or oppose hunting to address human-wildlife conflicts?
Percent
100
80
60
40
20
0
42
19
27
34
27
40
3
8
7
8
19
10
8
20
10
5
7
6
Strongly support
Moderately support
Neither support nor oppose
Moderately oppose
Strongly oppose
Don't know
2002 survey
2008 survey
2014 survey


Q43. What about to prevent the spread of animal disease? (Would you support or oppose hunting for this reason?)
Percent
100
80
60
40
20
0
50
56
29
34
4
3
7
3
8
3
3
2
2008
2014
Strongly support
Moderately support
Neither support nor oppose
Moderately oppose
Strongly oppose
Don't know


Q44. What about to reduce animal-vehicle collisions? (Would you support or oppose hunting for this reason?)
Percent
100
80
60
40
20
0
2008
2014
18
27
23
33
5
4
24
16
26
18
3
2
Strongly support
Moderately support
Neither support nor oppose
Moderately oppose
Strongly oppose
Don't know


Q45. What about to prevent damage to habitat caused by overpopulation of wildlife? (Would you support or oppose hunting for this reason?)
Percent
100
80
60
40
20
0
2008
2014
38
44
33
35
3
6
12
7
11
7
3
2
Strongly support
Moderately support
Neither support nor oppose
Moderately oppose
Strongly oppose
Don't know

PREDATOR MANAGEMENT

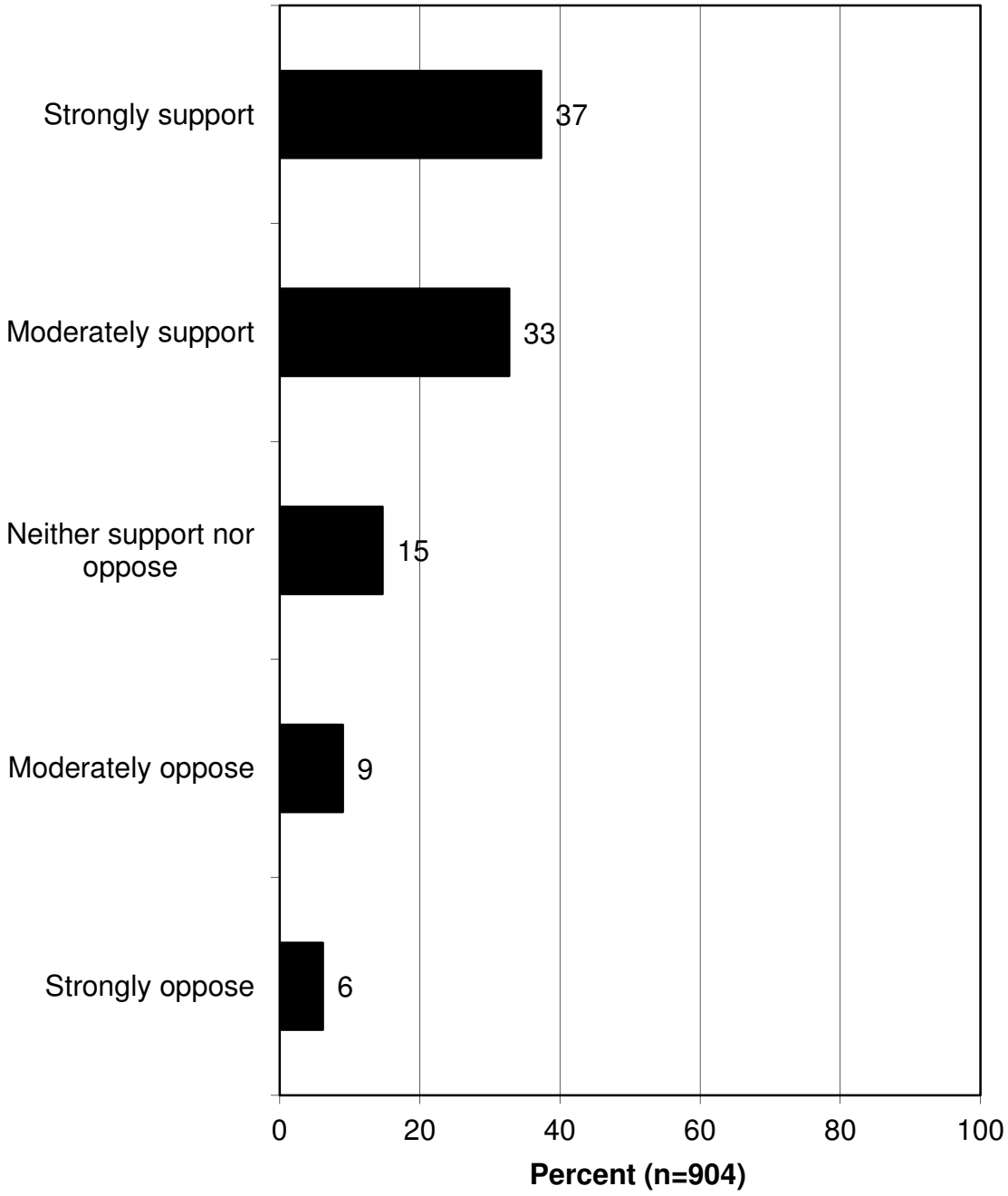
- There is much more support for (70%) than opposition to (15%) maintaining sustainable populations of predators in Washington.
  - The most common reason for support of having sustainable populations of predators is that predators are necessary for the ecosystem. Otherwise, some people do not want any animals killed by humans or they do not want the predator species to become endangered or be extirpated.

- Regarding *reducing* predator populations to prevent the loss of domestic animals, including pets: support (48%) and opposition (39%) are both substantial, indicating that there is no consensus on this issue.
  - A trend on this question shows gradually less overall support through the three surveys for *reducing* predator populations to prevent the loss of domestic animals, including pets (going from 69% overall support in 2002 to 48% overall support in 2014.

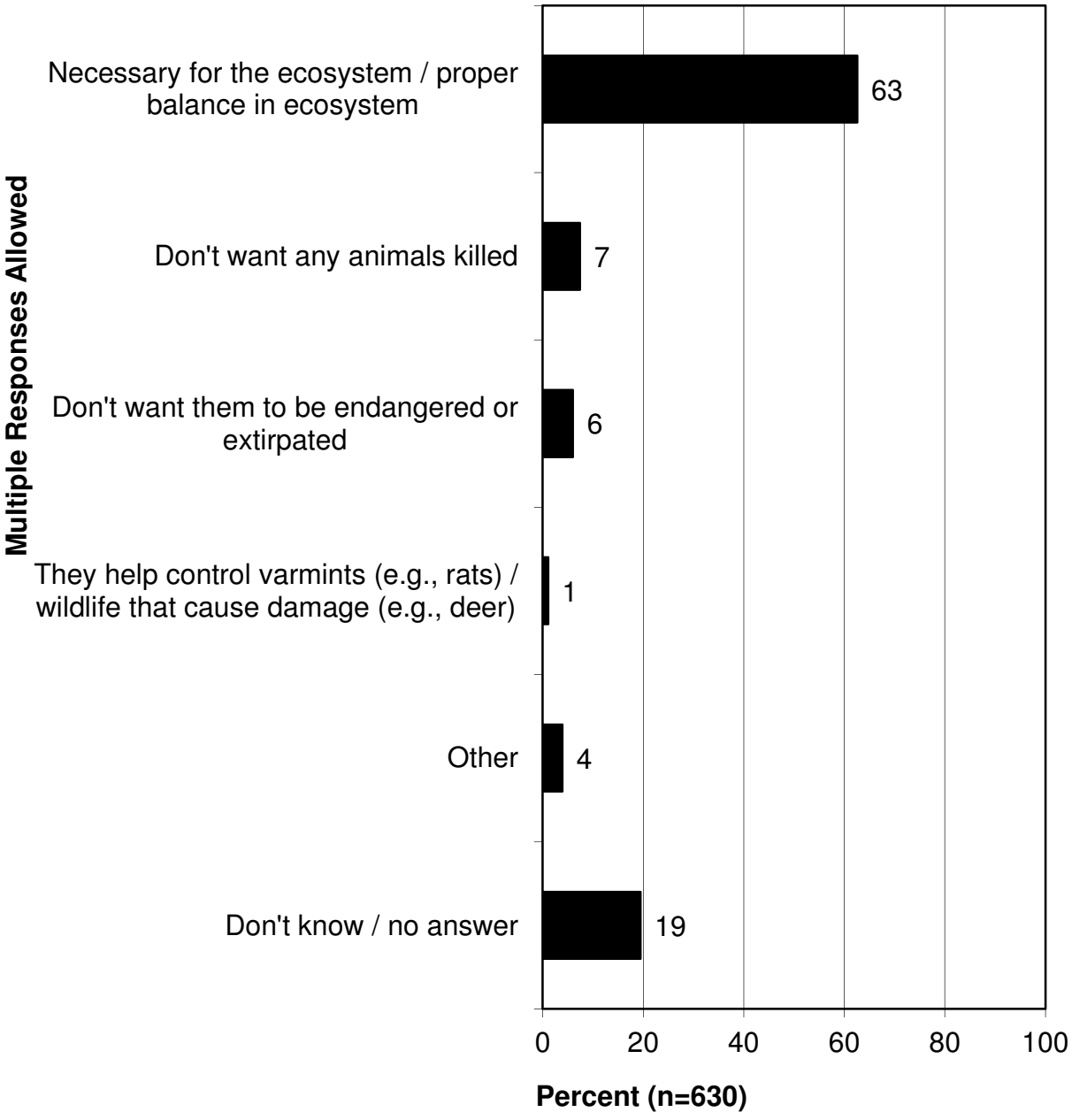
- There is much more support for (68%) than opposition to (19%) *reducing* predator populations to protect threatened or endangered species.
  - The trend on this question has fluctuated in the three surveys—the least support was found in the 2008 survey.

- Respondents were first informed that the overall health of deer and elk populations can vary because of factors including severe winters or poor habitat conditions. They were further informed that, when deer or elk populations are depressed, predators can hinder the population's ability to rebound. Respondents were then asked about their support for or opposition to *reducing* predator populations to increase deer or elk herds that are below population objectives. In these cases, support (71%) far exceeds opposition (15%).
  - The trend shows that support for hunting has increased for those scenarios where predators have hindered the elk or deer population's ability to rebound.
  - Of those who oppose reducing predator populations to increase deer and elk herds that are below population objectives, the most common reasons are that they want nature to take its own course or that they are against the hunting of predators (or hunting entirely).

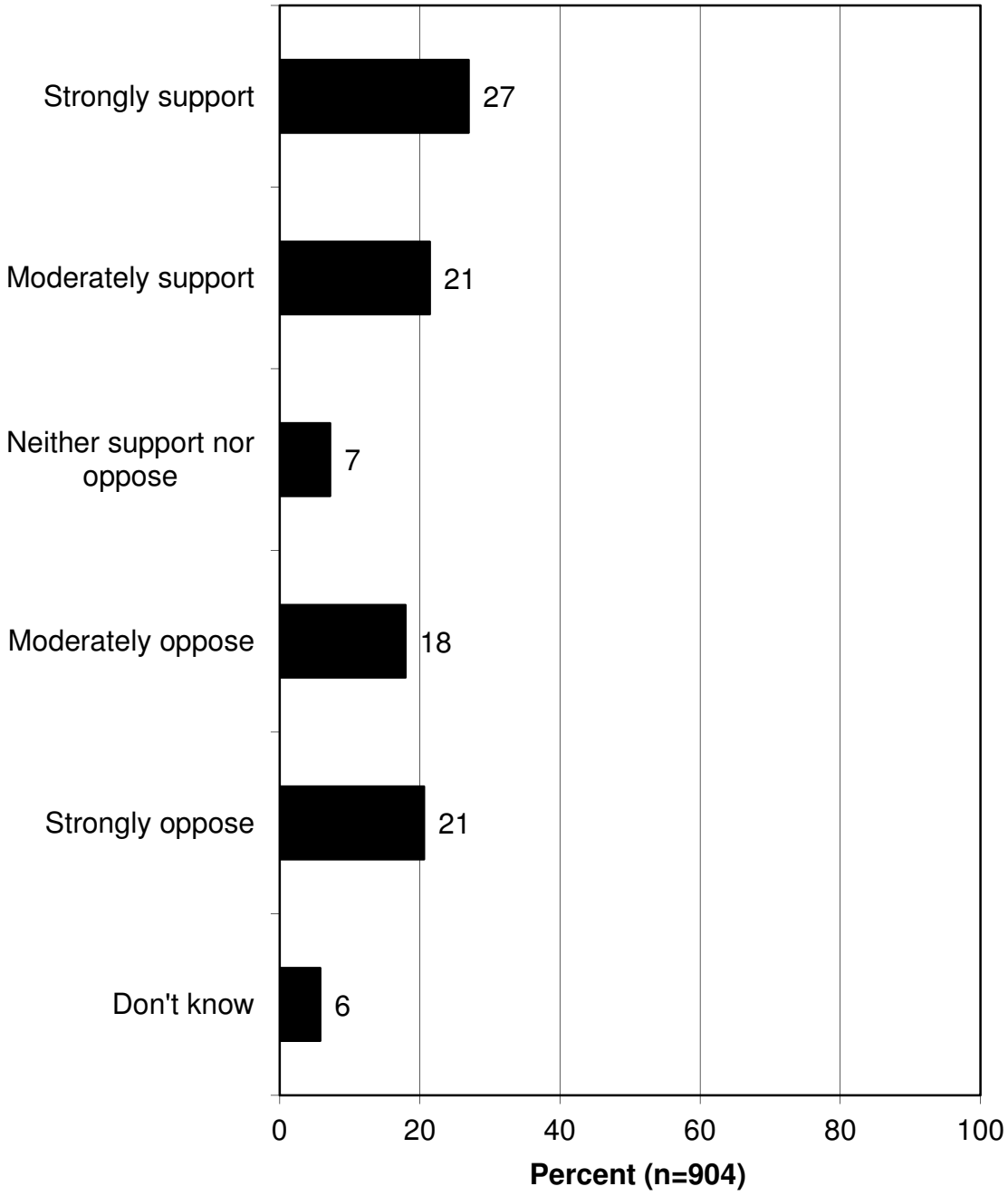
Q50. Do you support or oppose maintaining sustainable populations of predators?

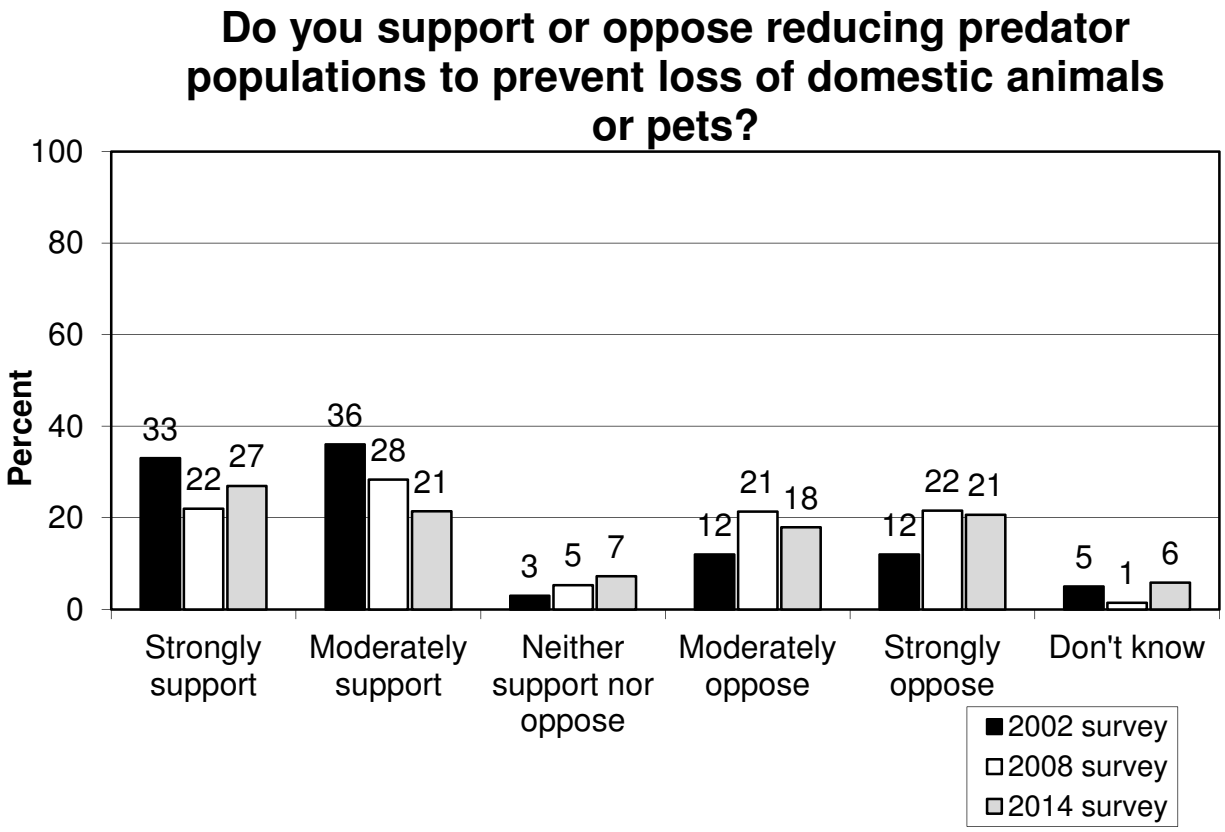


Q51. What are the main reasons you support maintaining sustainable populations of predators? (Asked of those who support maintaining sustainable populations of predators.)

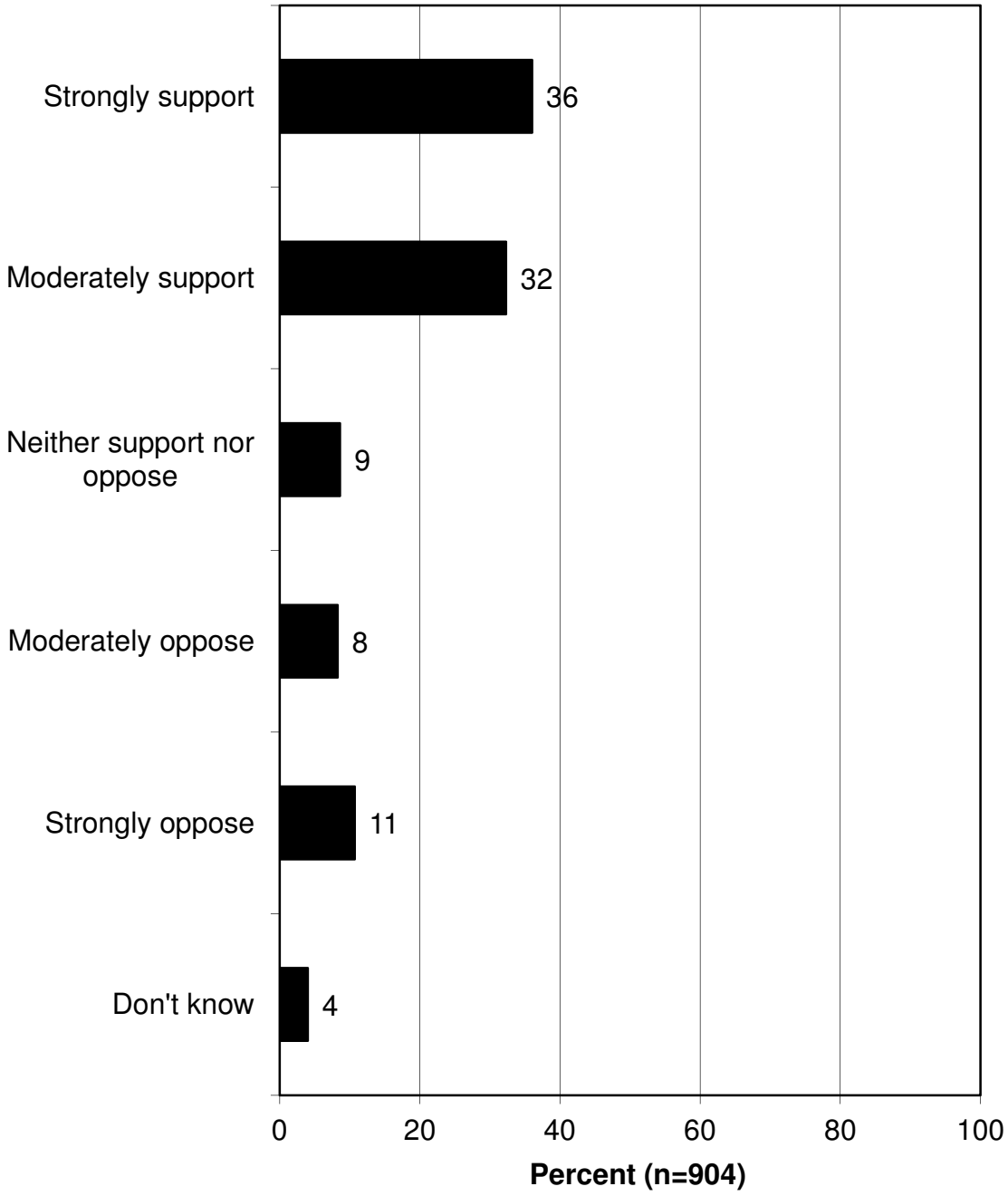


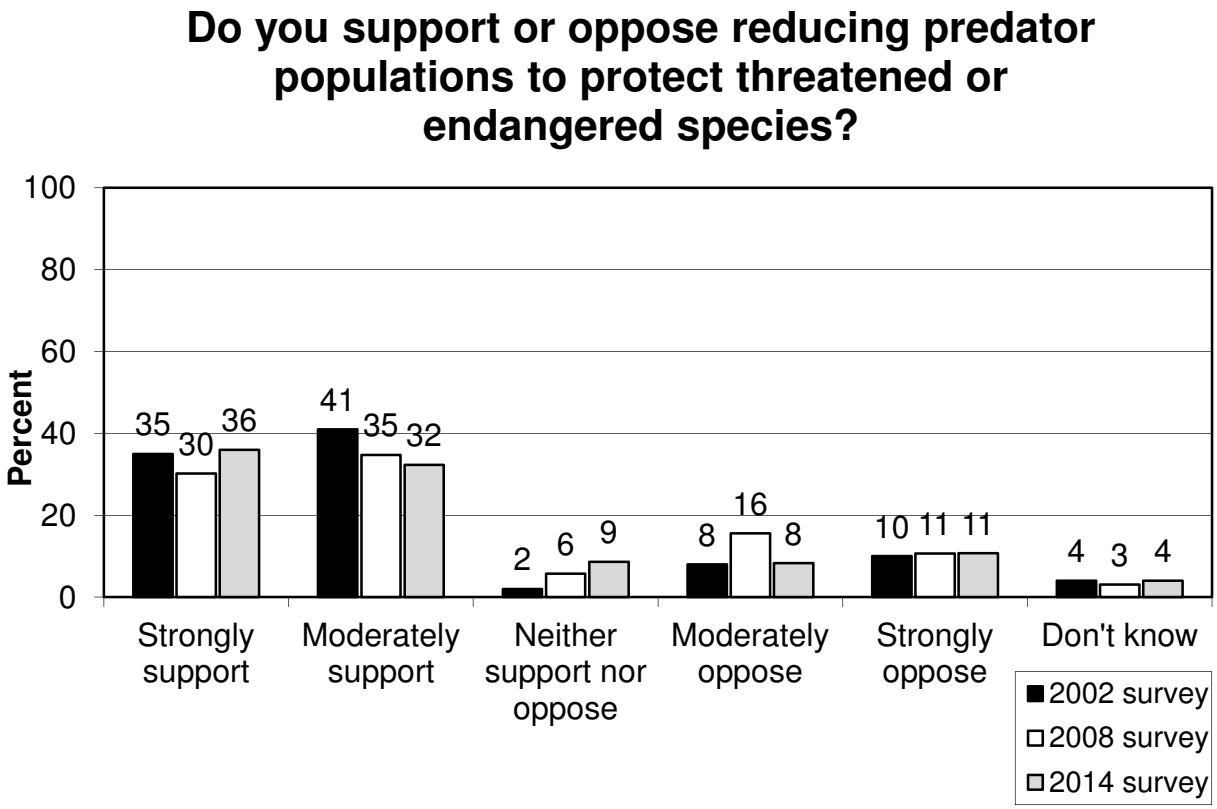
Q52. Do you support or oppose reducing predator populations to prevent loss of domestic animals or pets?



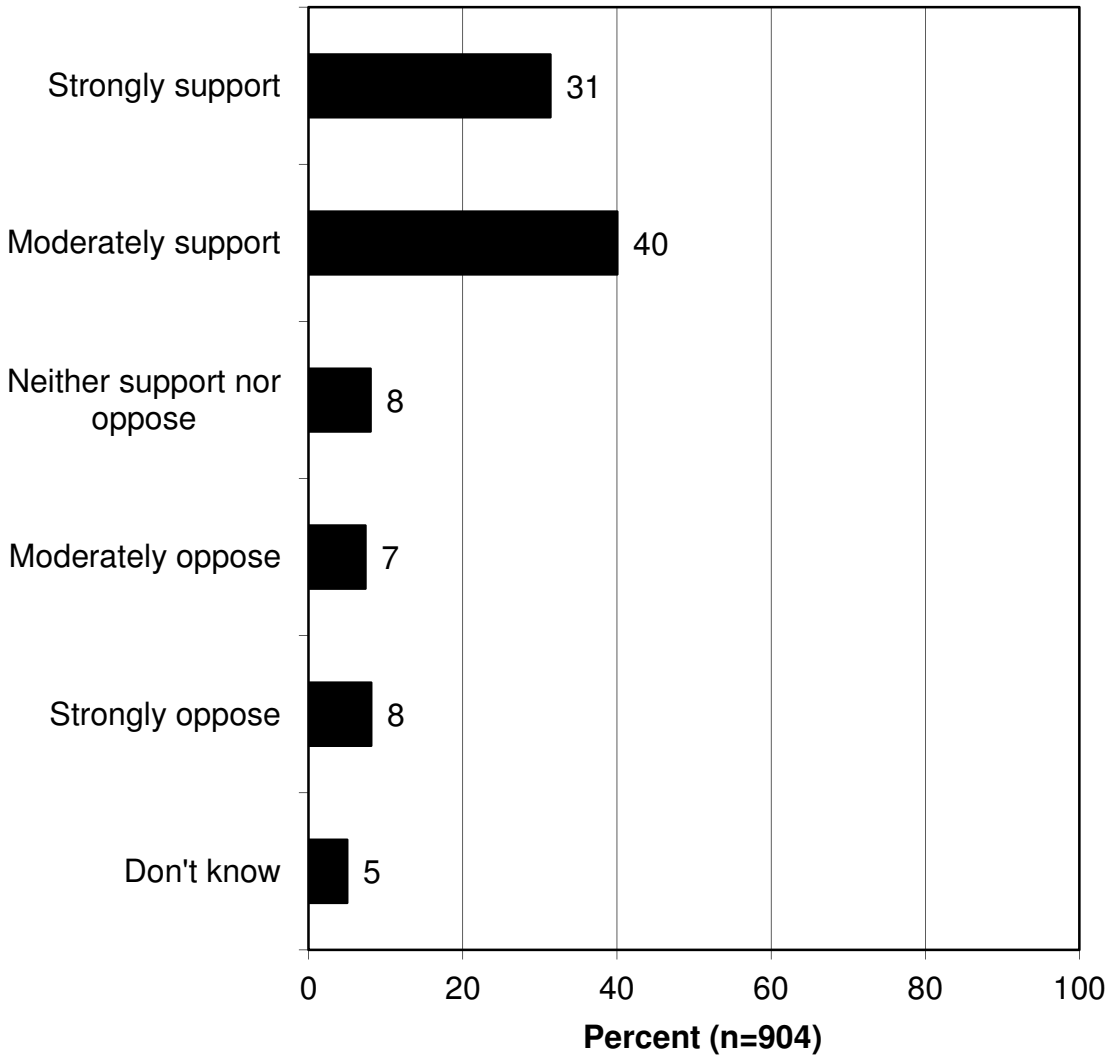

Do you support or oppose reducing predator populations to prevent loss of domestic animals or pets?
Percent
100
80
60
40
20
0
33
22
27
36
28
21
3
5
7
12
21
18
12
22
21
5
1
6
Strongly support
Moderately support
Neither support nor oppose
Moderately oppose
Strongly oppose
Don't know
2002 survey
2008 survey
2014 survey

Q53. Do you support or oppose reducing predator populations to protect threatened or endangered species?

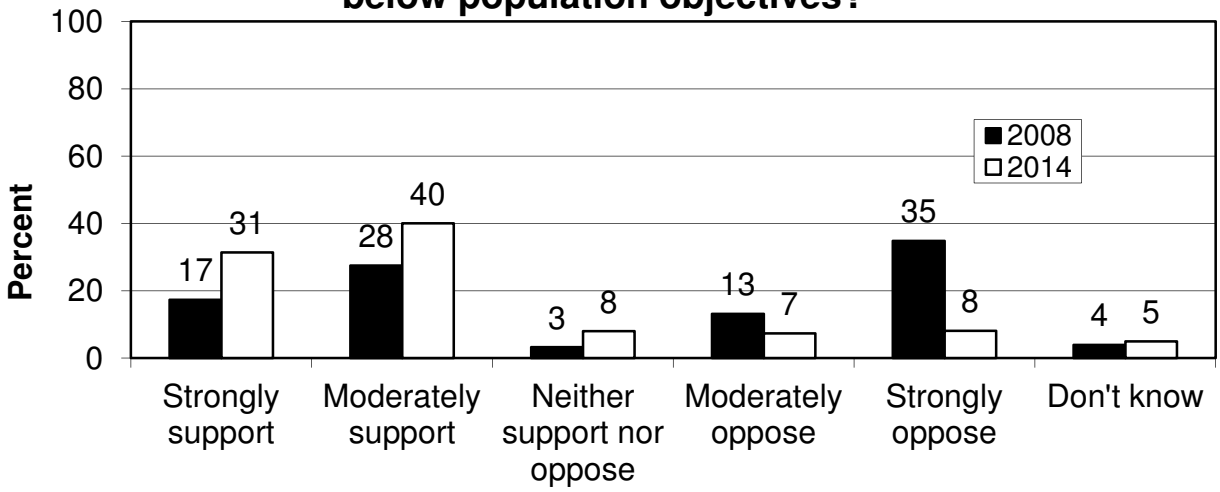



Do you support or oppose reducing predator populations to protect threatened or endangered species?
Percent
100
80
60
40
20
0
35 30 36
41 35 32
2 6 9
8 16 8
10 11 11
4 3 4
Strongly support
Moderately support
Neither support nor oppose
Moderately oppose
Strongly oppose
Don't know
2002 survey
2008 survey
2014 survey

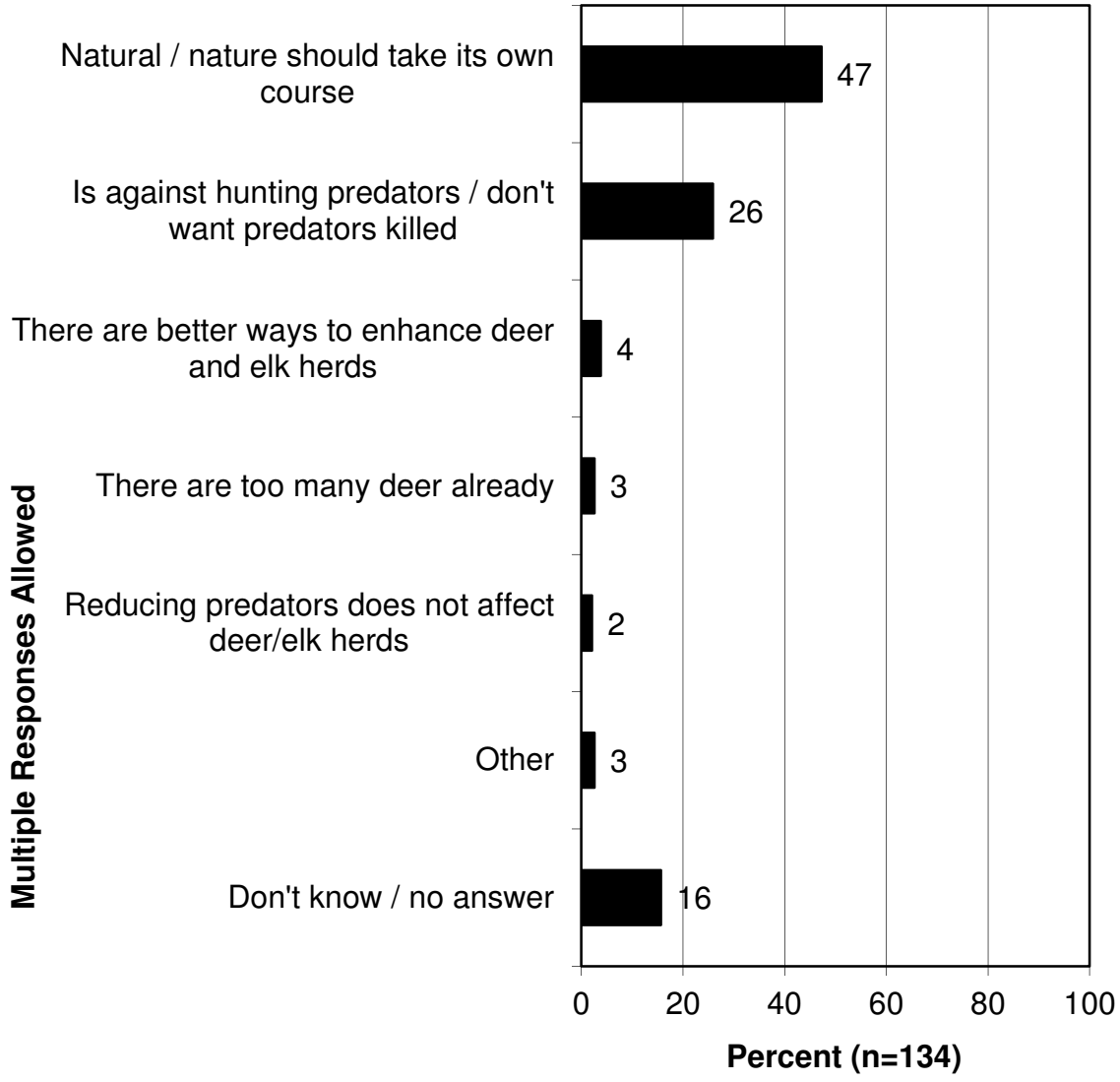
Q54. The overall health of deer and elk populations can vary due to factors including severe winters or poor habitat conditions. In some cases, when a deer or elk population is depressed, predators can hinder the population's ability to improve or rebound. In cases like this, do you support or oppose using hunting as a management tool to reduce predator populations to increase deer or elk herds that are below population objectives?



Q54. The overall health of deer and elk populations can vary due to factors including severe winters or poor habitat conditions. In some cases, when a deer or elk population is depressed, predators can hinder the population's ability to improve or rebound. In cases like this, do you support or oppose using hunting as a management tool to reduce predator populations to increase deer or elk herds that are below population objectives?



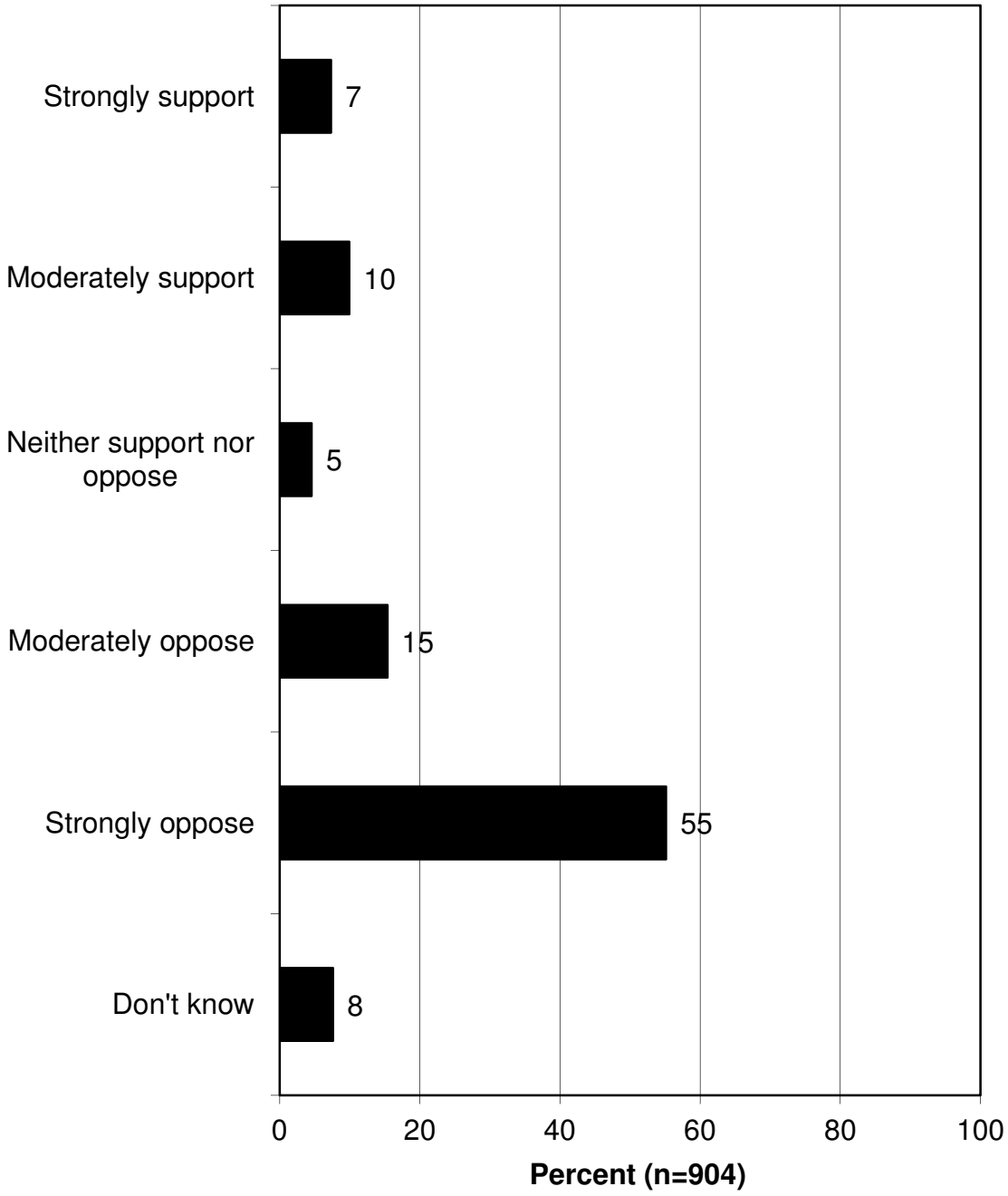
Q55. What are the main reasons you oppose reducing predator populations to enhance deer or elk herds that are below herd objectives? (Asked of those who oppose reducing predator populations to enhance deer or elk herds that are below herd objectives.)



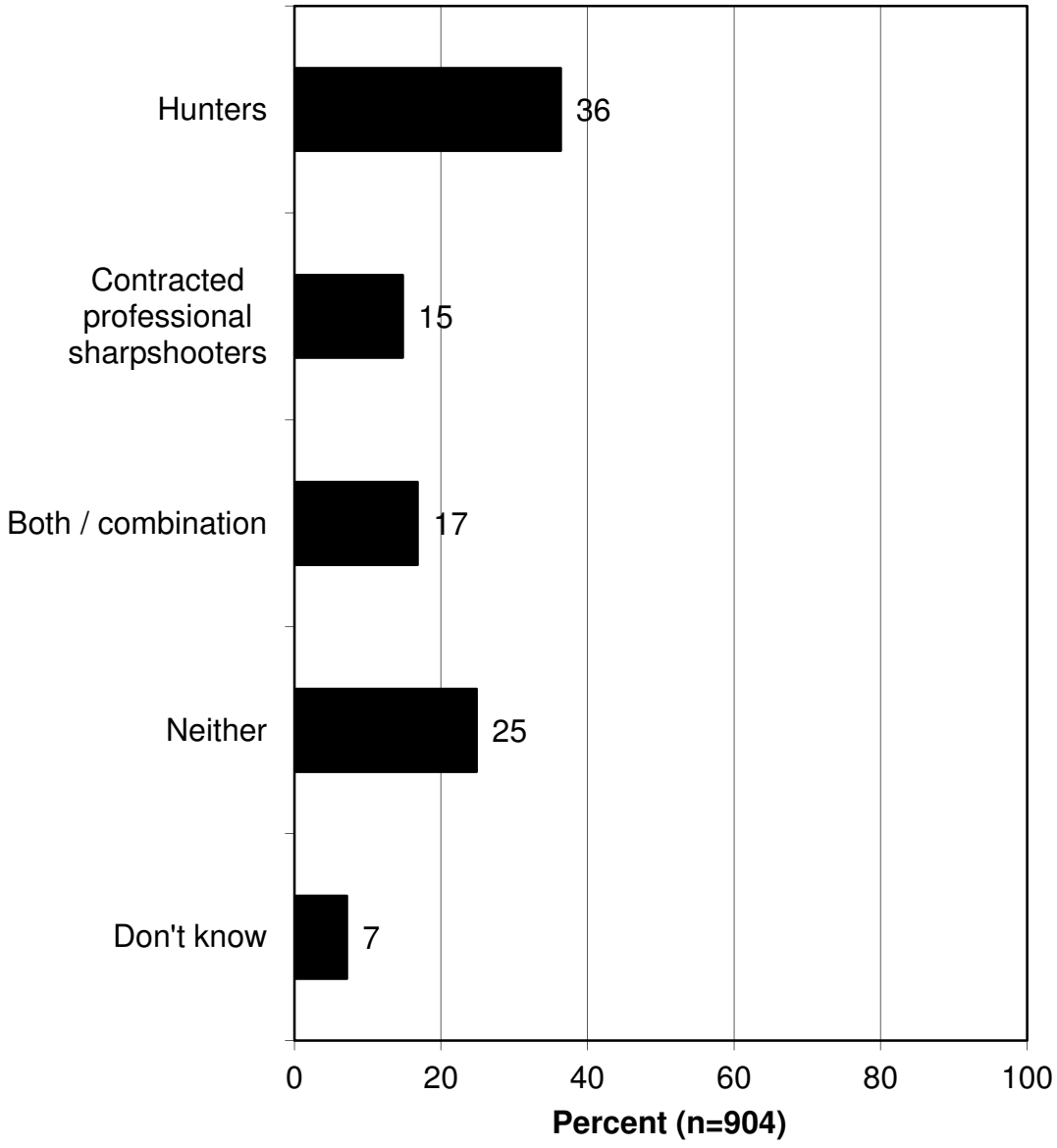
MANAGEMENT OF BLACK BEARS AND PROBLEMS CAUSED BY BLACK BEARS

- Opposition to (70%) far exceeds support for (17%) the lethal removal of black bears to prevent damage to timber on commercial timberlands.
  - A follow-up question asked whether, in the event that the Department does allow lethal removal of black bears, respondents think the removal should be done by hunters, by contracted professional sharpshooters, or a combination of the two. Most commonly, they want it done solely by hunters (36%). Otherwise, the percent wanting a combination (17%) is about the same as the percent wanting it done solely by professional sharpshooters (15%). A quarter of respondents (25%) said that they favored neither approach.

Q56. Do you support or oppose lethal removal of black bears to prevent damage to timber on commercial timberlands?



Q57. If the Department does decide to allow lethal removal of black bears that cause damage to timber, do you think the removal should be done by hunters or by contracted professional sharpshooters?



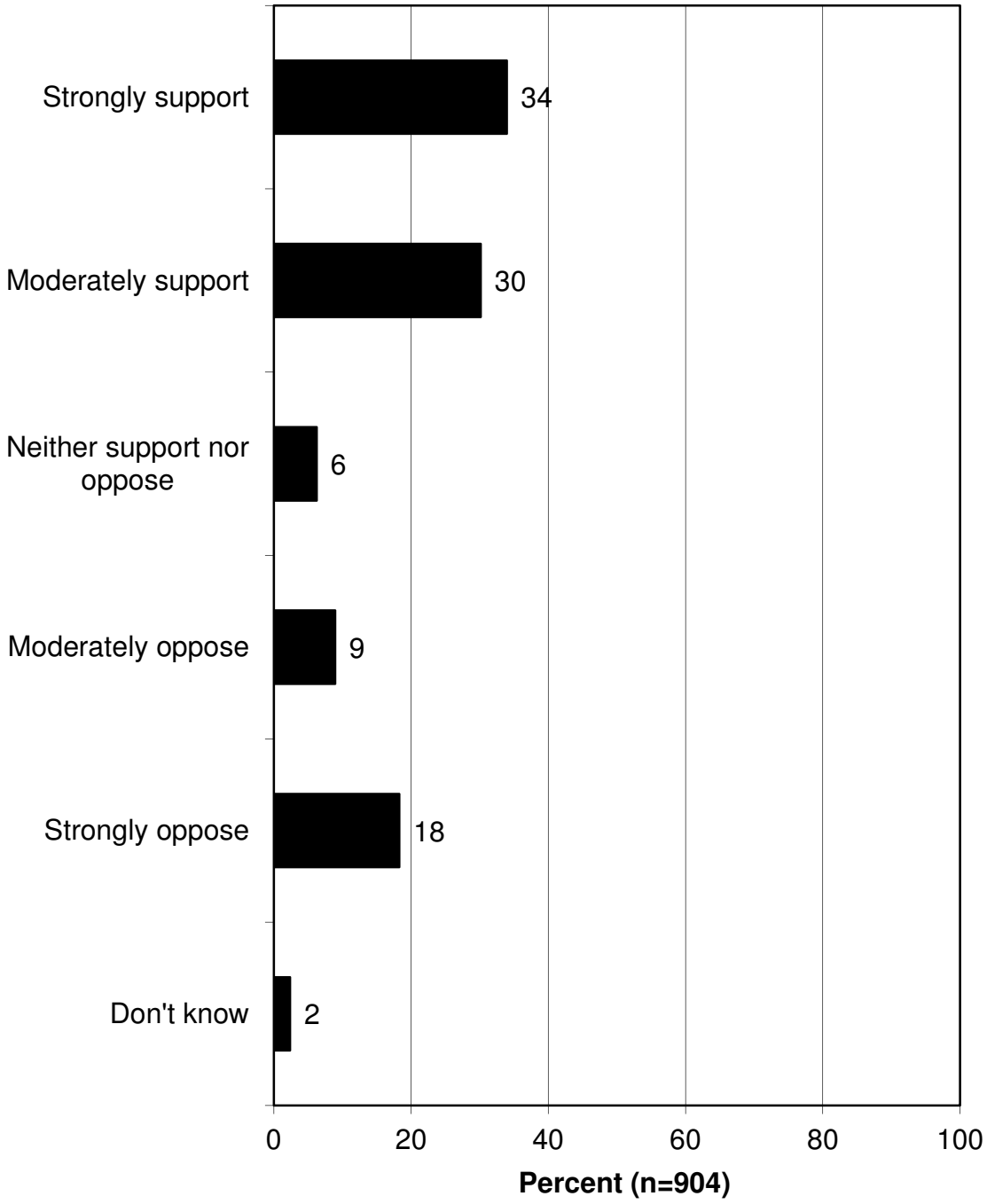
WOLF RECOVERY AND WOLF MANAGEMENT IN WASHINGTON

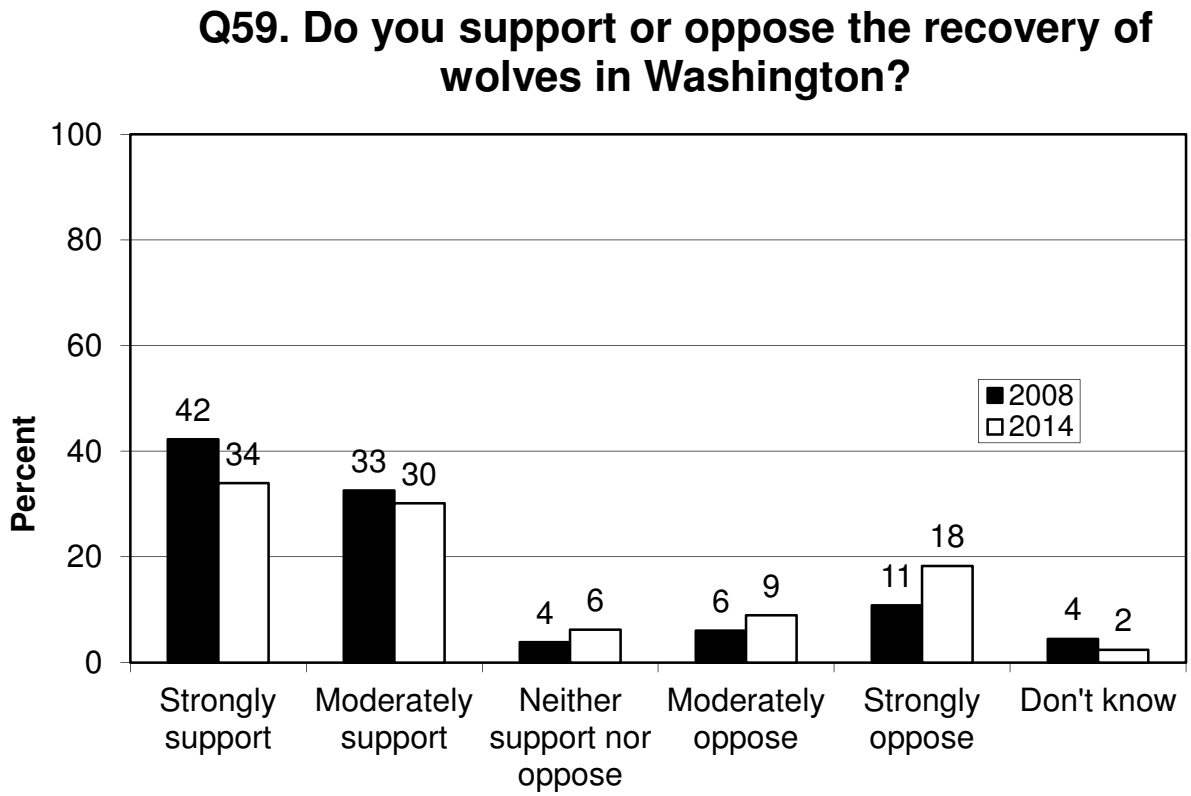
SUPPORT FOR OR OPPOSITION TO WOLF RECOVERY IN WASHINGTON

- The most basic question about the recovery of wolves asked if residents supported or opposed it. There is much more support for (64%) than opposition to (27%) the recovery of wolves in Washington.
  - A trend graph shows a lower level of support in the 2014 survey compared to the 2008 survey.
  - A follow-up question asked about support for or opposition to wolf recovery if it resulted in some localized declines in elk and deer populations: 57% support, while 28% oppose.
    - A trend graph shows about the same level of support for wolf recovery given that it may cause elk and deer population declines: while *strong* support went up slightly in 2014, overall support went down slightly.

- Residents were asked if they would support or oppose, once the wolf population in the state meets recovery population objectives, removing wolves from the state endangered species list. Support for this (73%) far exceeds opposition (15%).

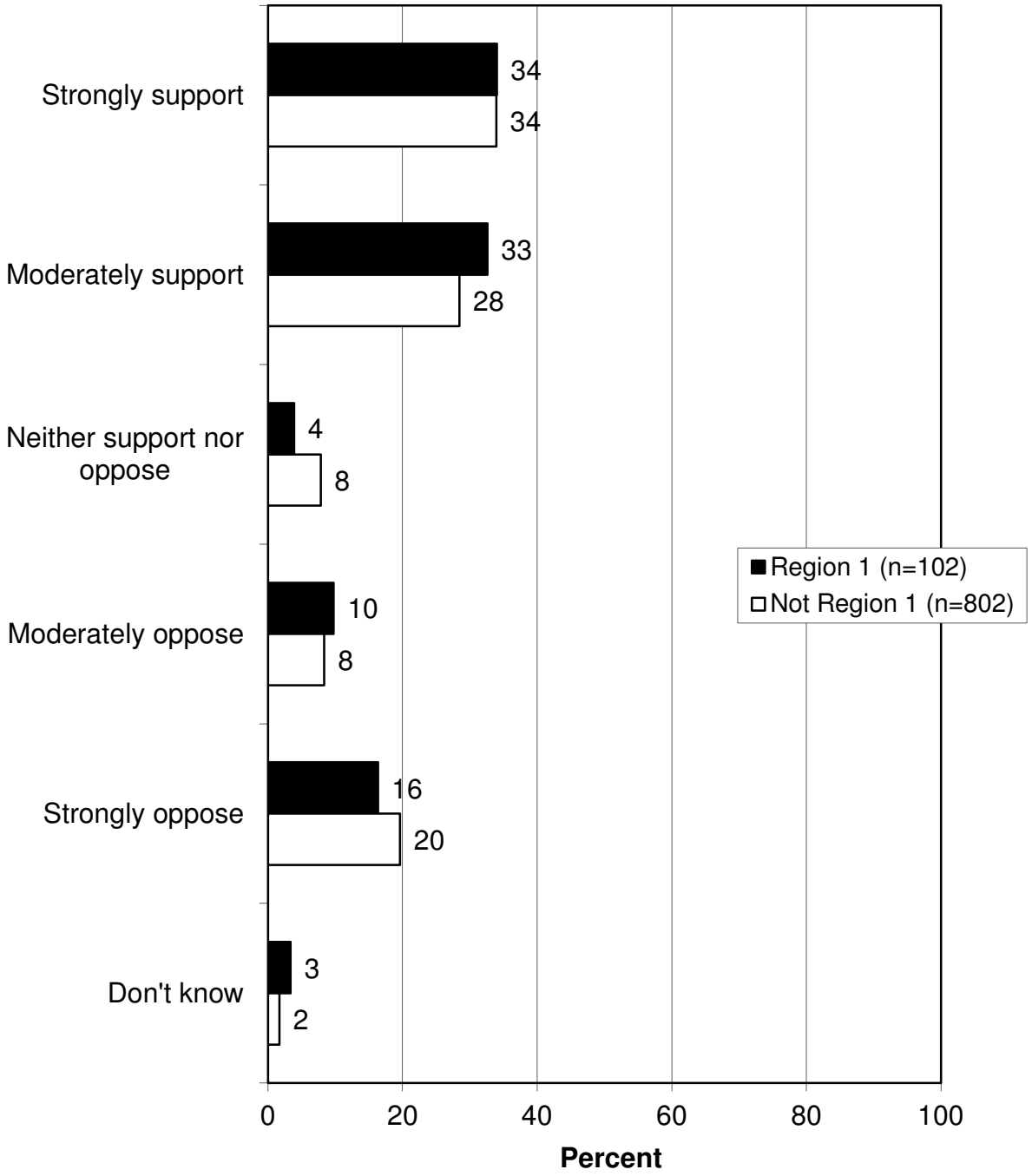
Q59. Do you support or oppose the recovery of wolves in Washington?




Q59. Do you support or oppose the recovery of wolves in Washington?
Percent
100
80
60
40
20
0
2008
2014
42
34
33
30
4
6
6
9
11
18
4
2
Strongly support
Moderately support
Neither support nor oppose
Moderately oppose
Strongly oppose
Don't know

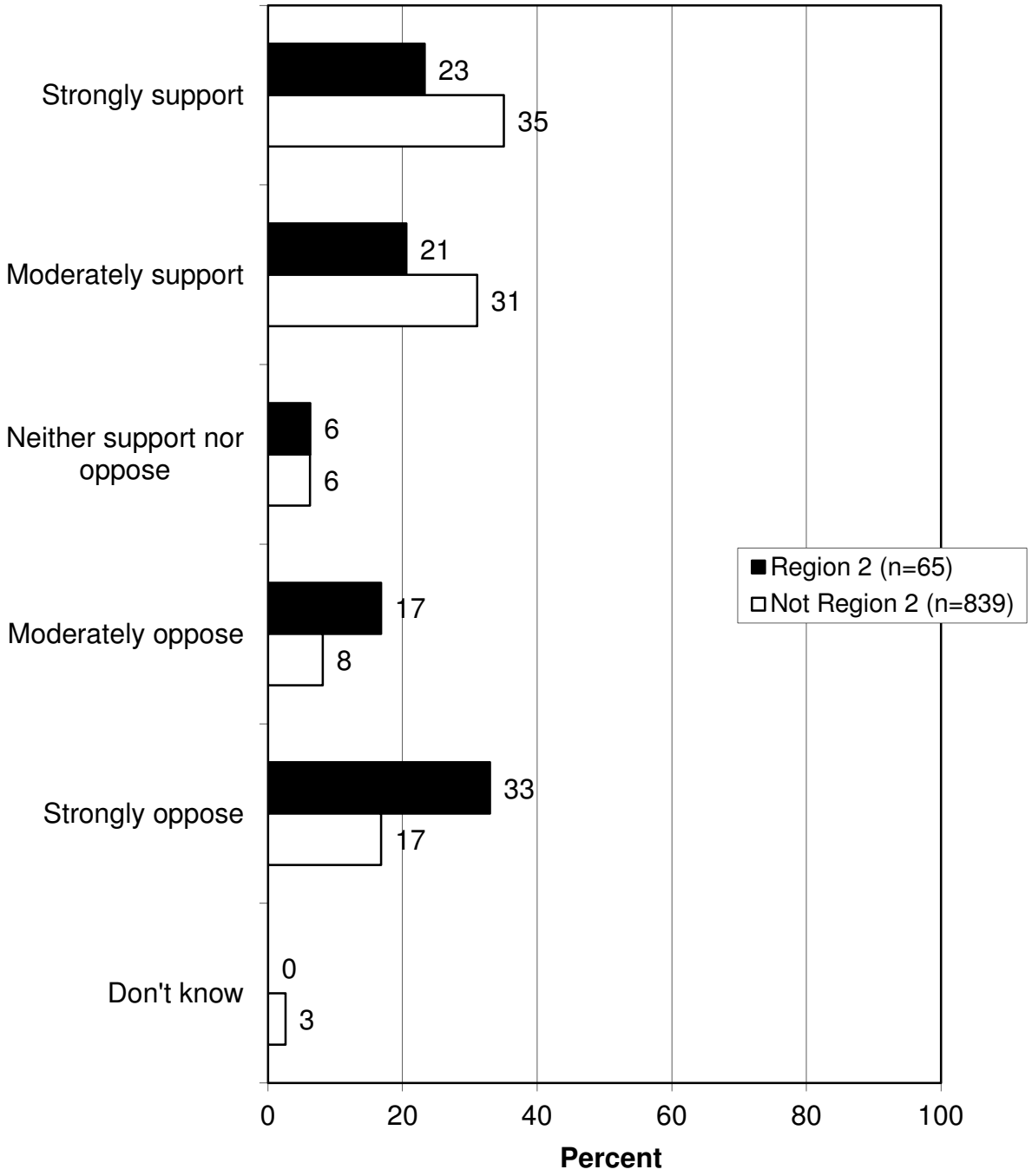
Region 1 consists of selected counties near the Puget Sound: Jefferson, Snohomish, King, Pierce, and Thurston.

Q59. Do you support or oppose the recovery of wolves in Washington?



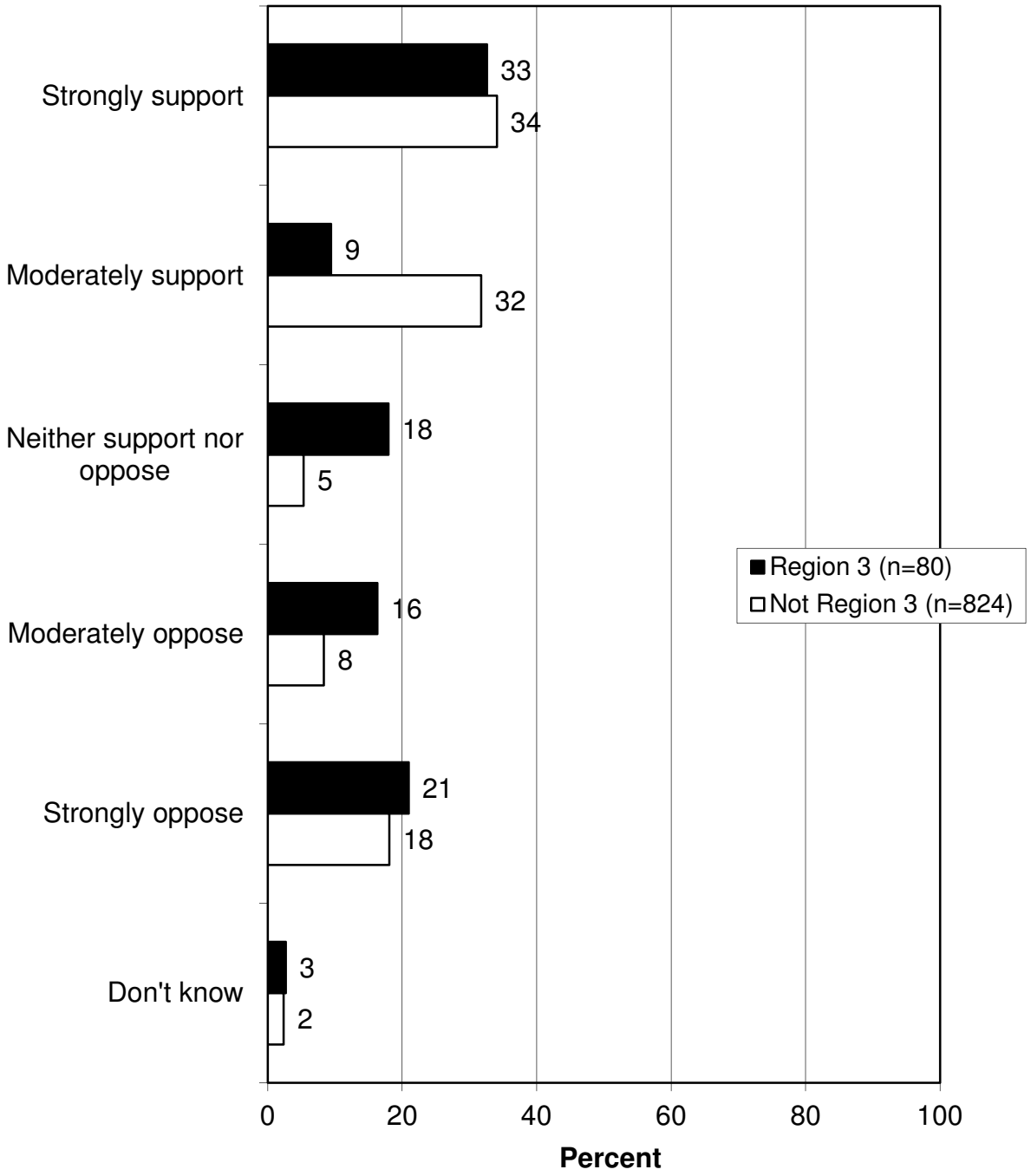
Region 2 consists of the northeastern counties: Okanagan, Ferry, Stevens, and Pend Oreille.

Q59. Do you support or oppose the recovery of wolves in Washington?



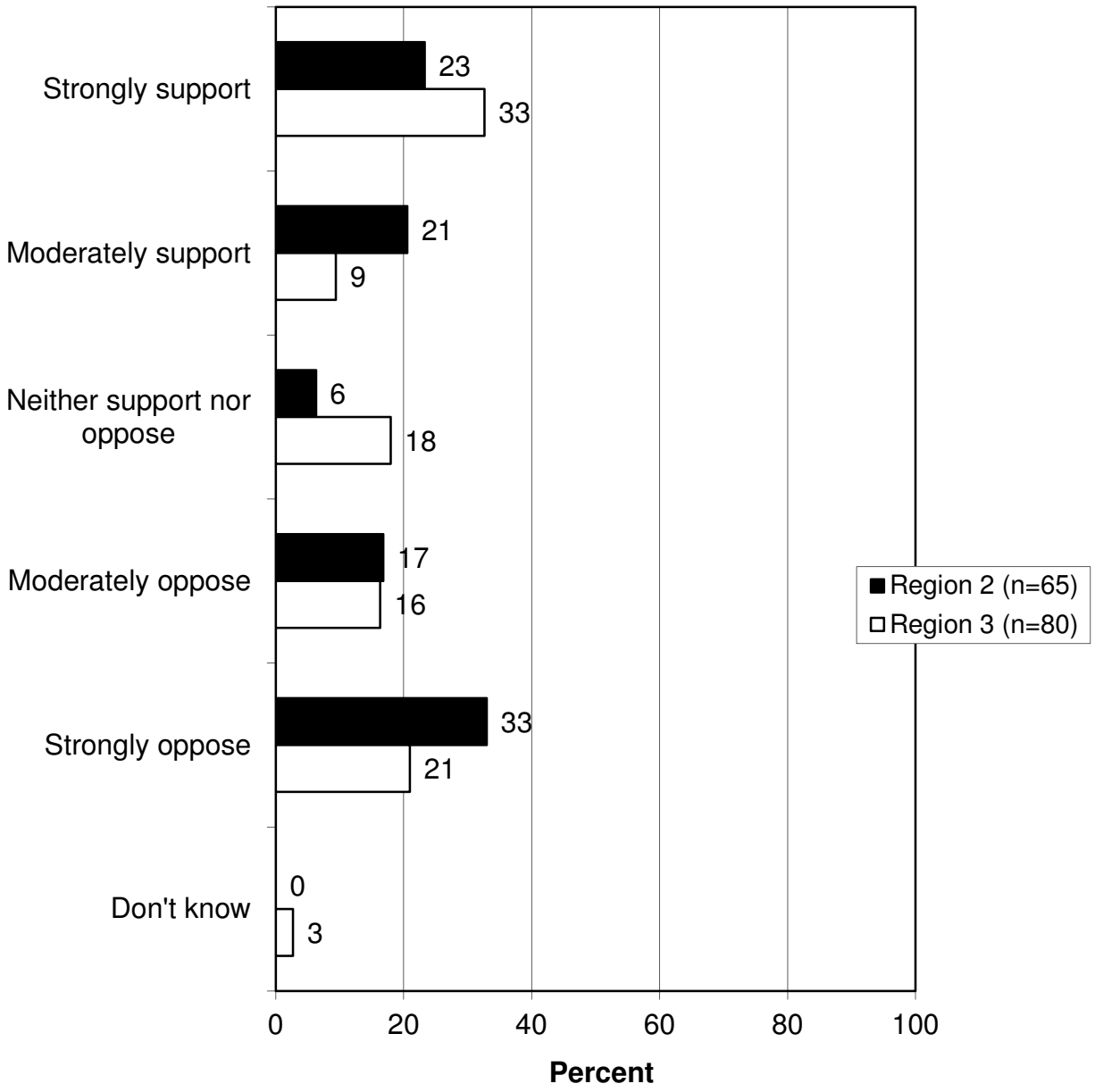
Region 3 consists of the southeastern counties and two central counties: Walla Walla, Columbia, Garfield, Asotin, Chelan, and Kittitas.

Q59. Do you support or oppose the recovery of wolves in Washington?

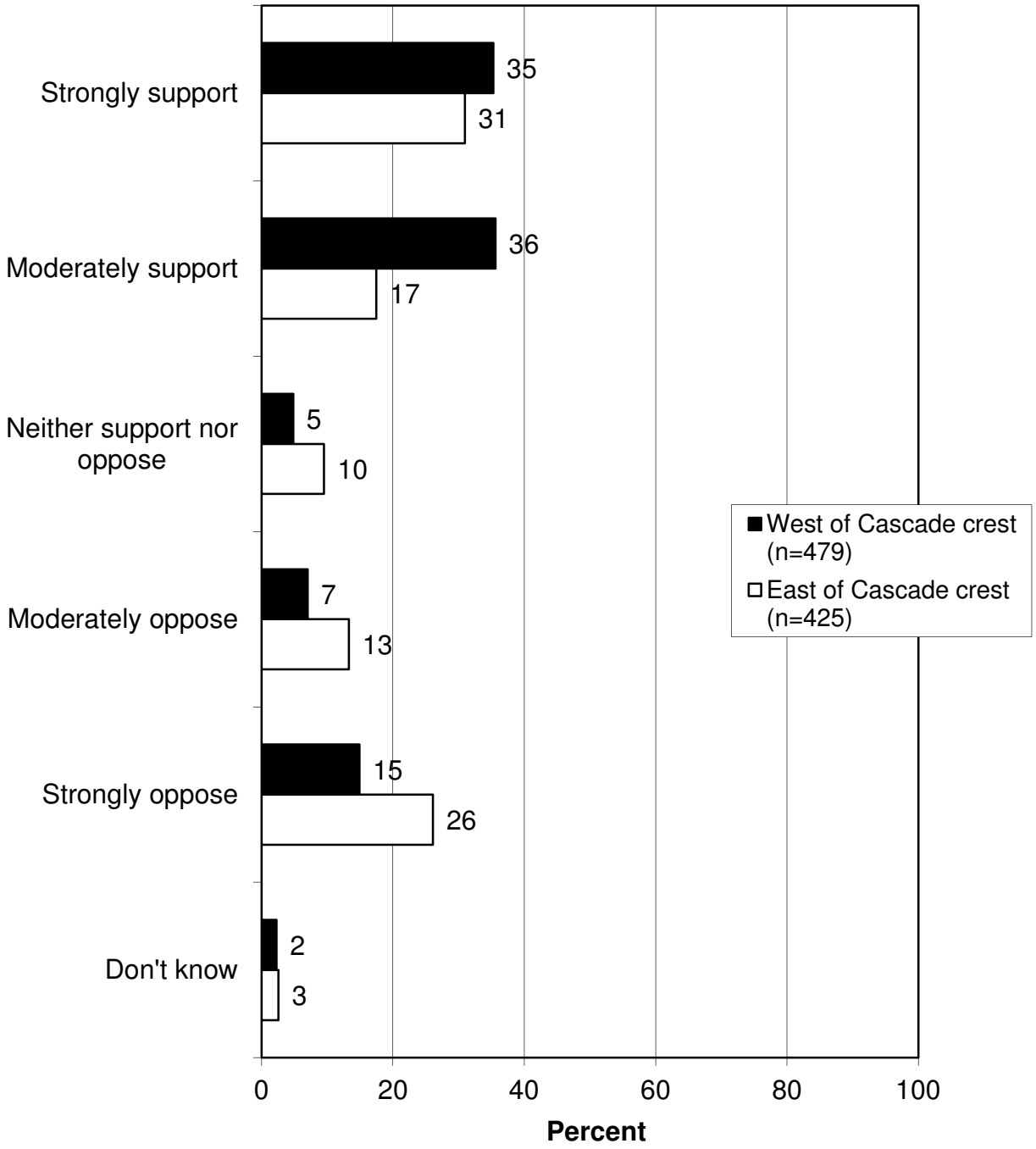


Region 2: Okanagan, Ferry, Stevens, and Pend Oreille. Region 3 Walla Walla, Columbia, Garfield, Asotin, Chelan, and Kittitas.

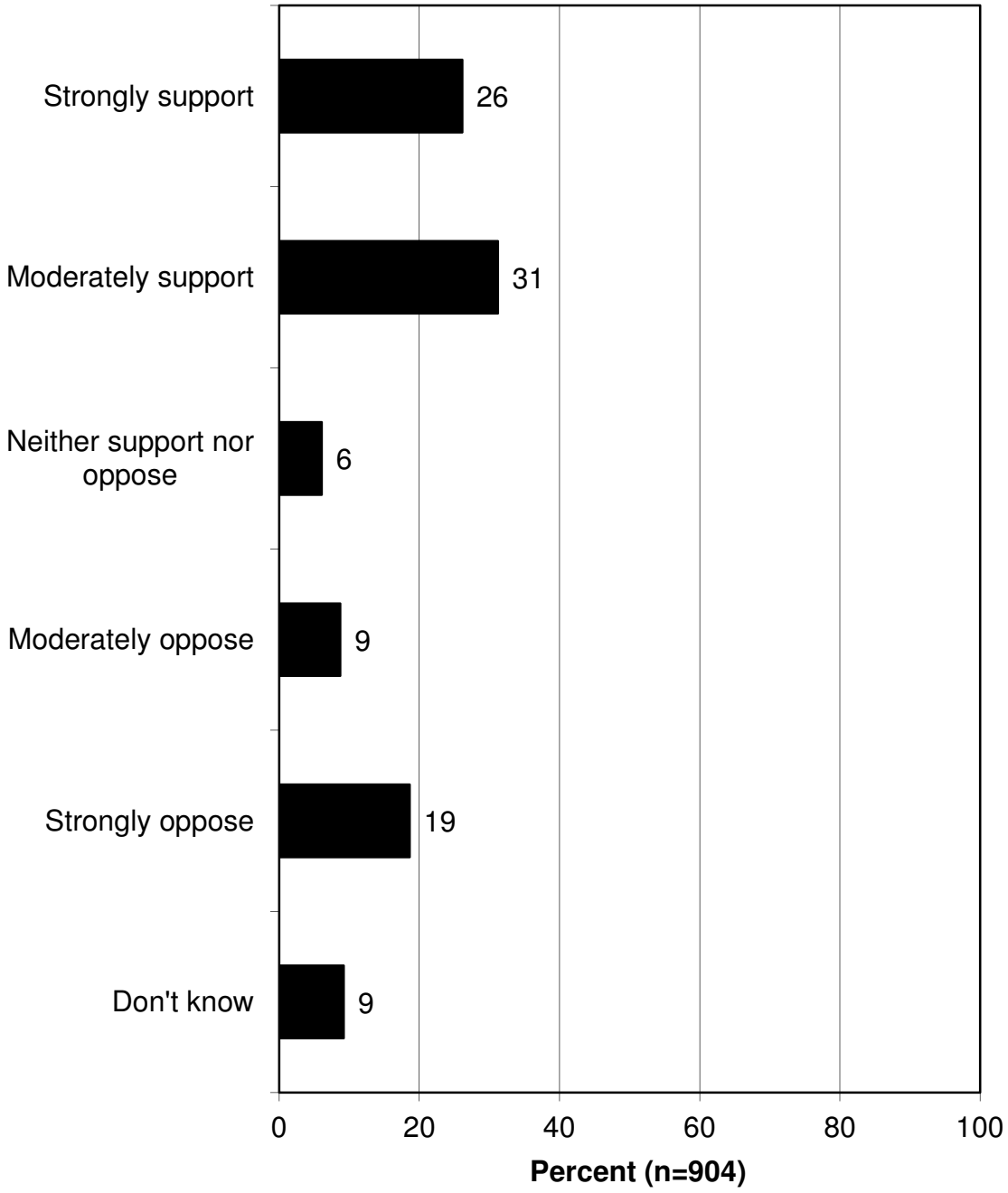
Q59. Do you support or oppose the recovery of wolves in Washington?

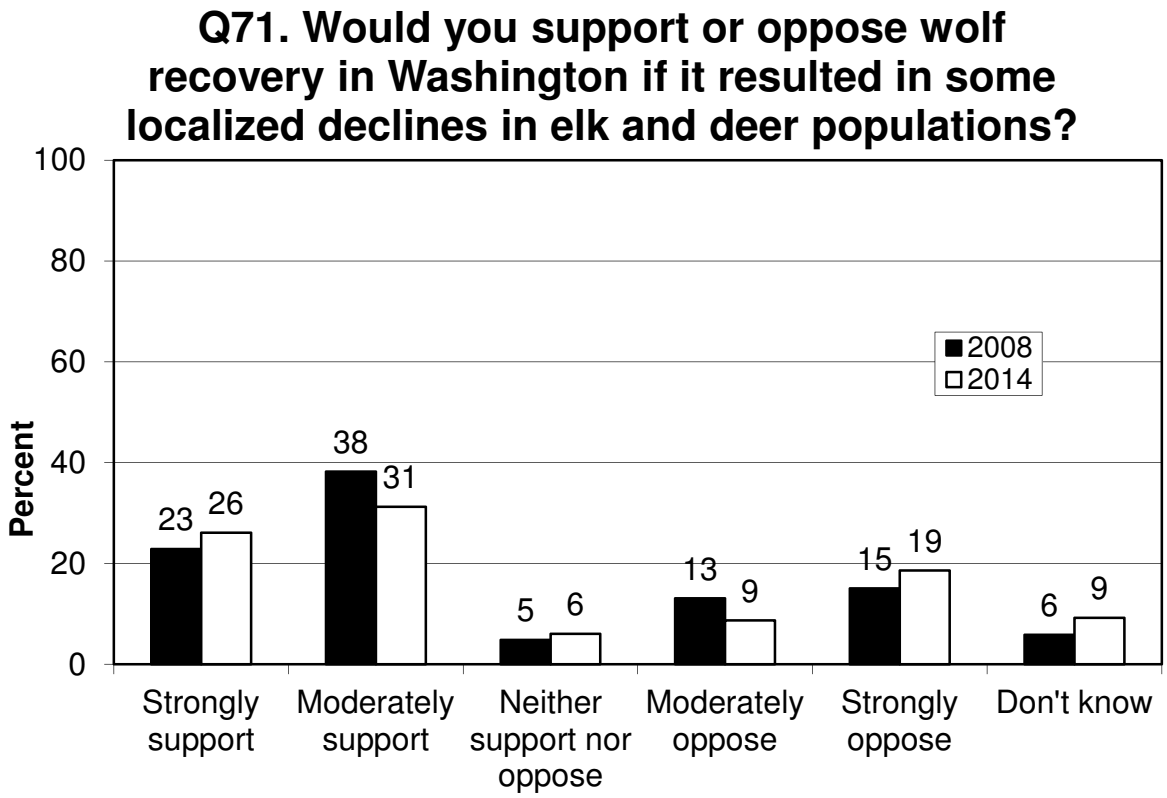


Q59. Do you support or oppose the recovery of wolves in Washington?



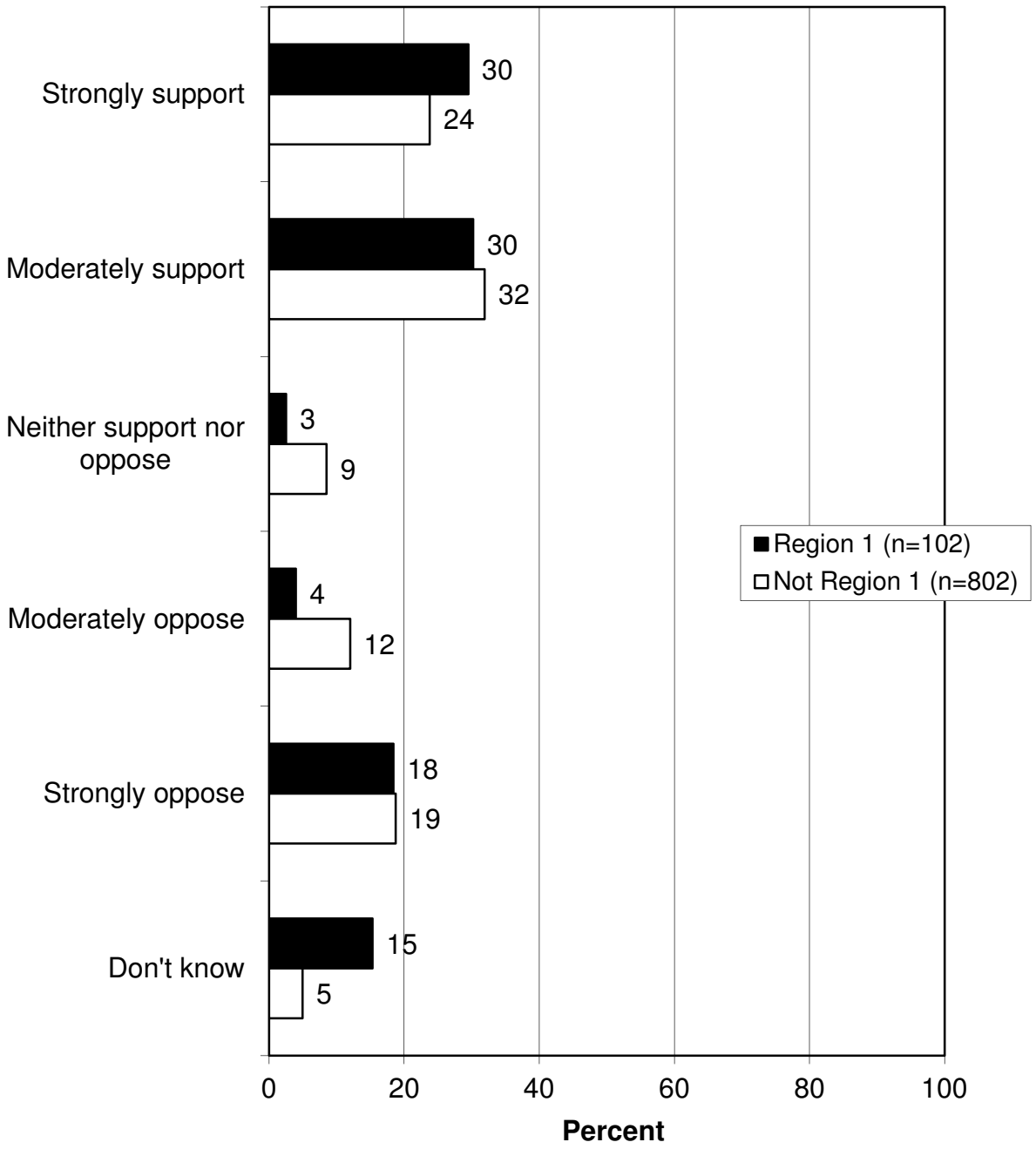
Q71. Would you support or oppose wolf recovery in Washington if it resulted in some localized declines in elk and deer populations?




Q71. Would you support or oppose wolf recovery in Washington if it resulted in some localized declines in elk and deer populations?
Percent
100
80
60
40
20
0
2008
2014
23
26
38
31
5
6
13
9
15
19
6
9
Strongly support
Moderately support
Neither support nor oppose
Moderately oppose
Strongly oppose
Don't know

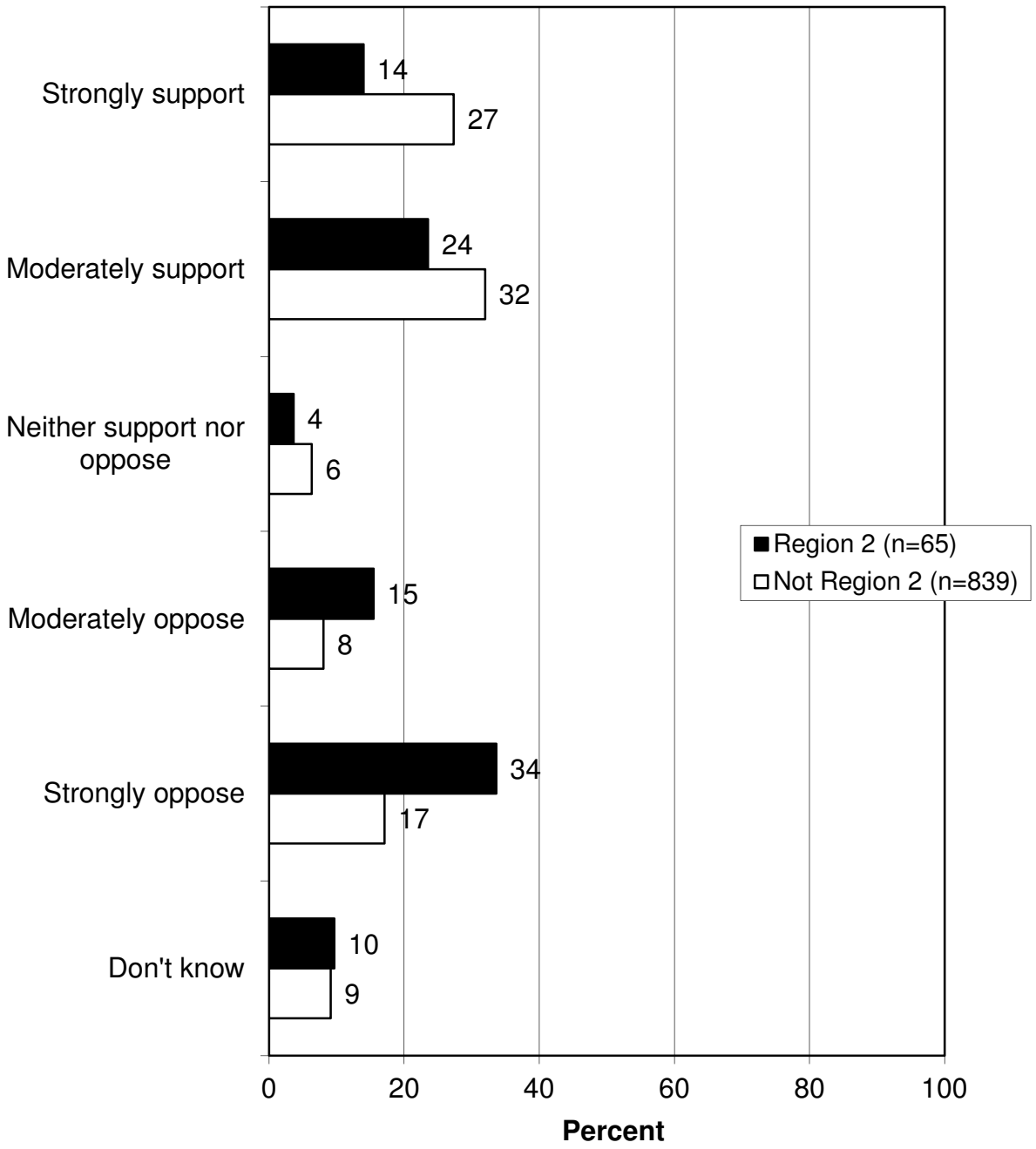
Region 1 consists of selected counties near the Puget Sound: Jefferson, Snohomish, King, Pierce, and Thurston.

Q71. Would you support or oppose wolf recovery in Washington if it resulted in some localized declines in elk and deer populations?



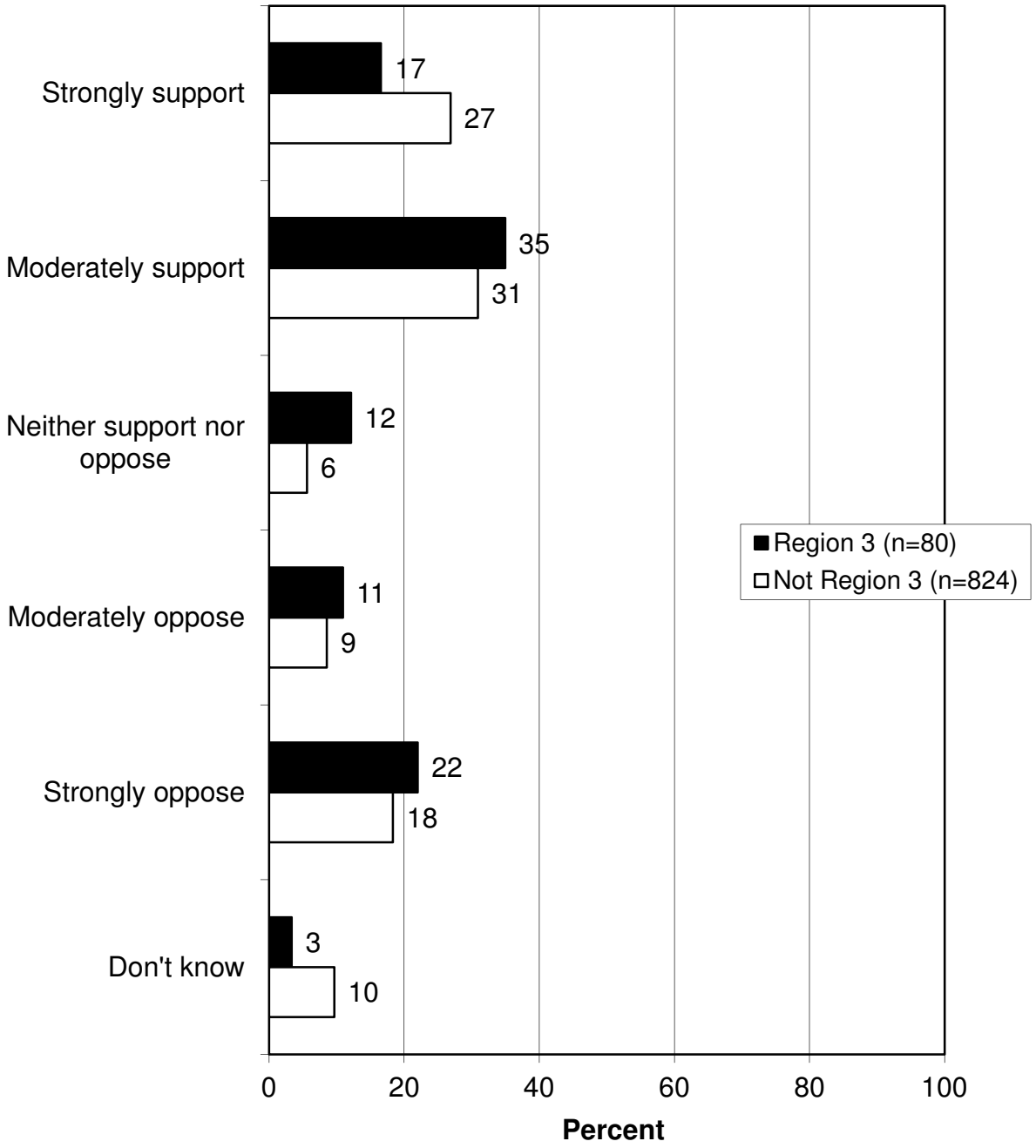
Region 2 consists of the northeastern counties: Okanagan, Ferry, Stevens, and Pend Oreille.

Q71. Would you support or oppose wolf recovery in Washington if it resulted in some localized declines in elk and deer populations?



Region 3 consists of the southeastern counties and two central counties: Walla Walla, Columbia, Garfield, Asotin, Chelan, and Kittitas.

Q71. Would you support or oppose wolf recovery in Washington if it resulted in some localized declines in elk and deer populations?



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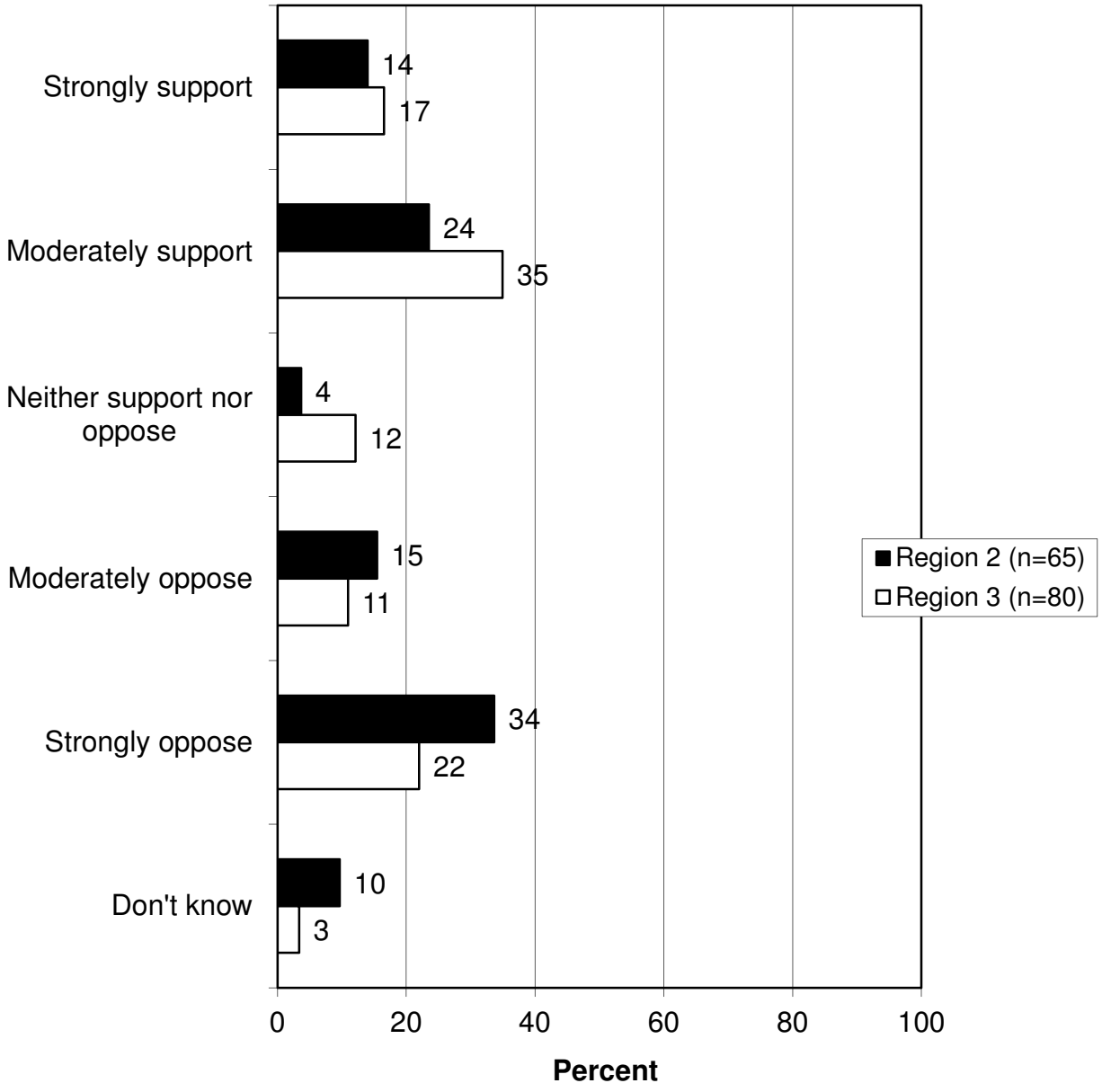

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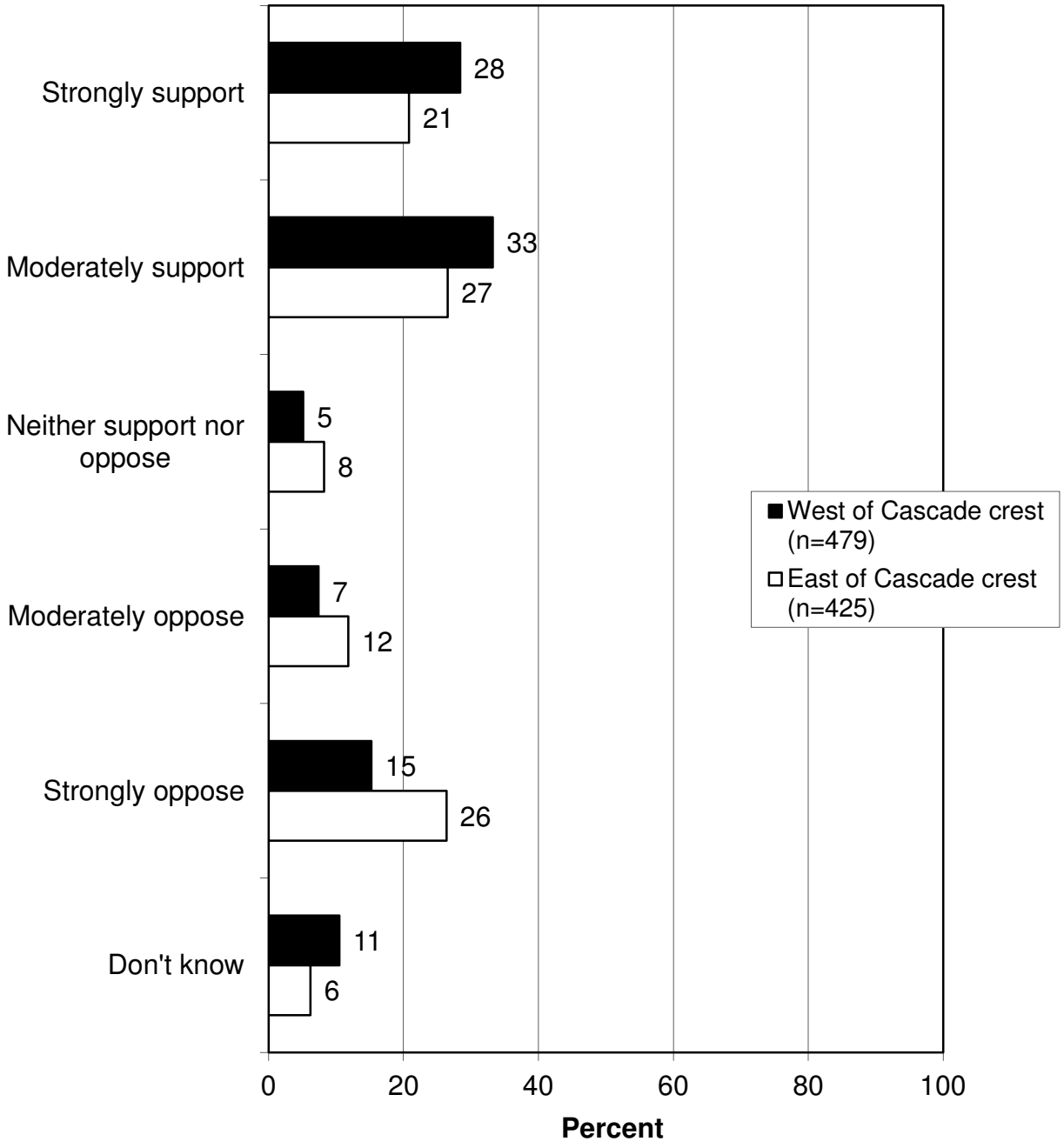
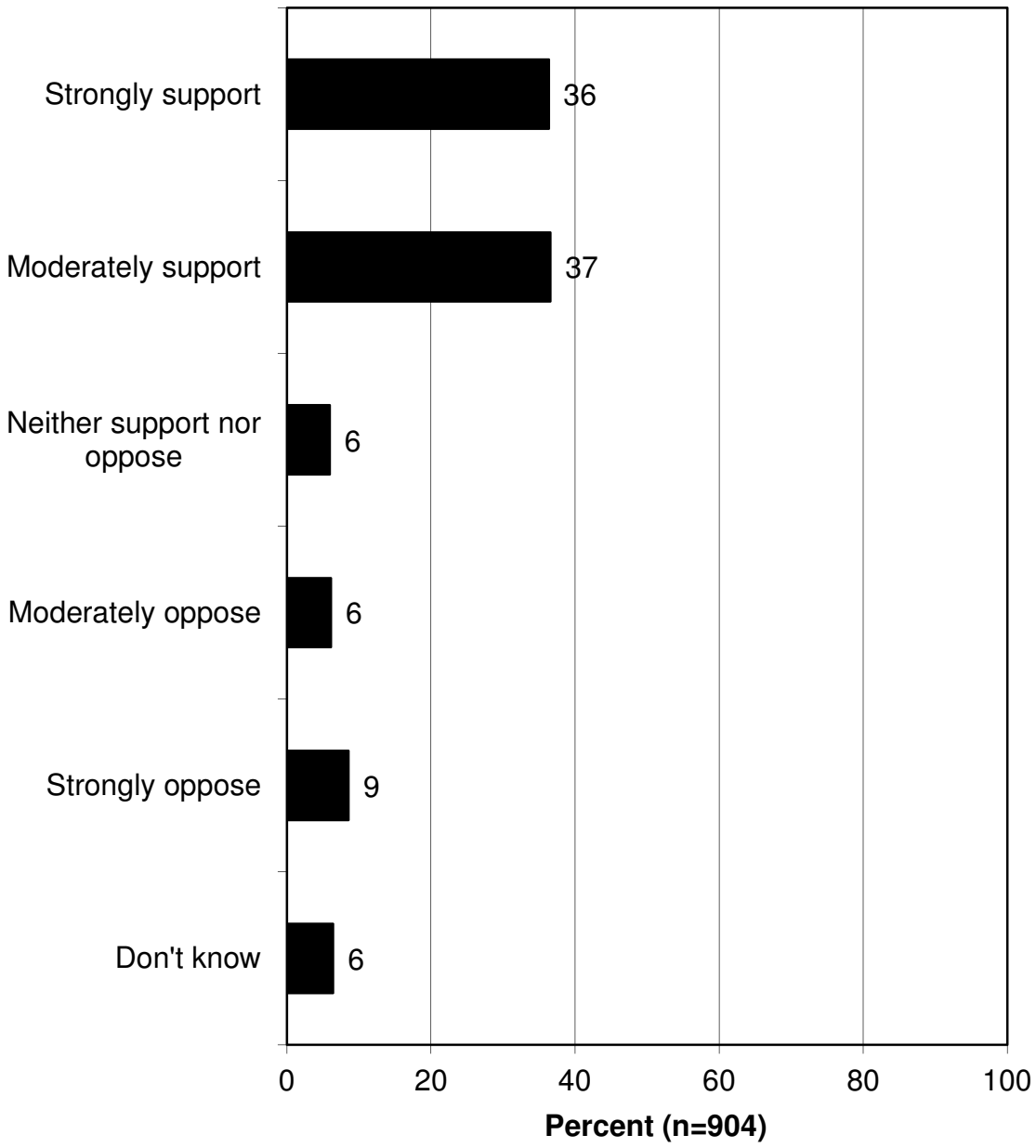


Q72. Do you support or oppose removing wolves from the state endangered species list in Washington when the population and recovery objectives of the state plan are met?



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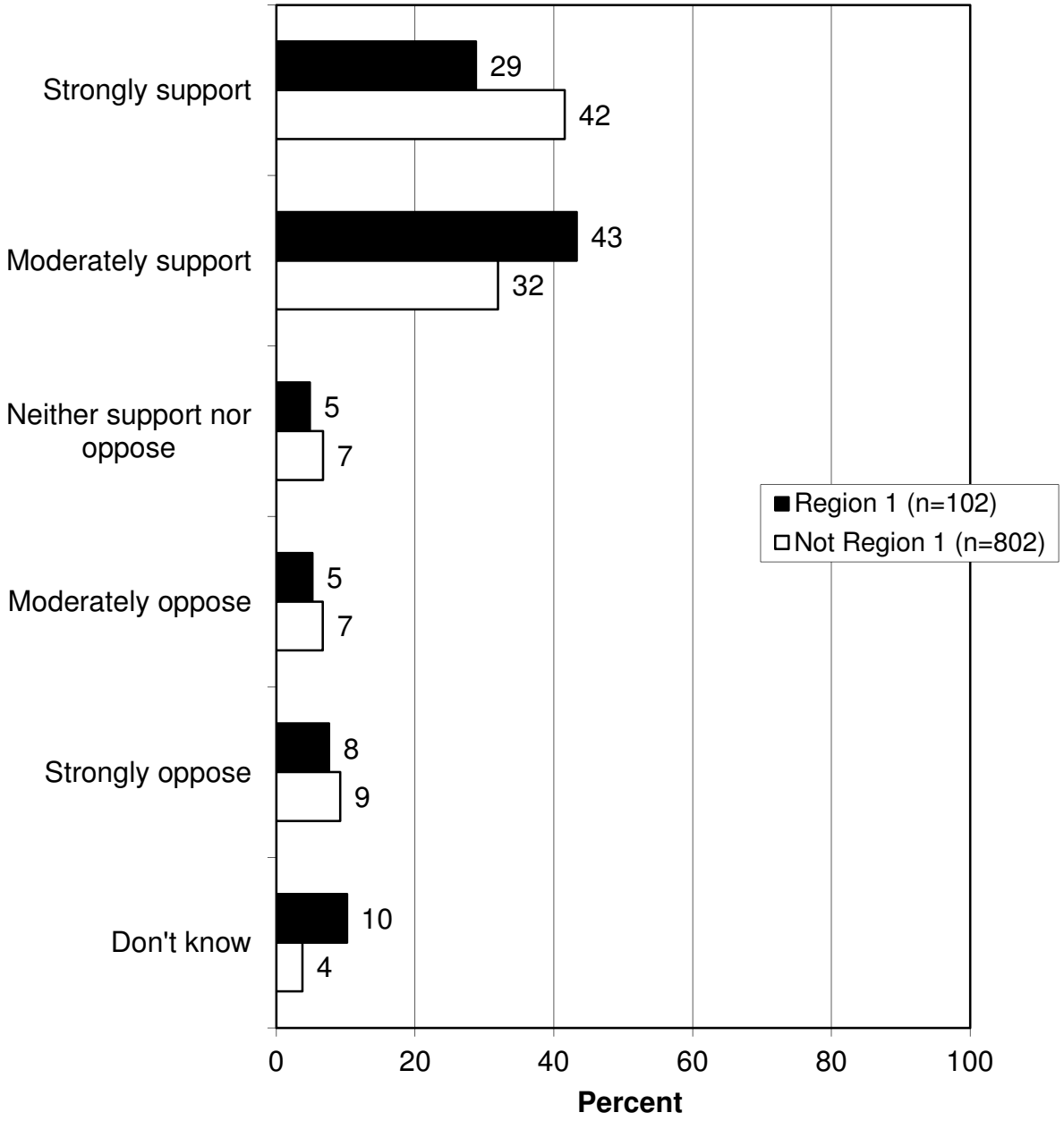

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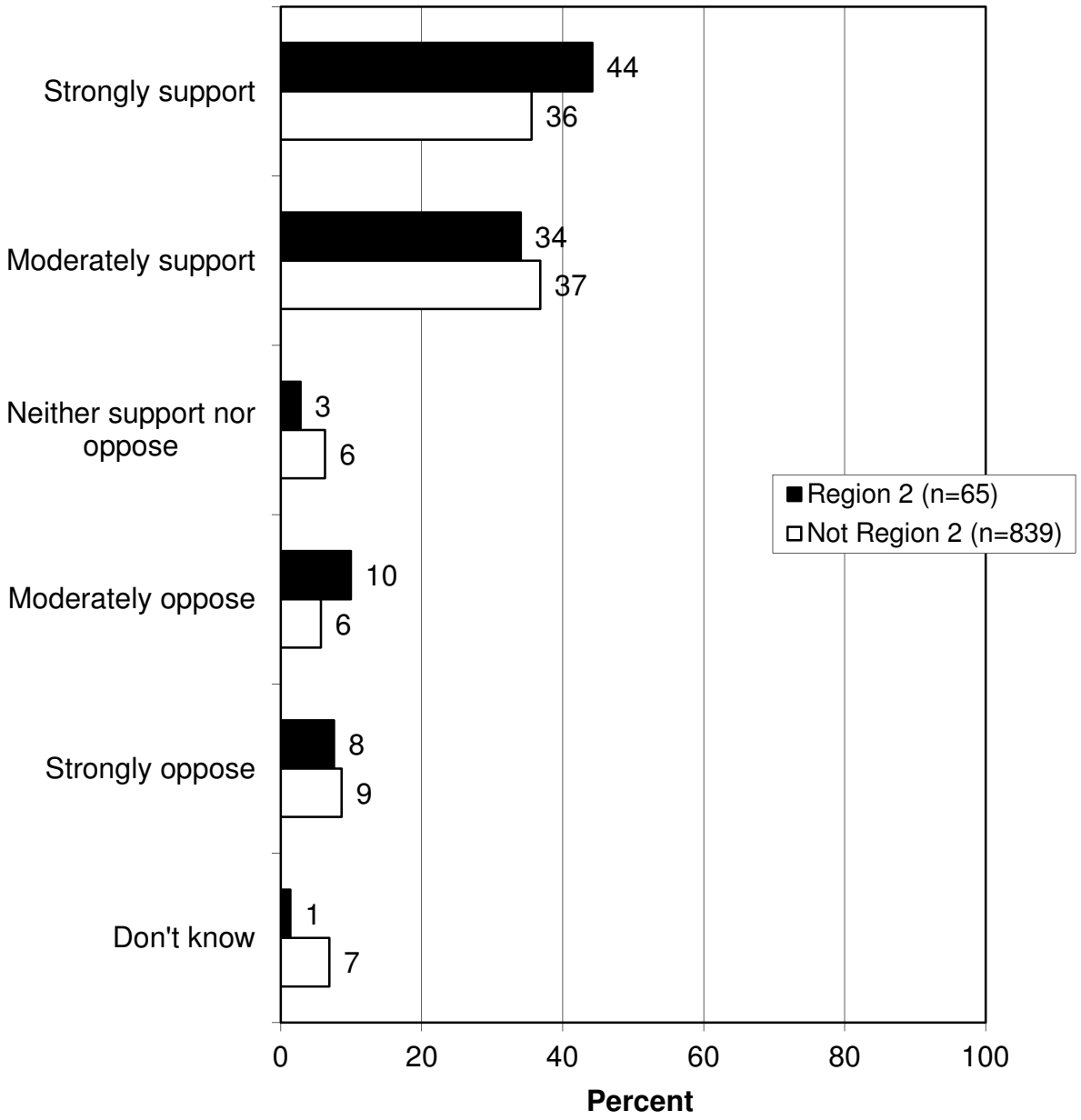

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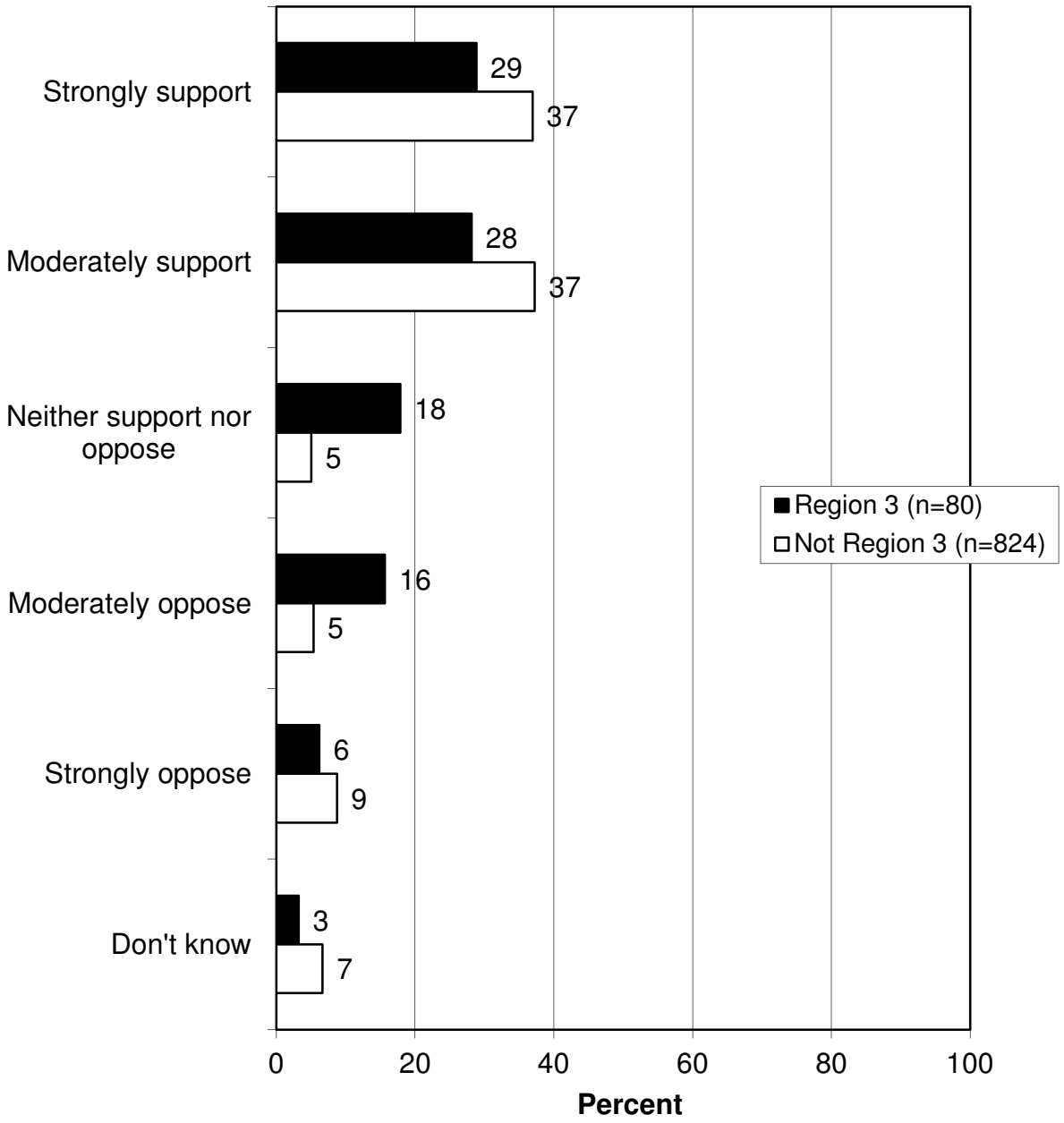

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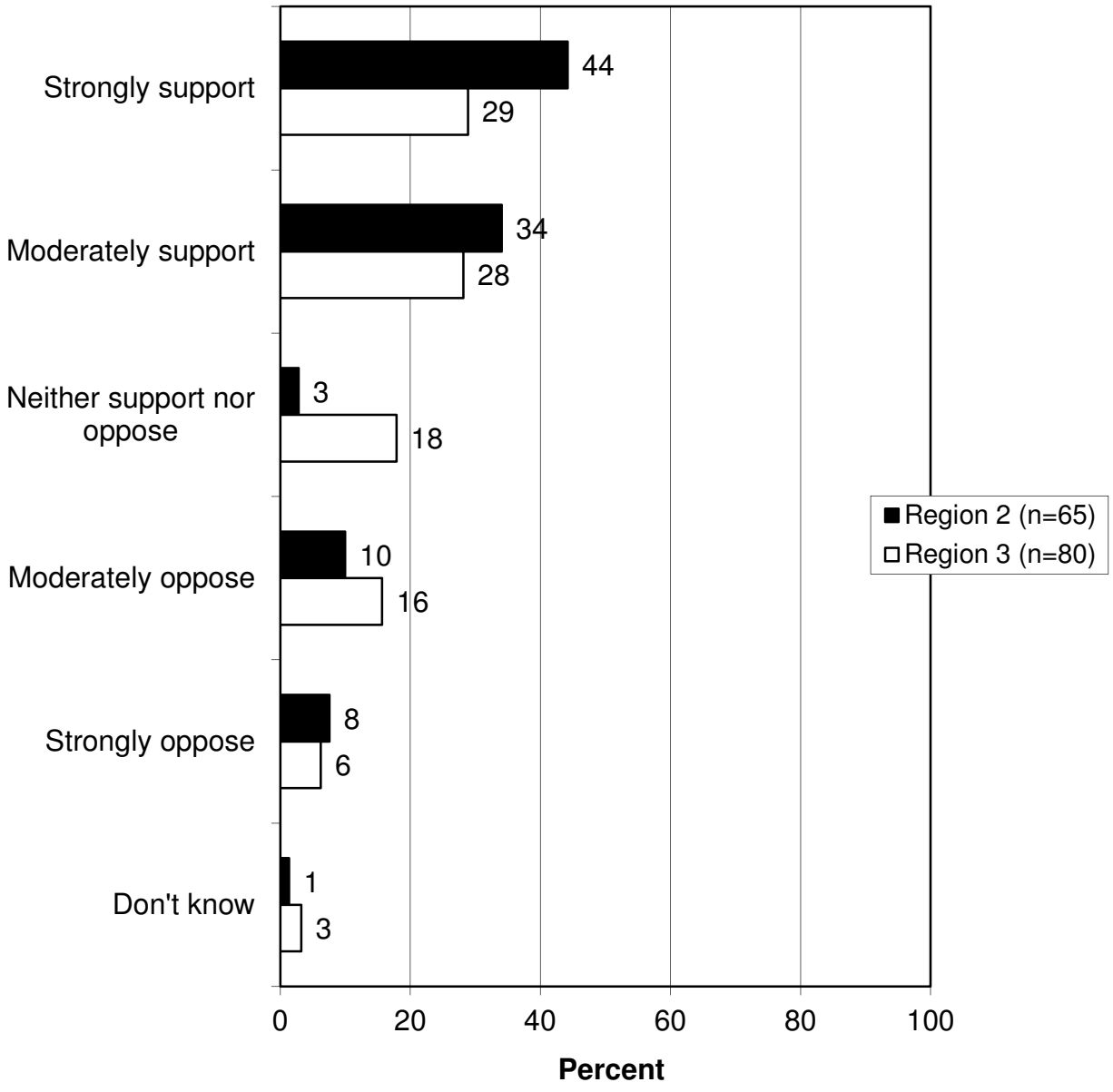

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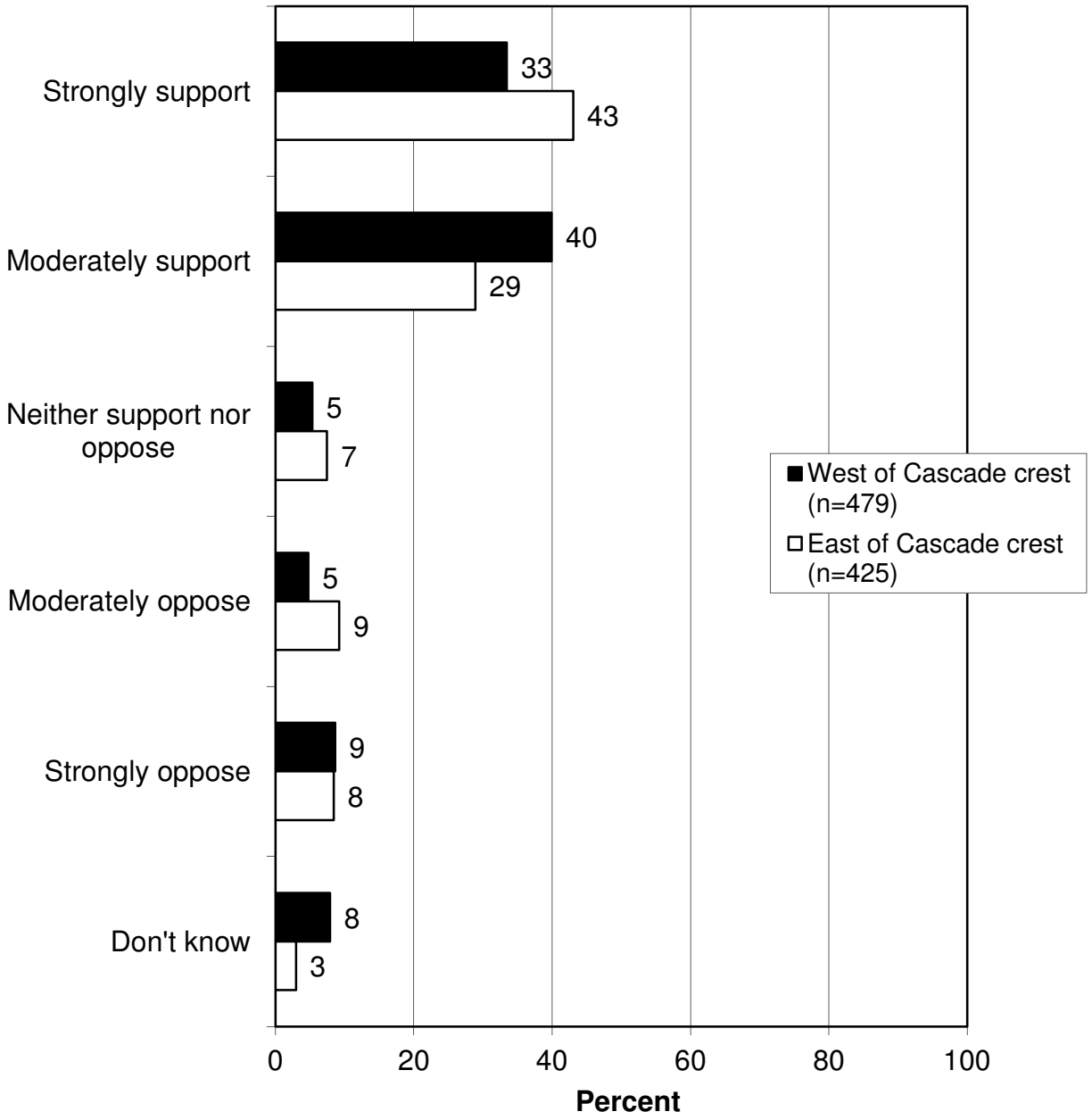
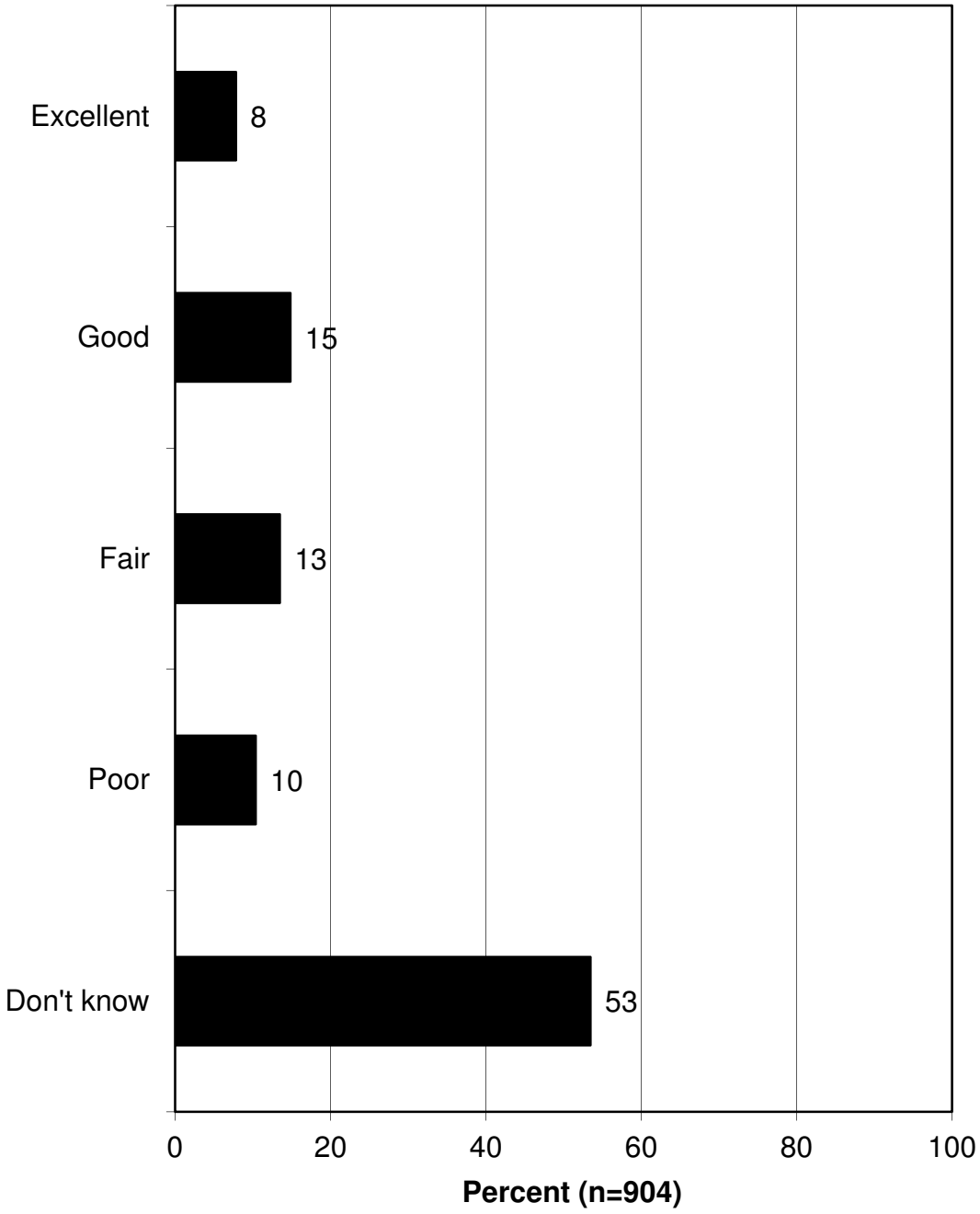


RATINGS OF THE DEPARTMENT'S MANAGEMENT OF WOLVES IN WASHINGTON

- When residents are asked to rate the Department's management of wolves in Washington, the majority (53%) do not know what rating to give. Otherwise, they are fairly evenly split, with 23% saying *excellent* or *good* (the upper half of the scale), and 23% saying *fair* or *poor* (the lower half of the scale). Despite the mixed results, note that only 10% rated the Department's management of wolves as *poor*.
  - Reasons for an excellent rating are shown.
  - Reasons for not giving a higher rating (among those who did not give a rating of *excellent*) include the feeling among residents that there are too many wolves, that they disagree with having wolves in Washington, the feeling that there are not enough wolves, that the Department does not communicate effectively about wolves, and that wolves cause problems.

Q60. Overall, how would you rate the Washington Department of Fish and Wildlife's management of wolves?



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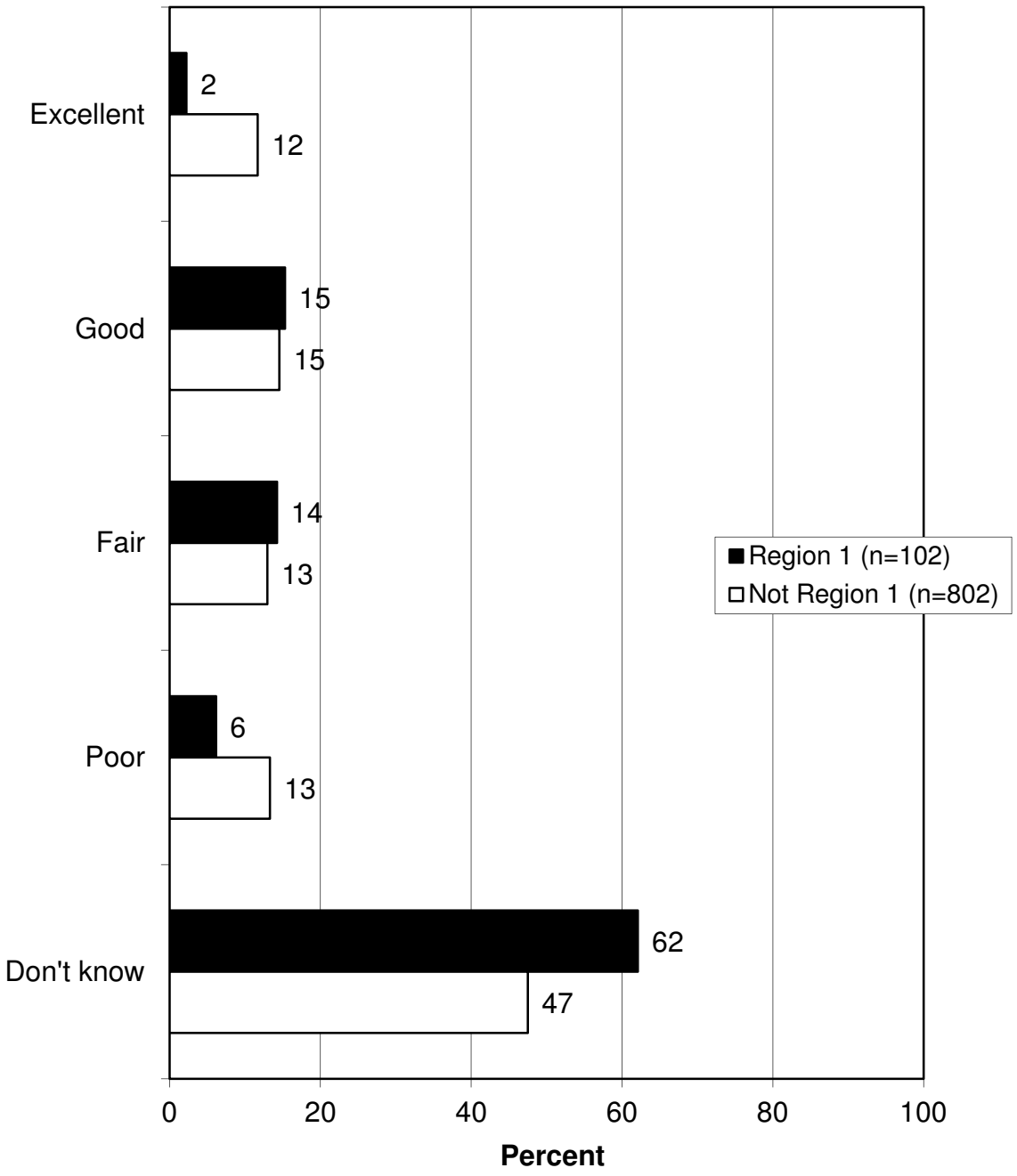

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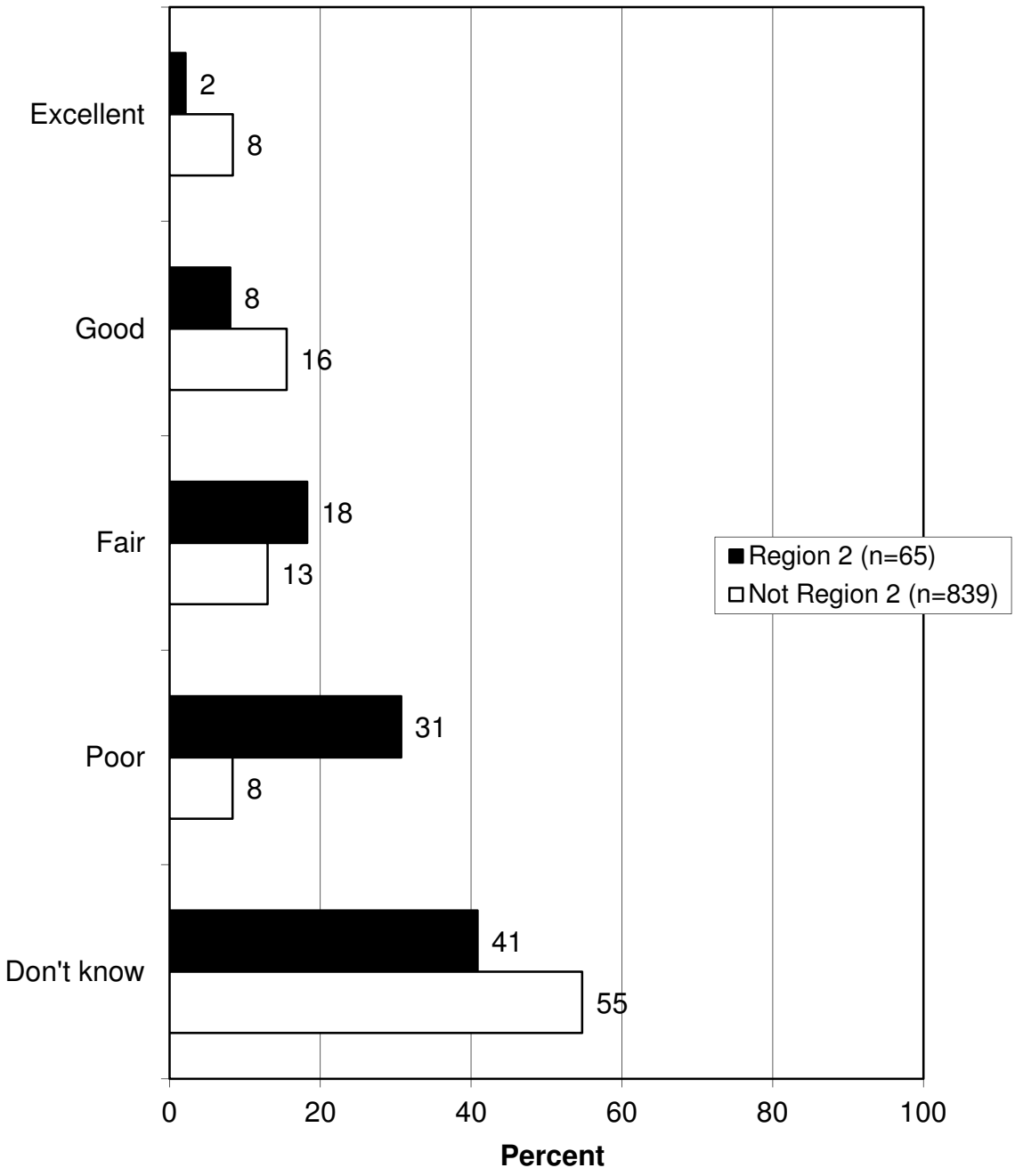

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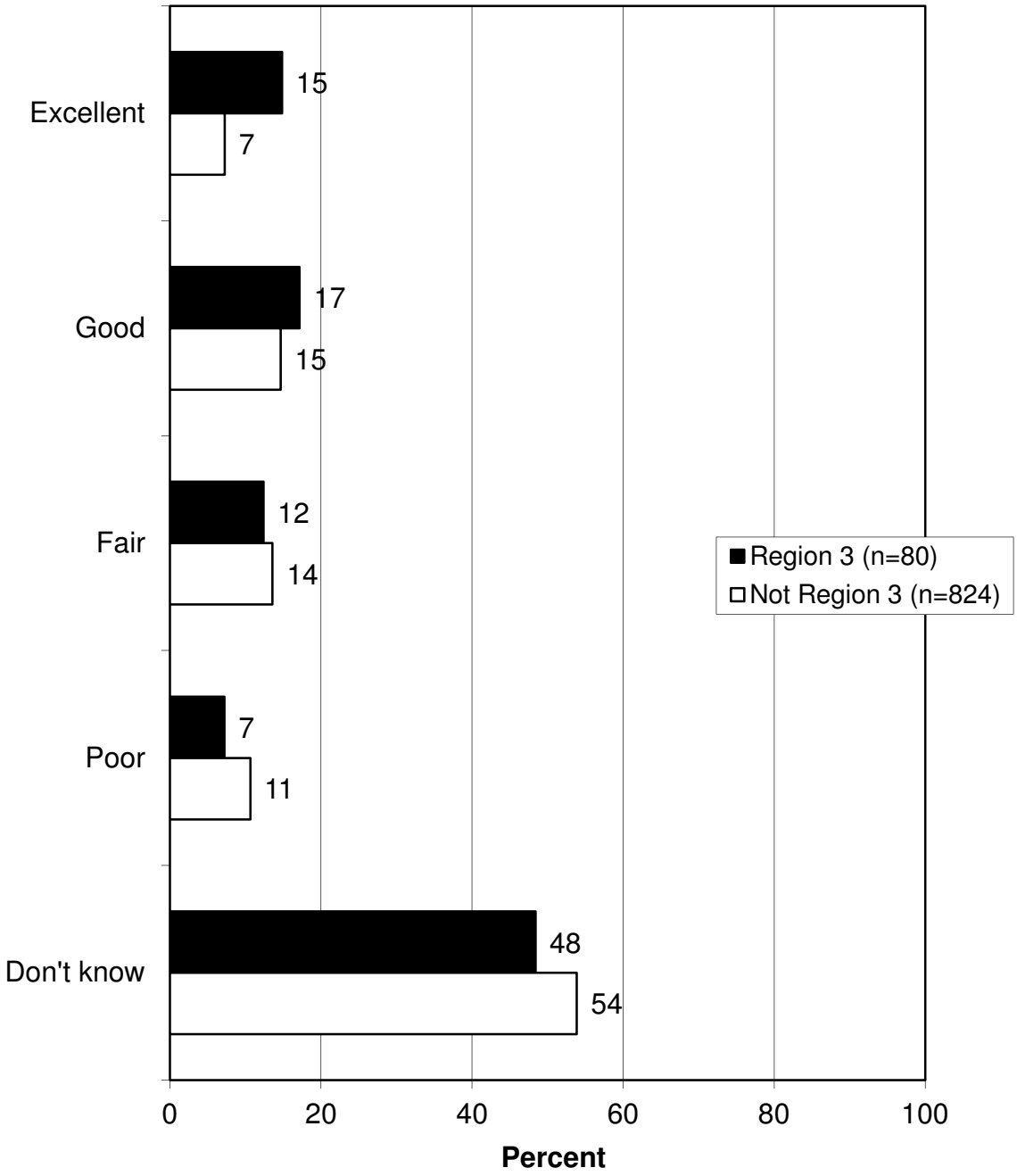

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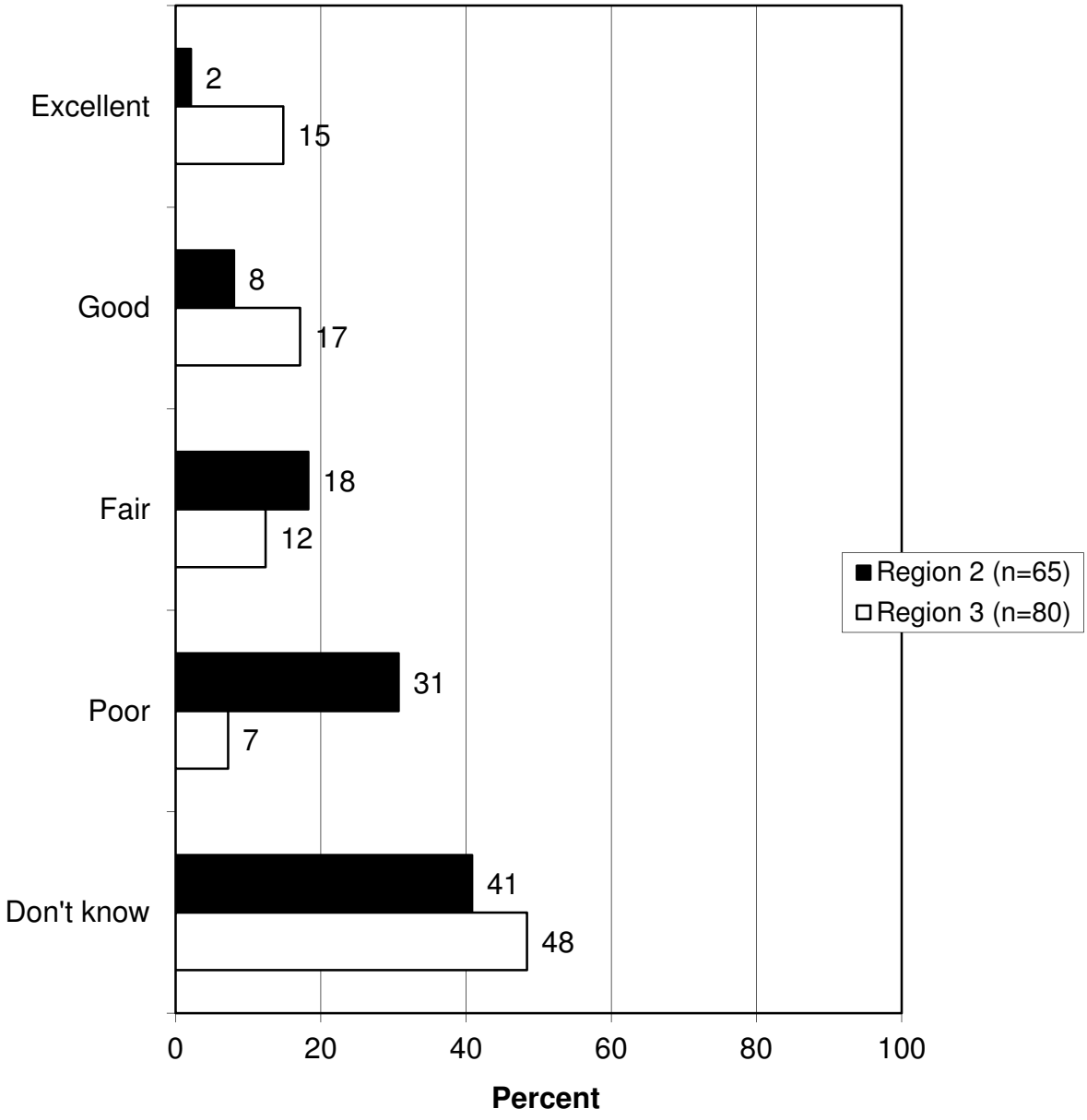

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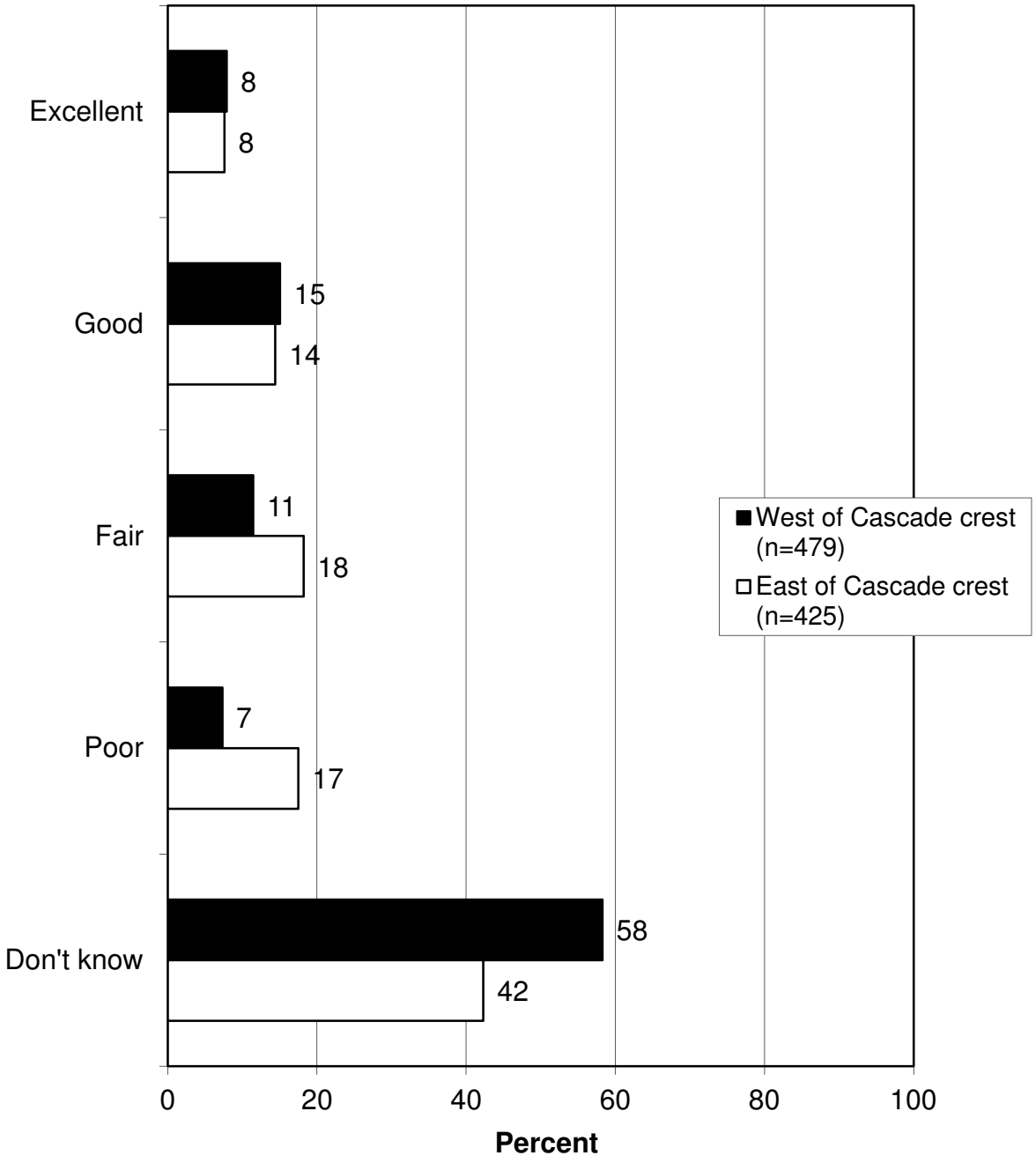
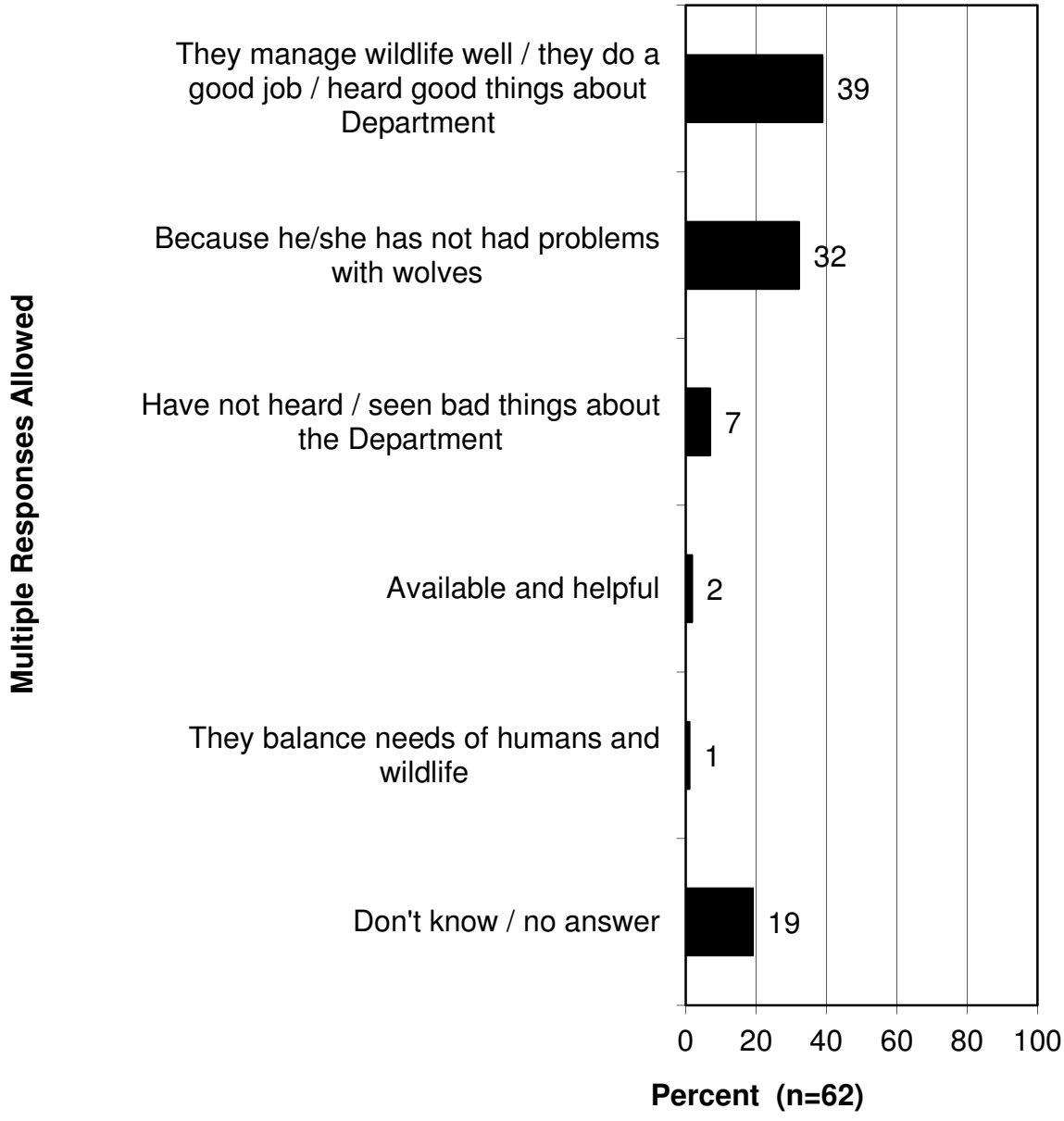
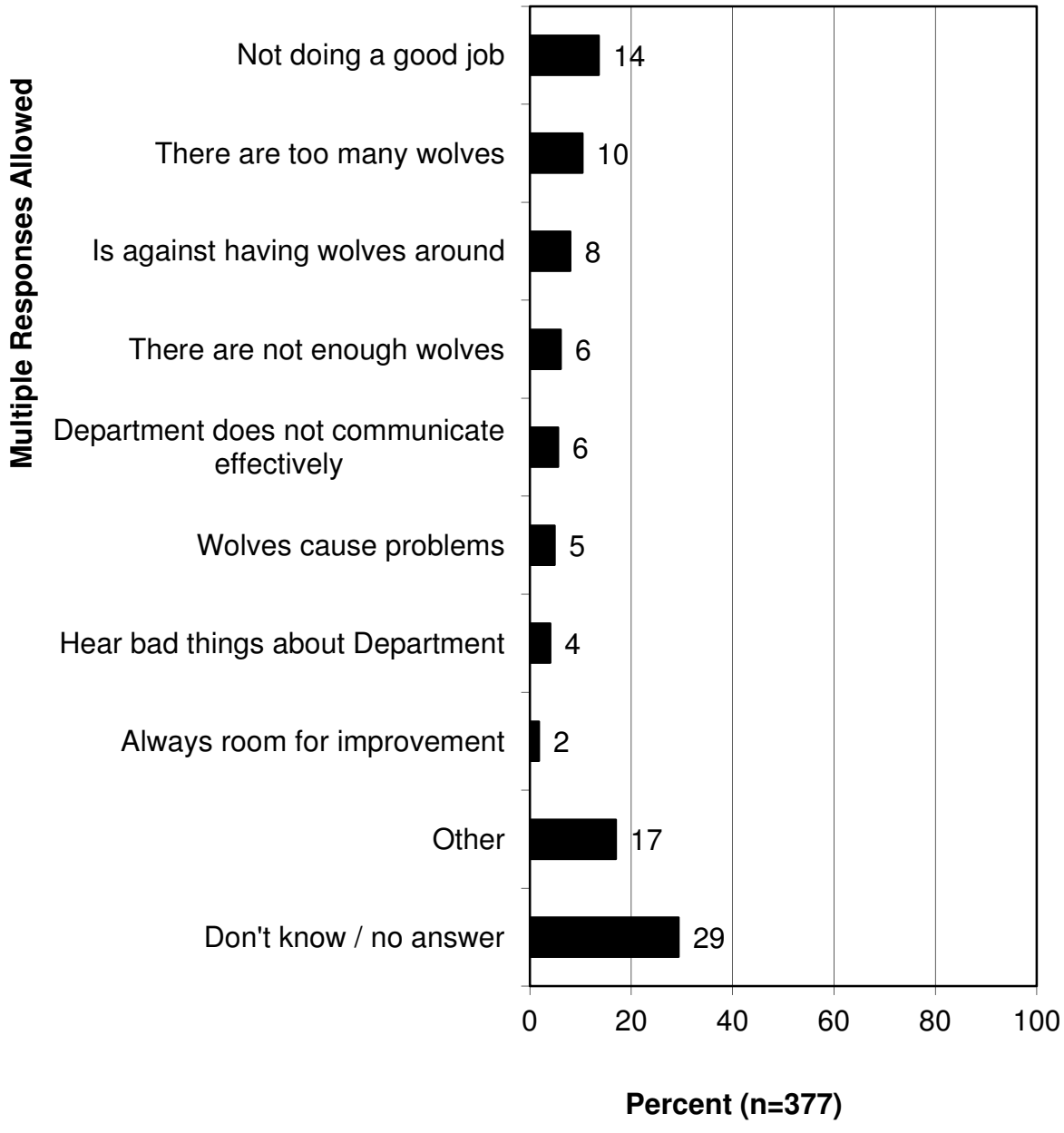


Q61. Why did you rate the Department as excellent? (Asked of those who rated the Washington Department of Fish and Wildlife's management of wolves as excellent.)



Q62. Why didn't you rate the Department higher? (Asked of those who rated the Washington Department of Fish and Wildlife's management of wolves as good, fair, or poor.)



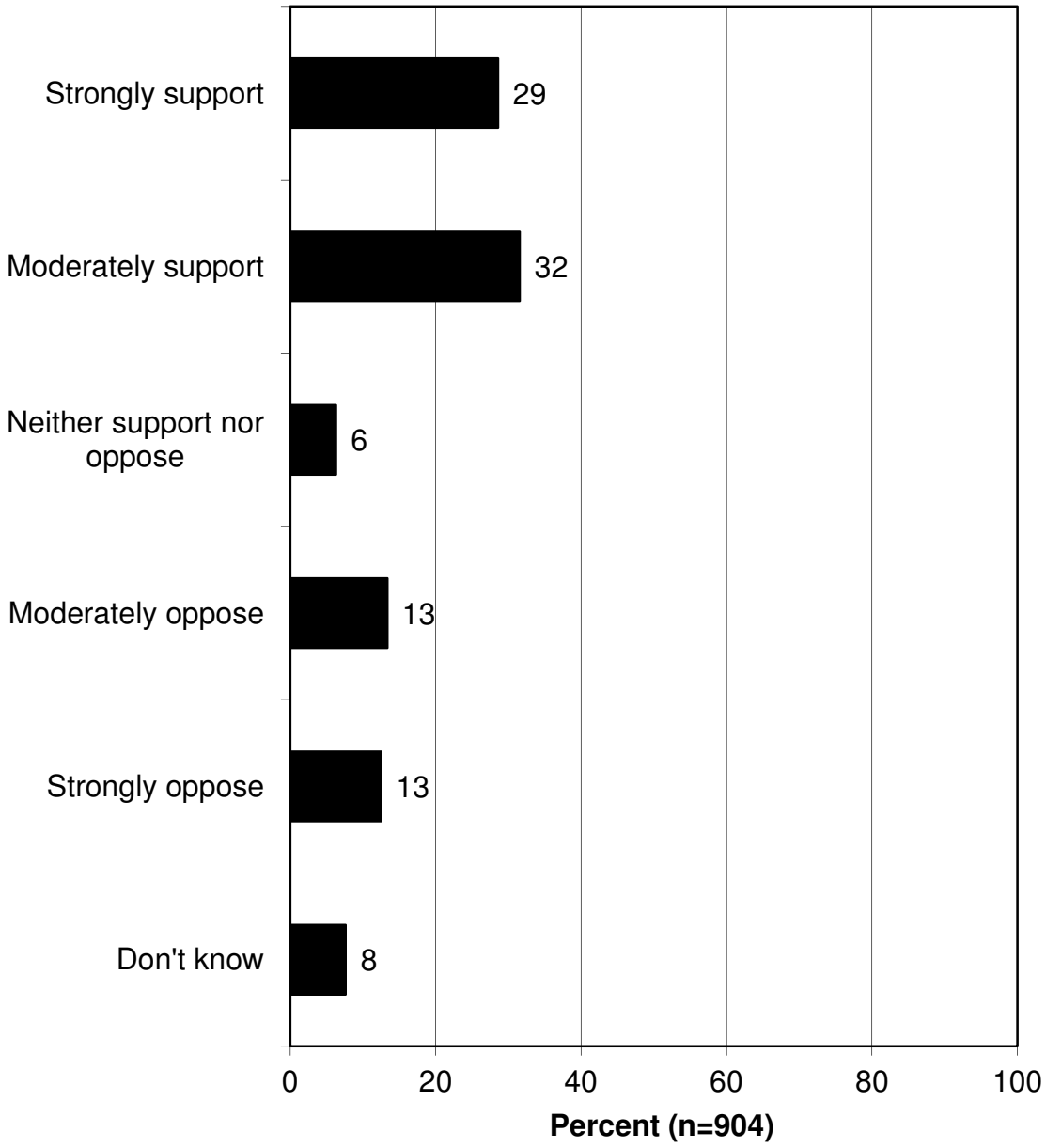
OPINIONS ON MANAGEMENT OF HUMAN-WOLF CONFLICTS

- While there is a majority of Washington residents in support of wolf recovery, there is also a majority who would support having the Department provide cost share funding to landowners to prevent wolves from attacking livestock: 61% support such cost share funding; however, 26% oppose.
  - A follow-up question adds a nuance to such cost share funding, and it was asked only of those who supported having the Department provide cost share funding to landowners to prevent wolves from attacking livestock. The question asked those who supported in the previous question whether they would support or oppose the provision of cost share funding as the *primary* strategy to address potential human conflicts with wolves. In this question, there is some erosion of support: 65% of them still support, but for 35%, their support either turns to opposition (20% of them) or turns to a neutral answer.

- Again, while a majority of Washington residents support wolf recovery, there is also a majority who support (63%) some level of lethal wolf control to protect livestock in Washington. However, 28% of residents oppose lethal wolf control.
  - Support is not much different on this question between 2008 and 2014.

- Finally, the survey asked about support for or opposition to some level of lethal wolf control to protect deer, elk, and moose populations in Washington: on this question, 55% support, while 32% oppose.

Q65. Would you support or oppose the Department providing cost share funding to landowners to prevent wolves from attacking livestock?



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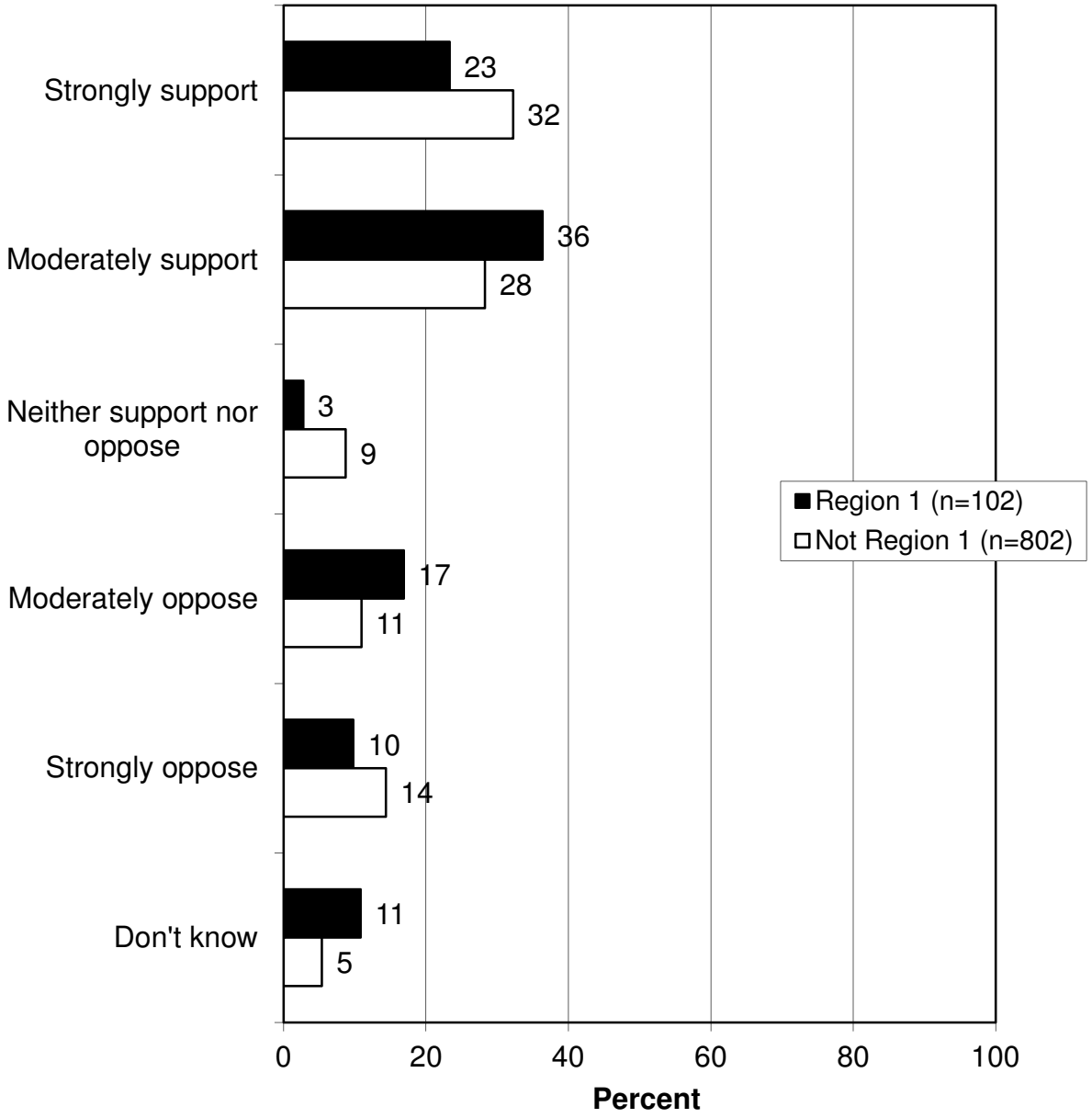

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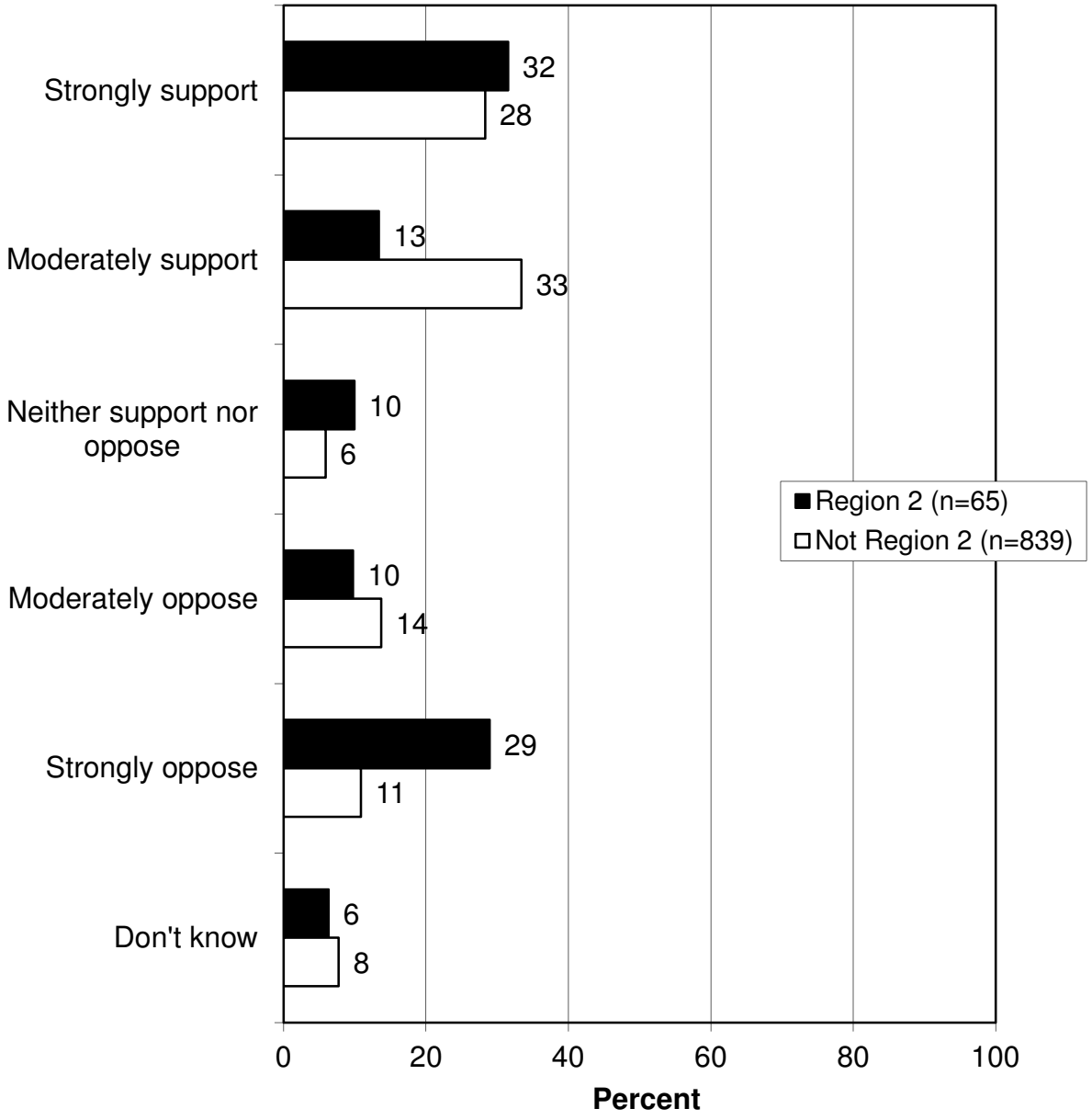

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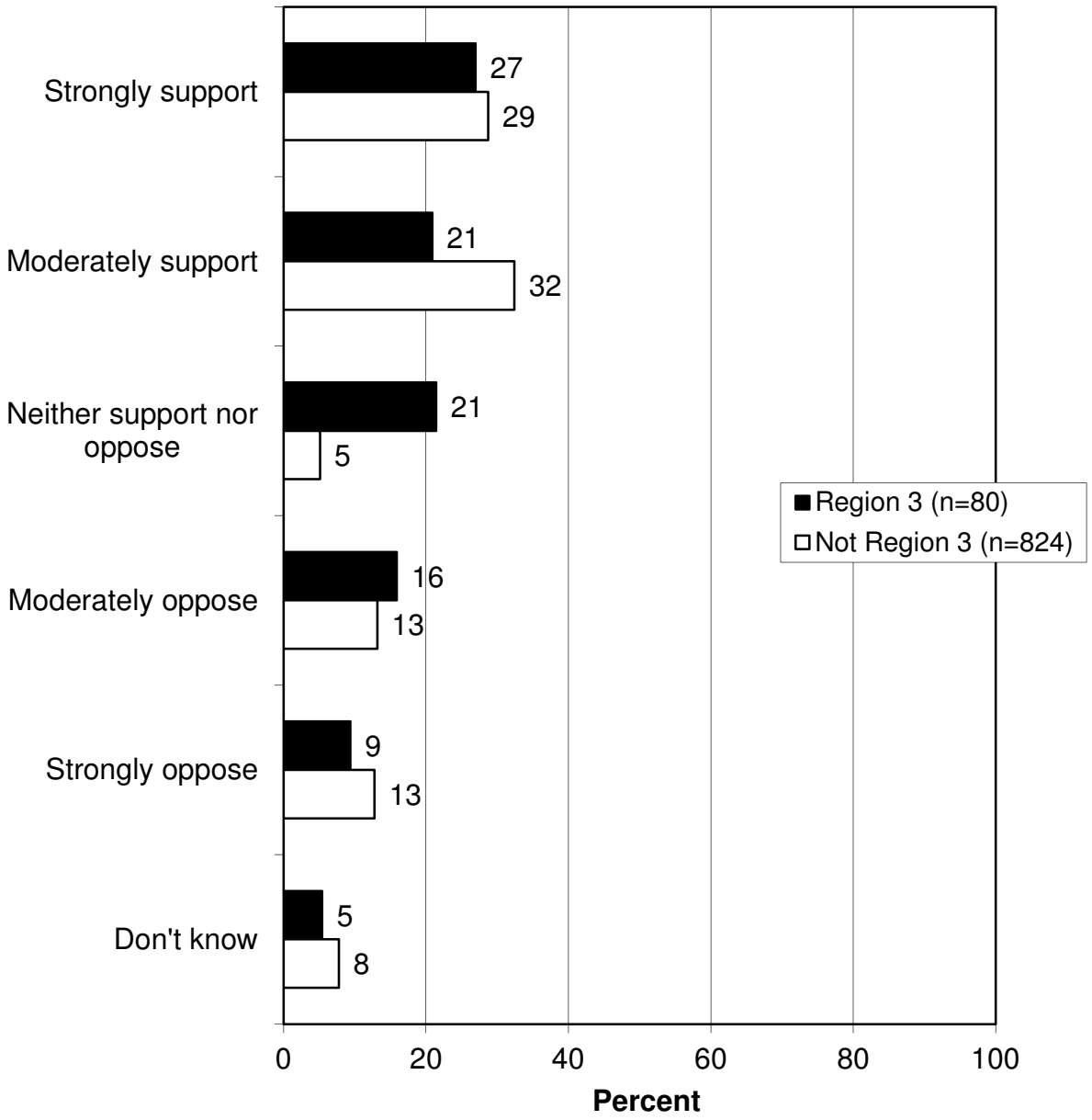

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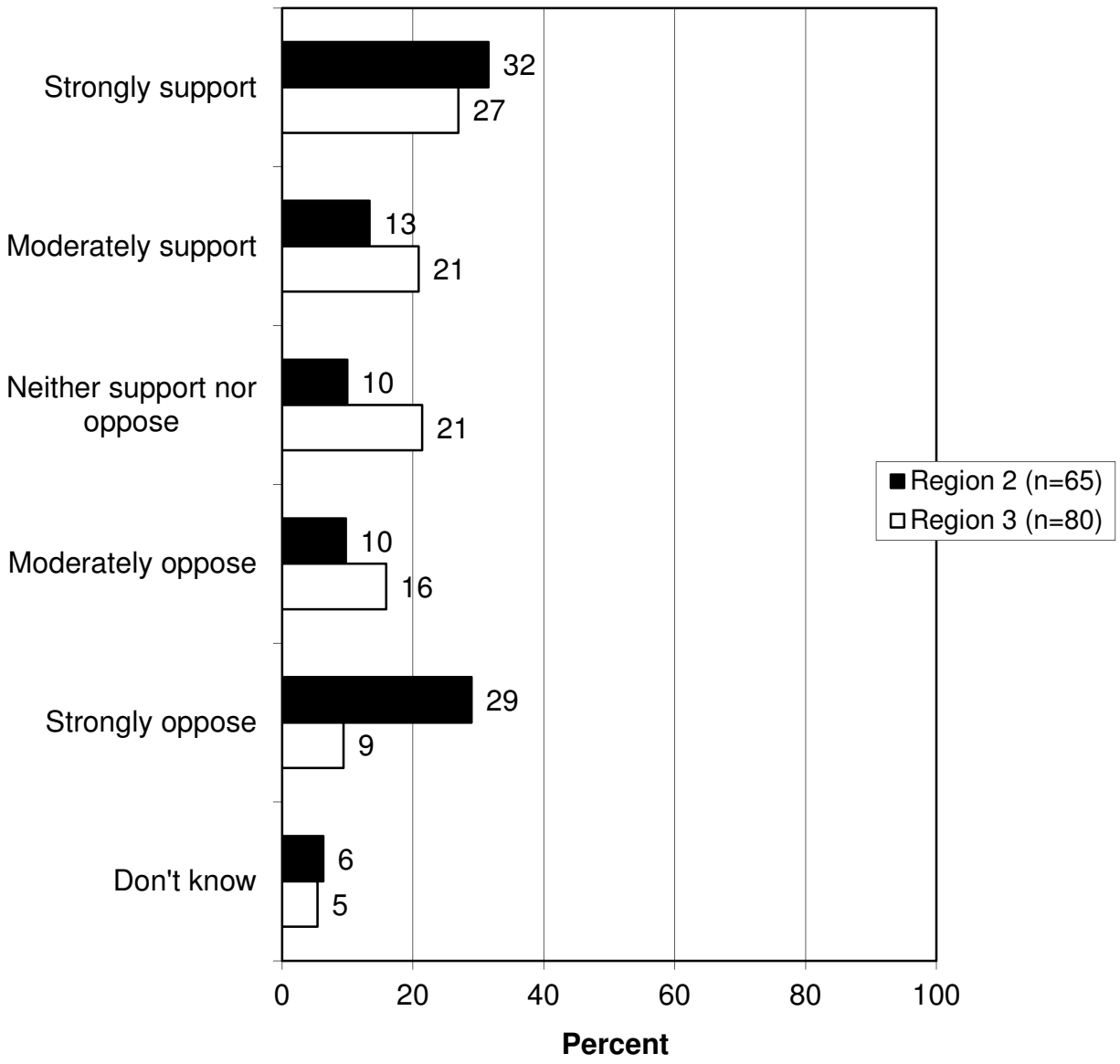

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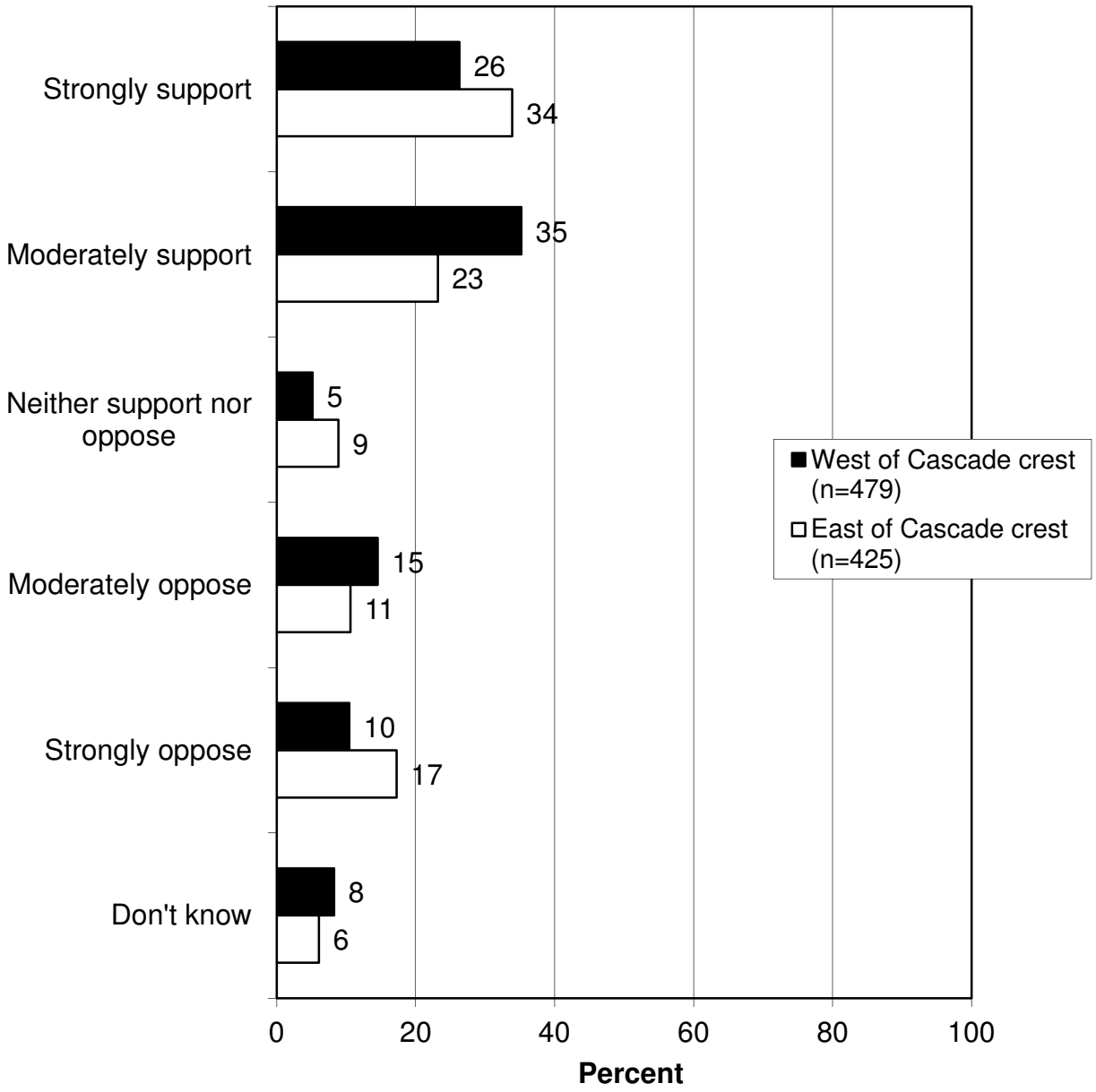
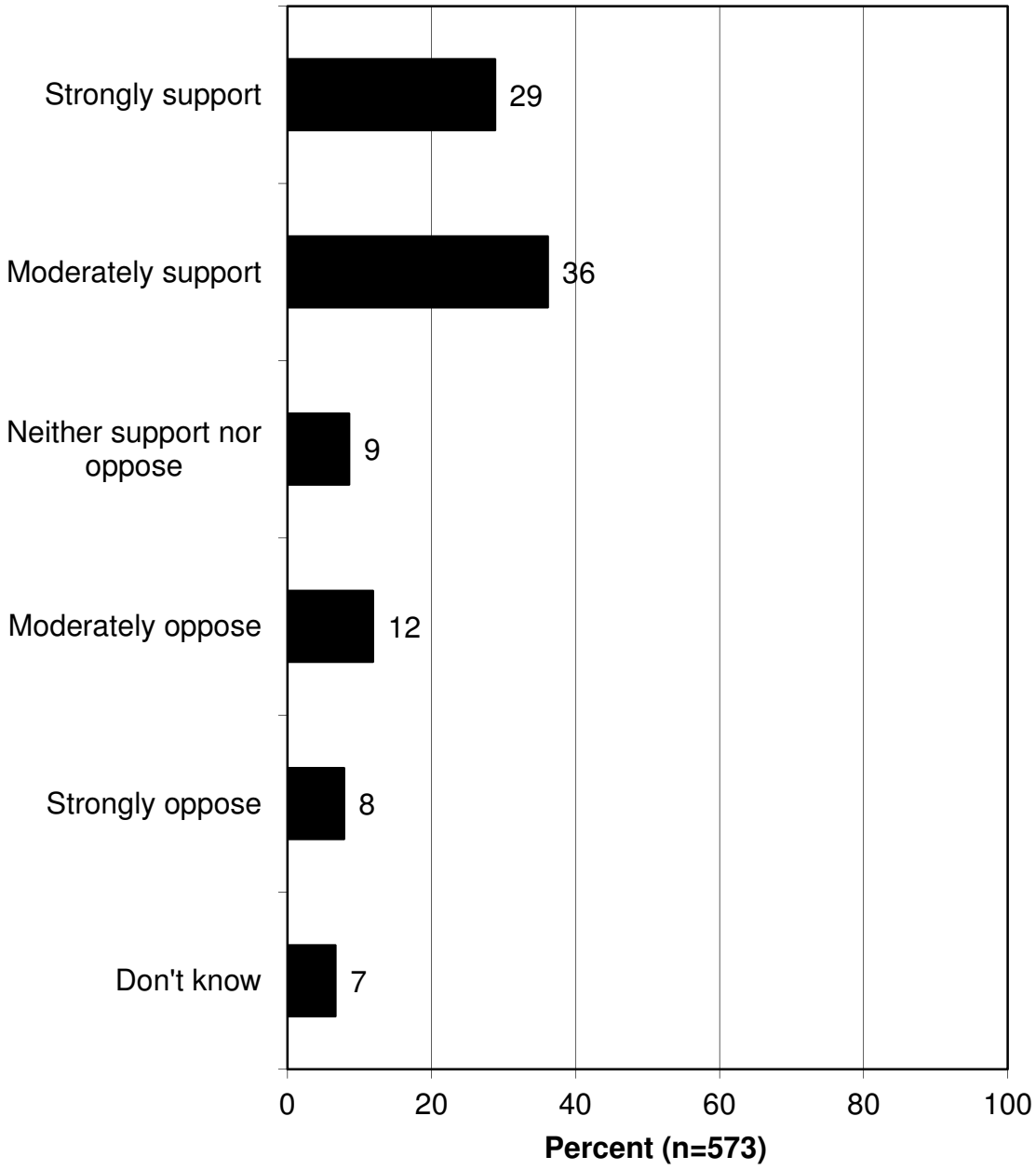


Q66. Would you support or oppose the Department providing cost share funding to landowners as the primary strategy to address potential conflicts with wolves? (Asked of those who supported having the Department provide cost share funding to prevent wolves



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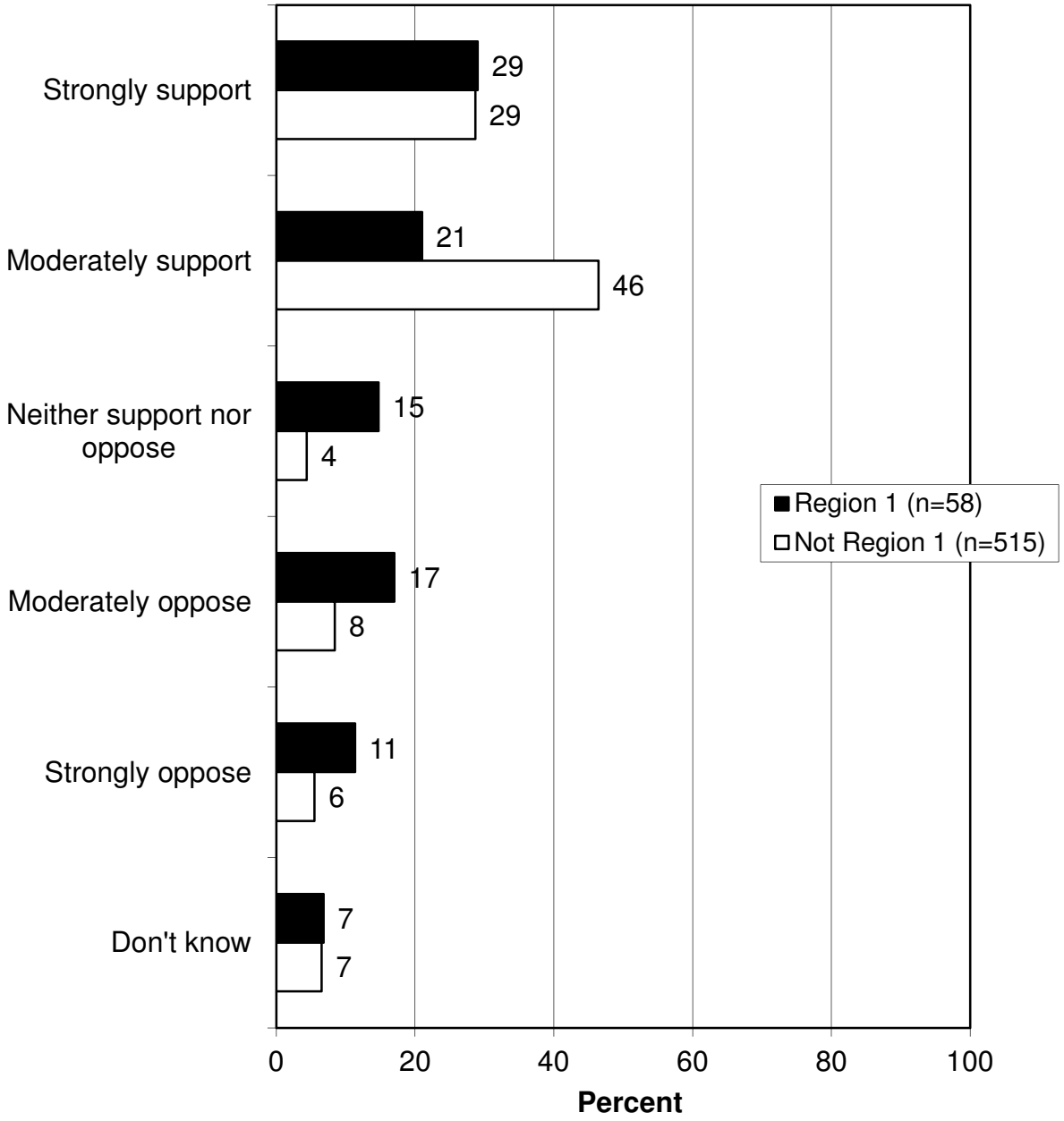

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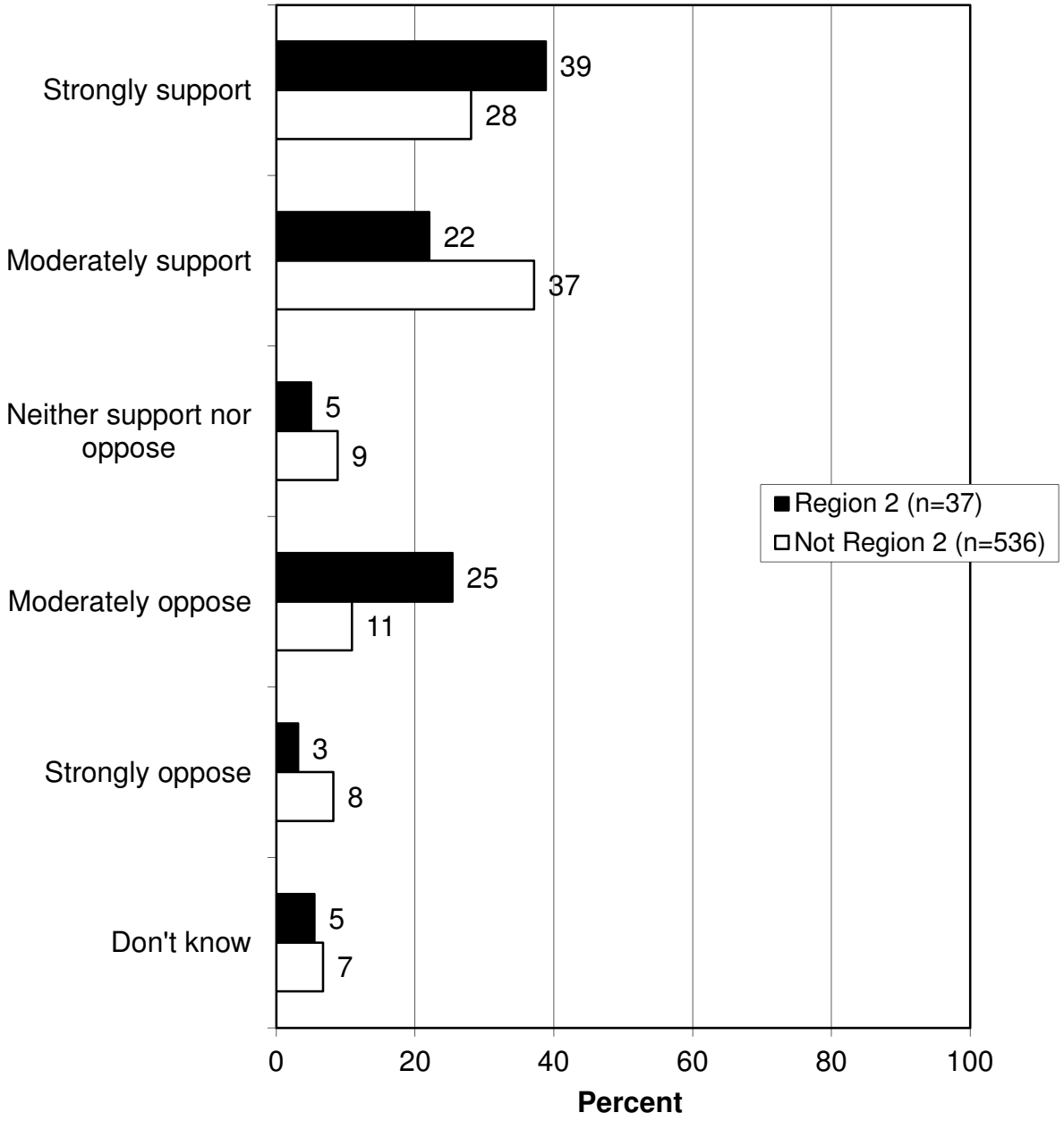

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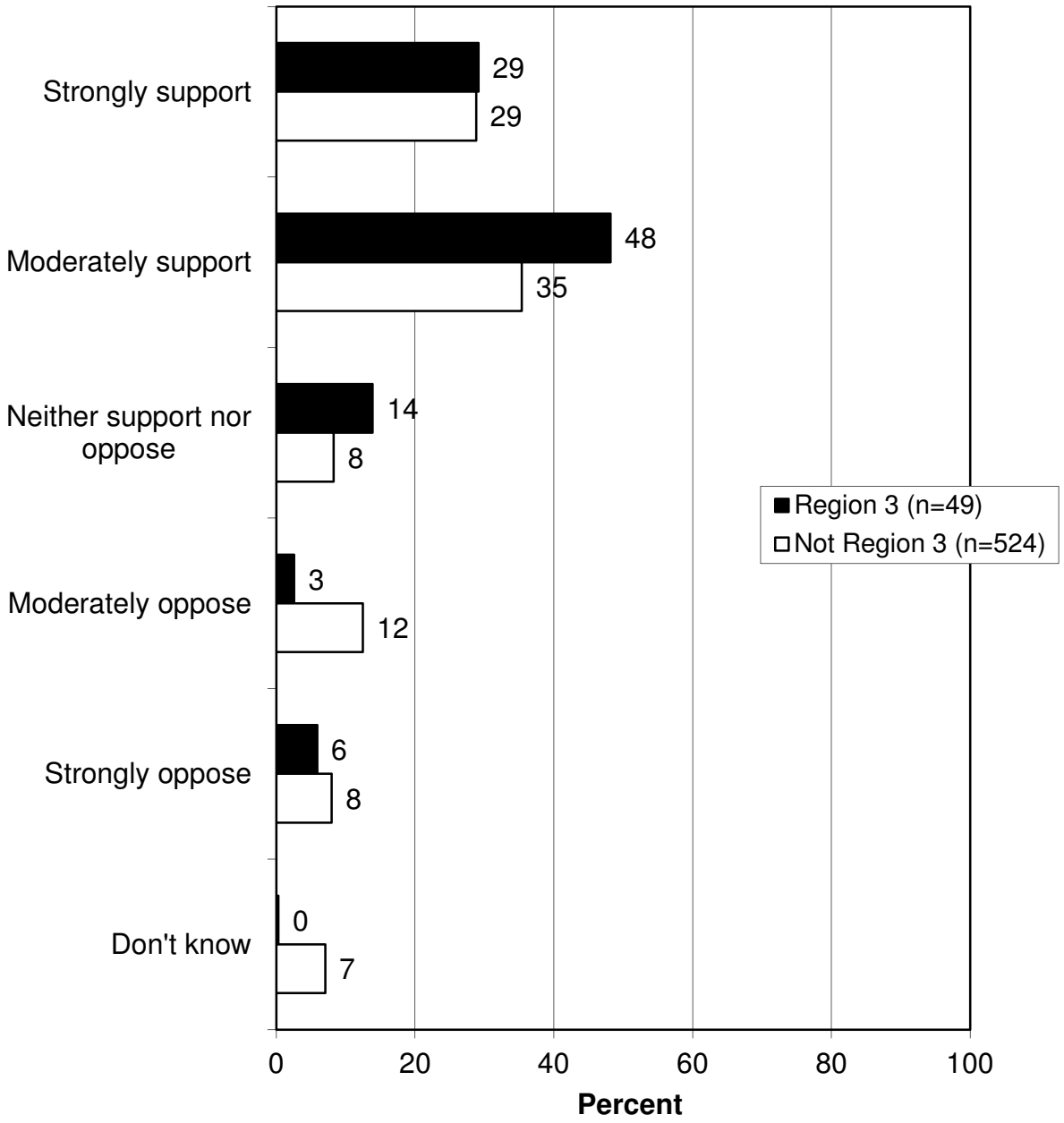

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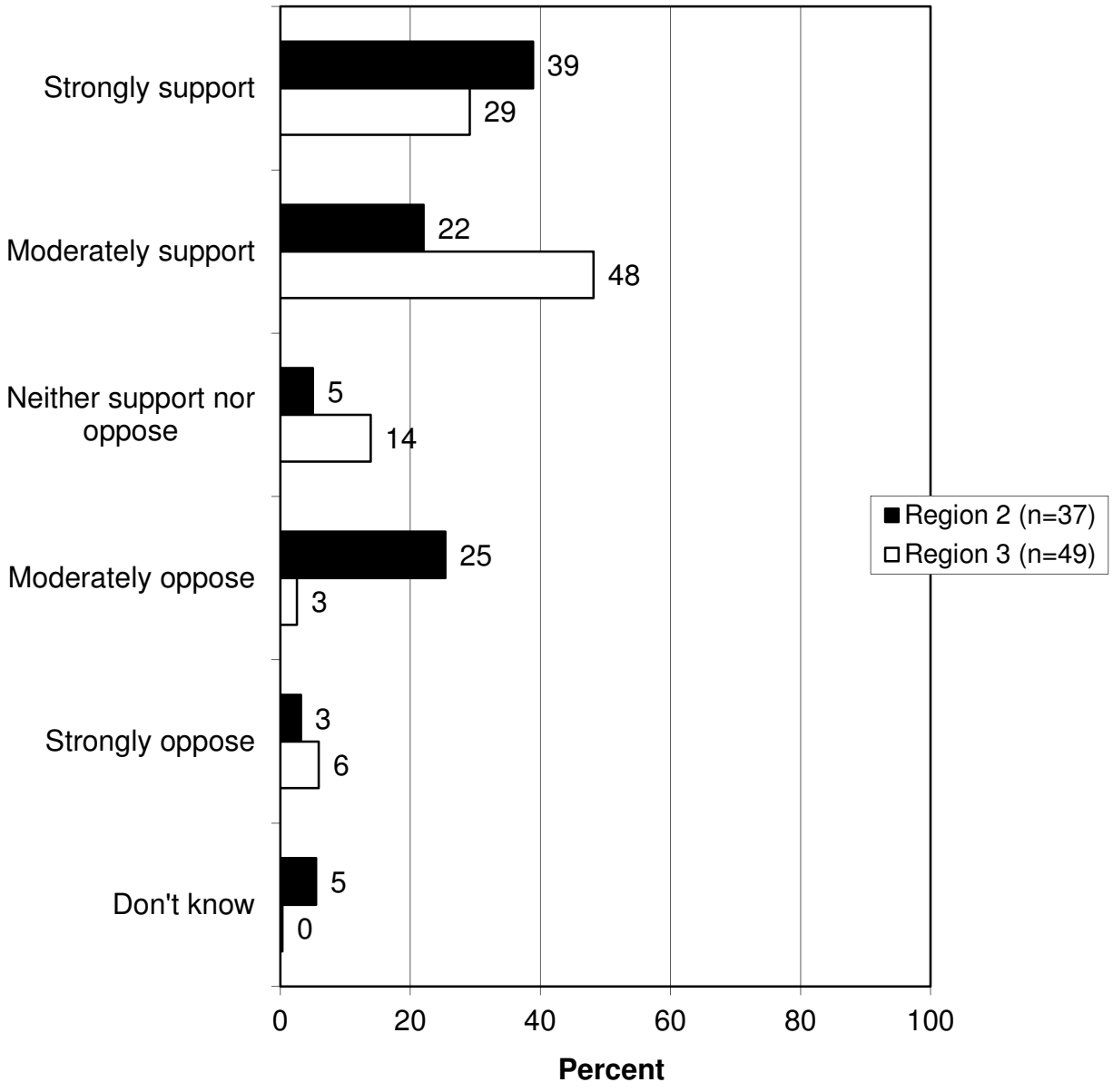

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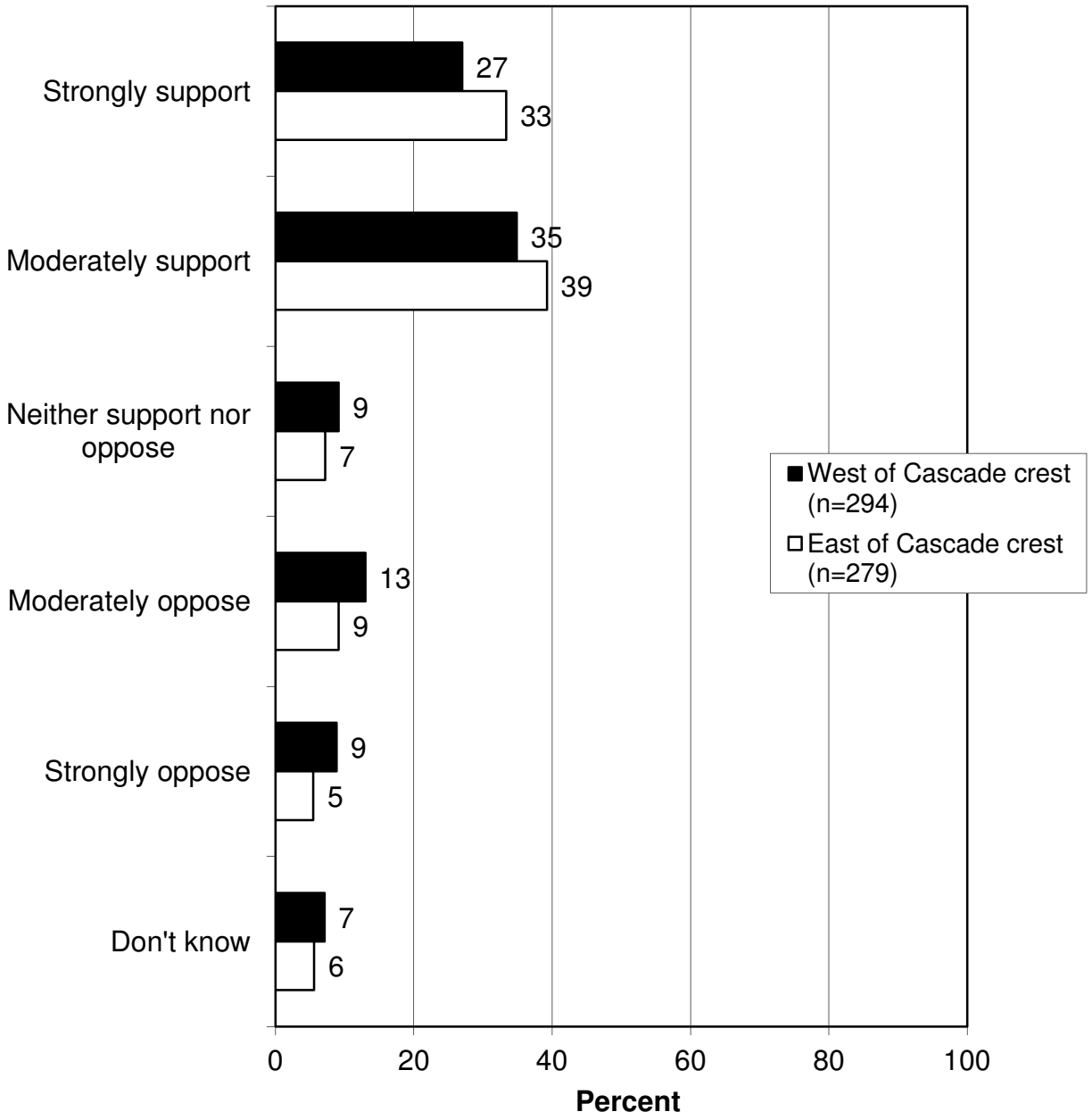

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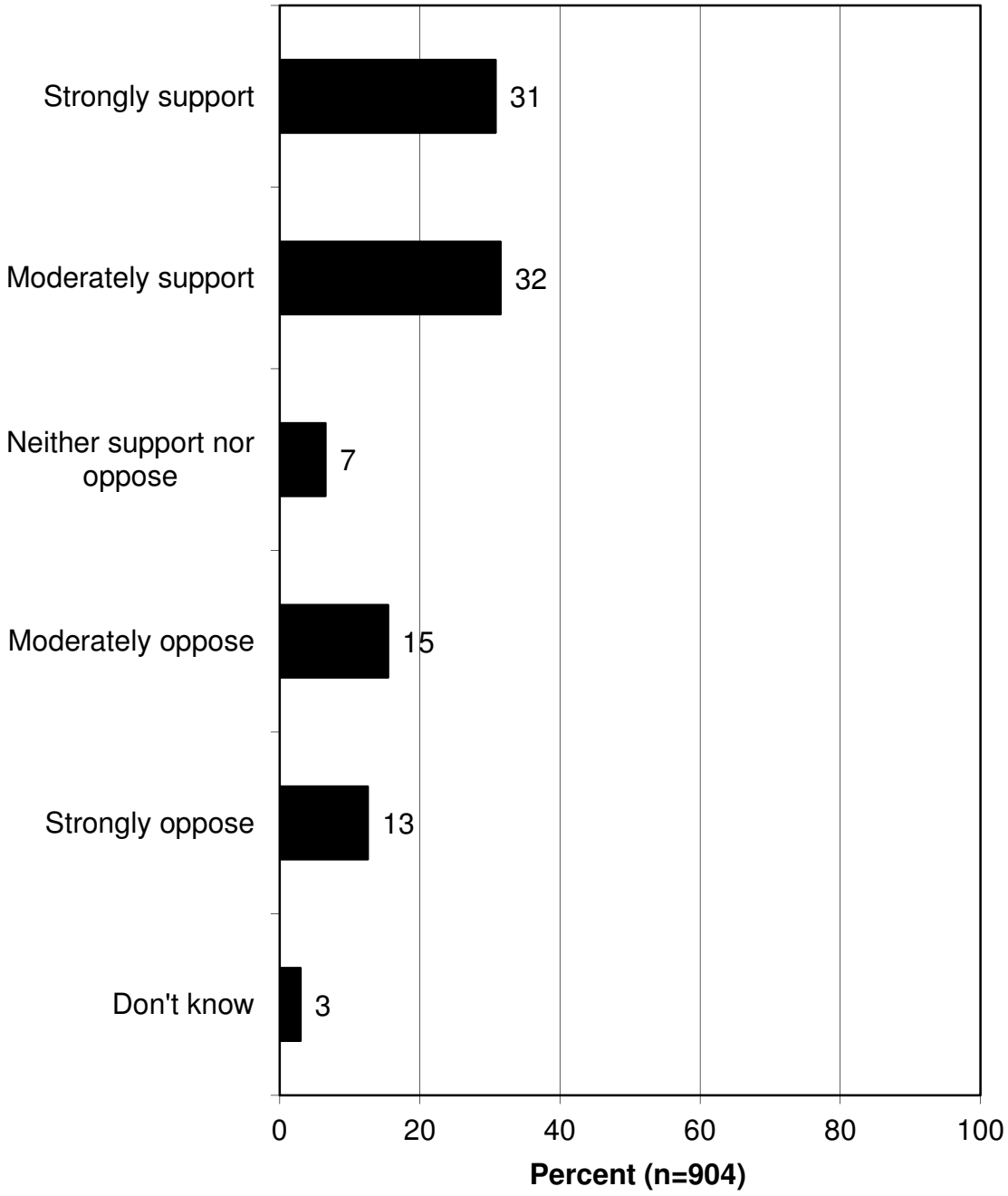

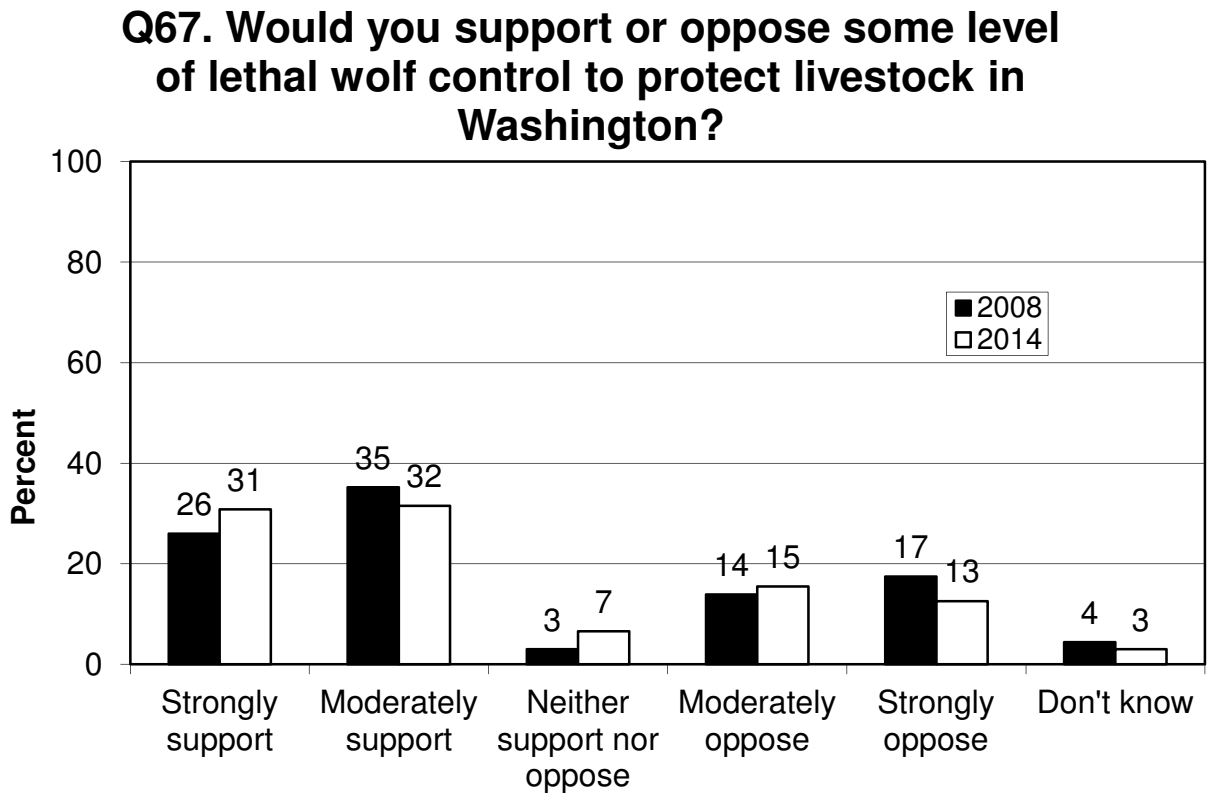
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Percent
100
80
60
40
20
0
2008
2014
26
31
35
32
3
7
14
15
17
13
4
3
Strongly support
Moderately support
Neither support nor oppose
Moderately oppose
Strongly oppose
Don't know

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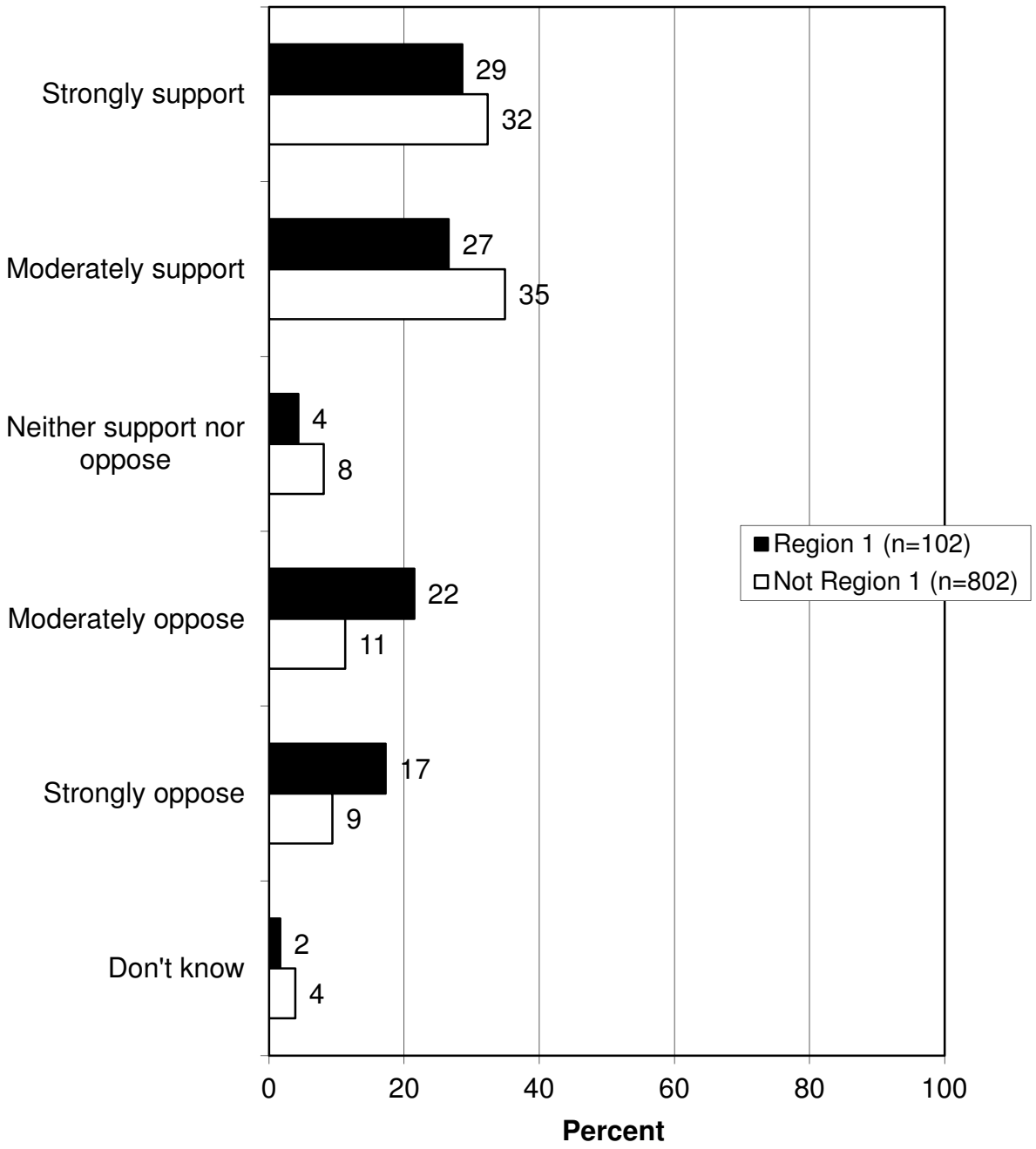

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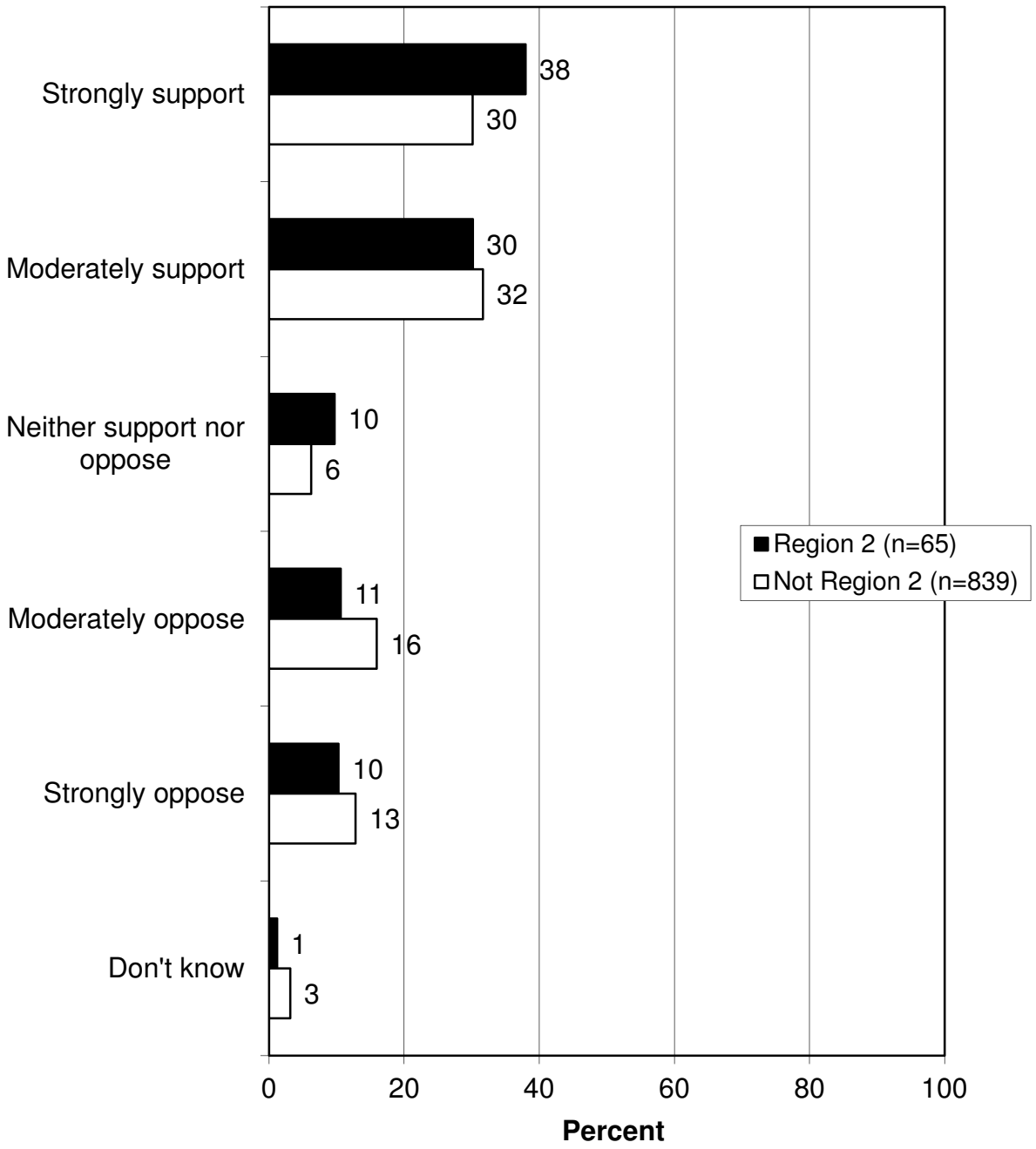

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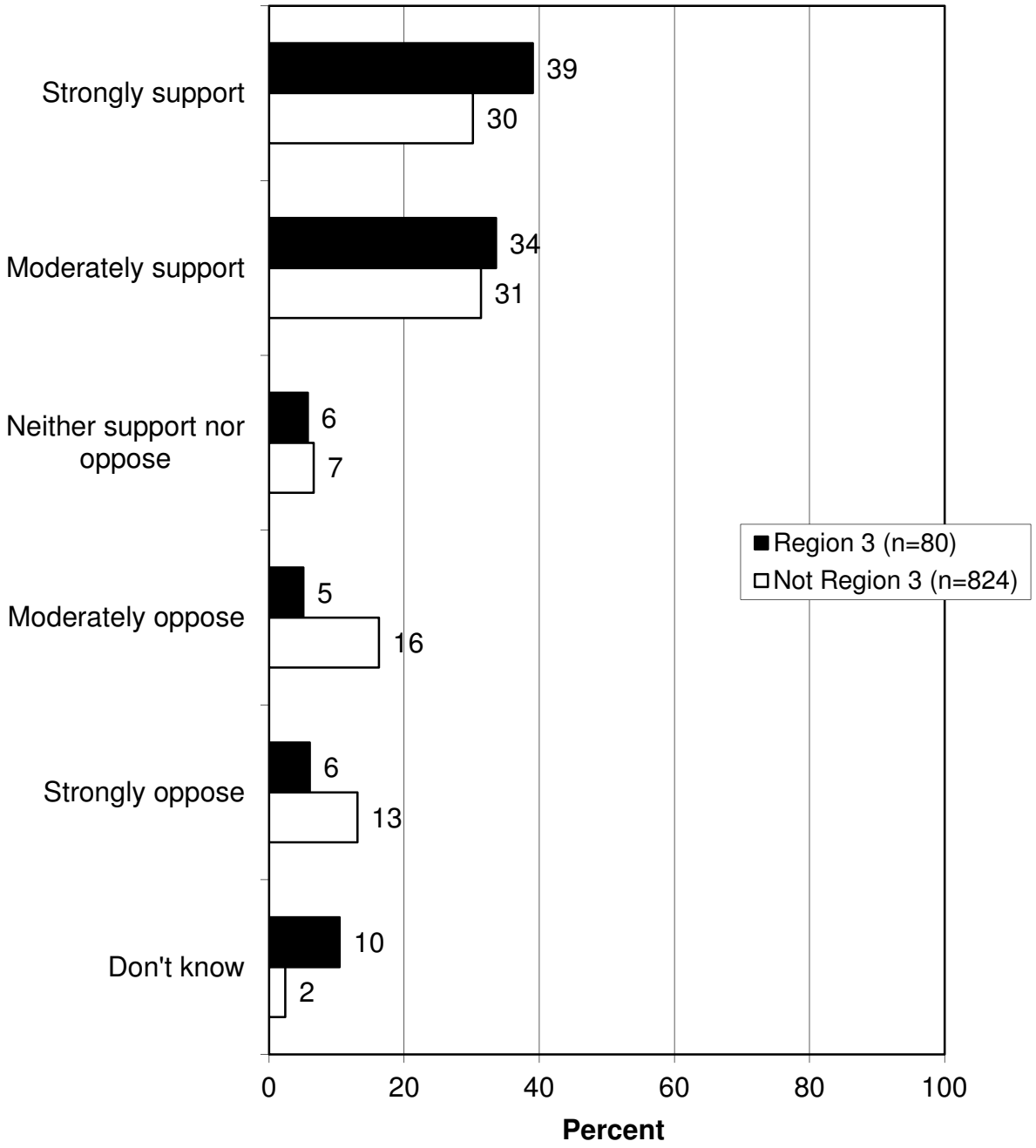

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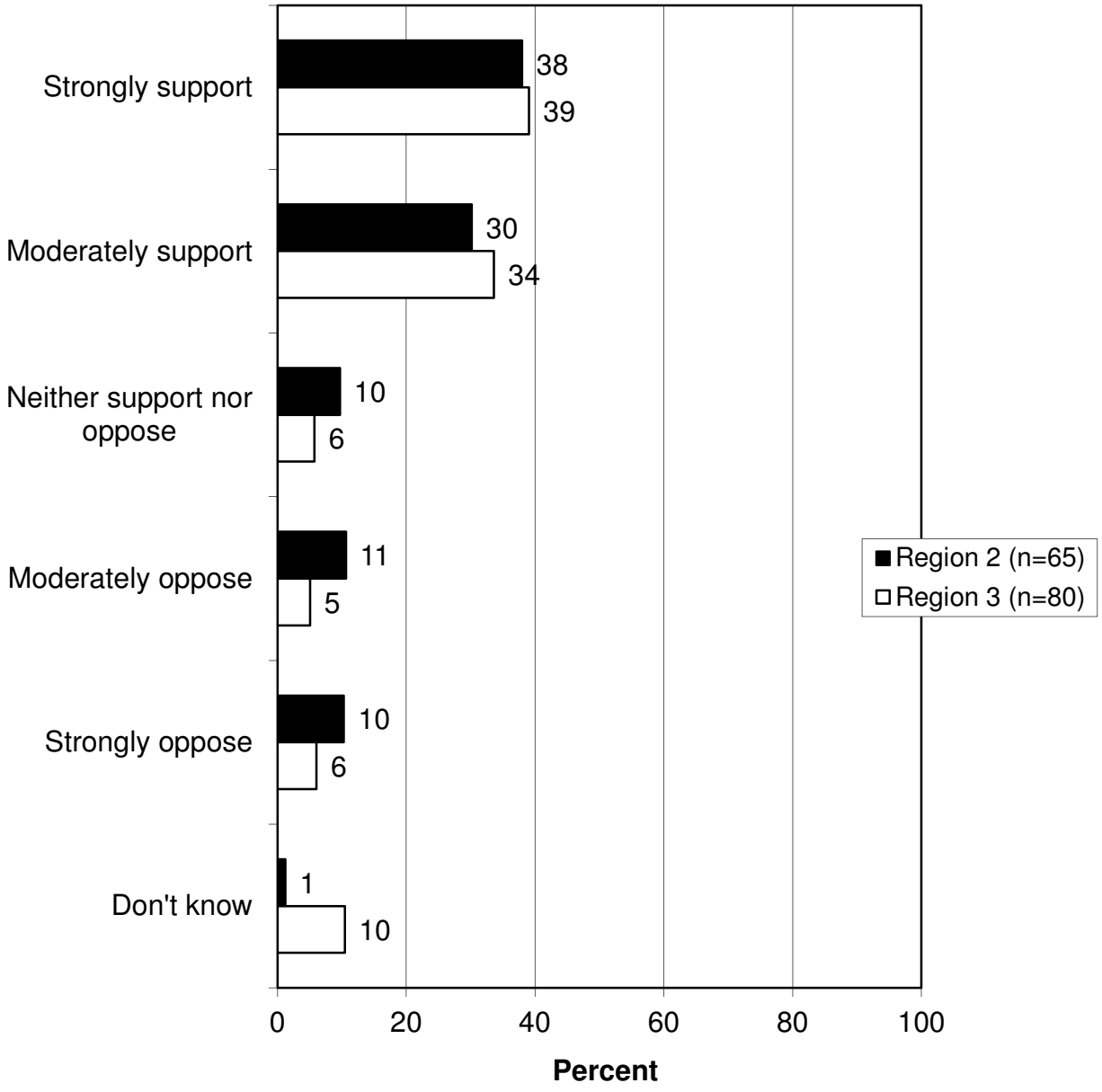

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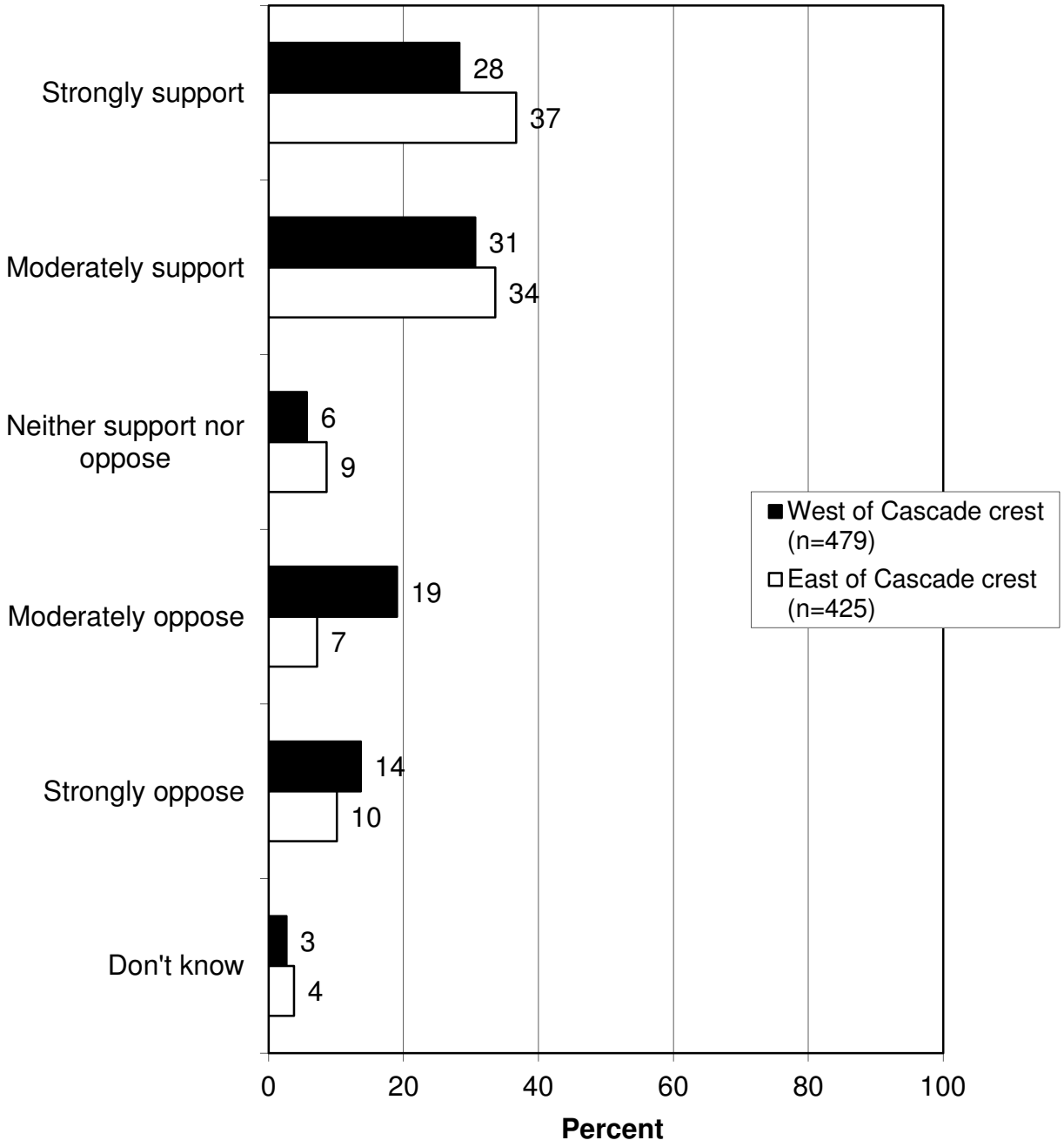

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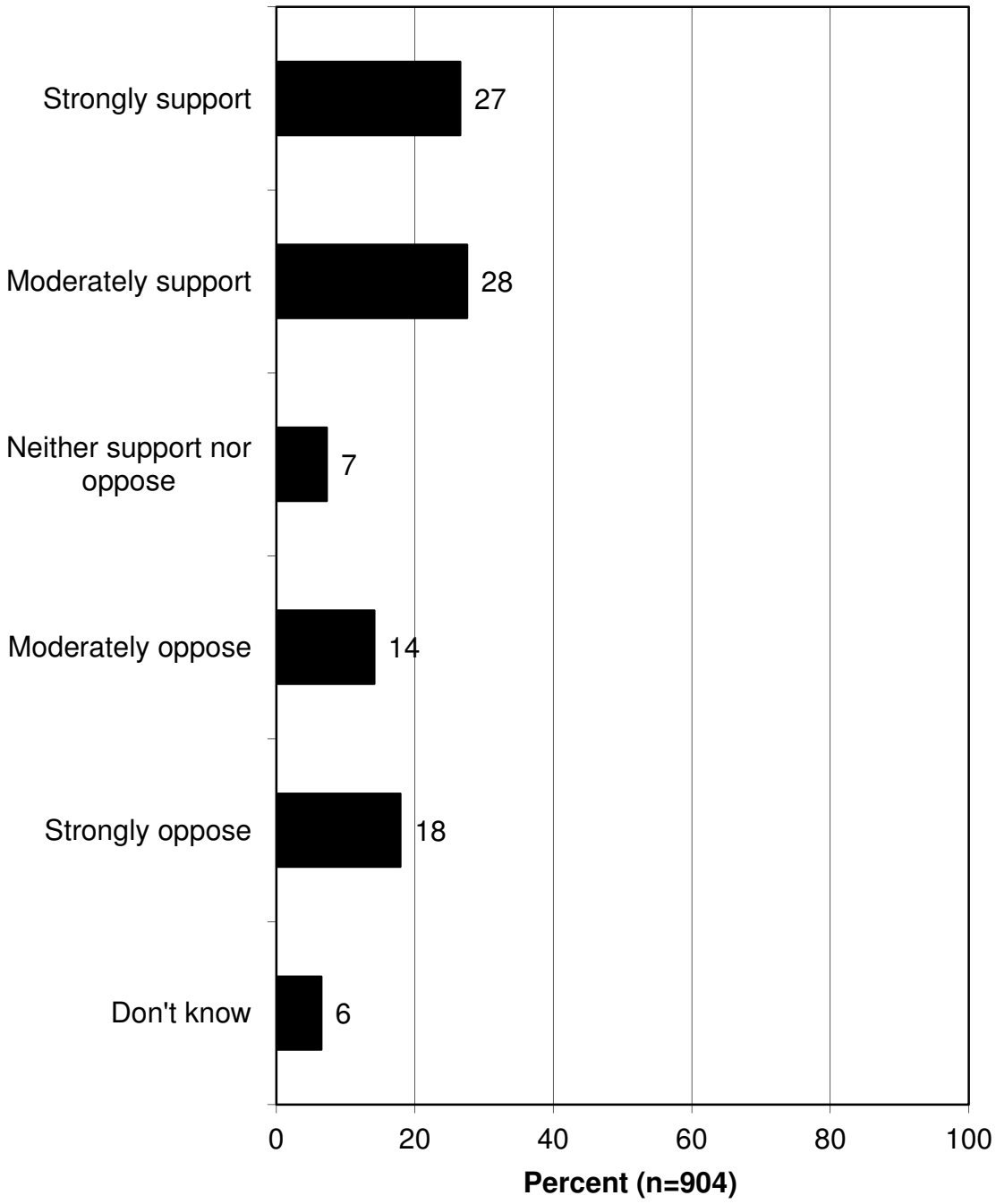

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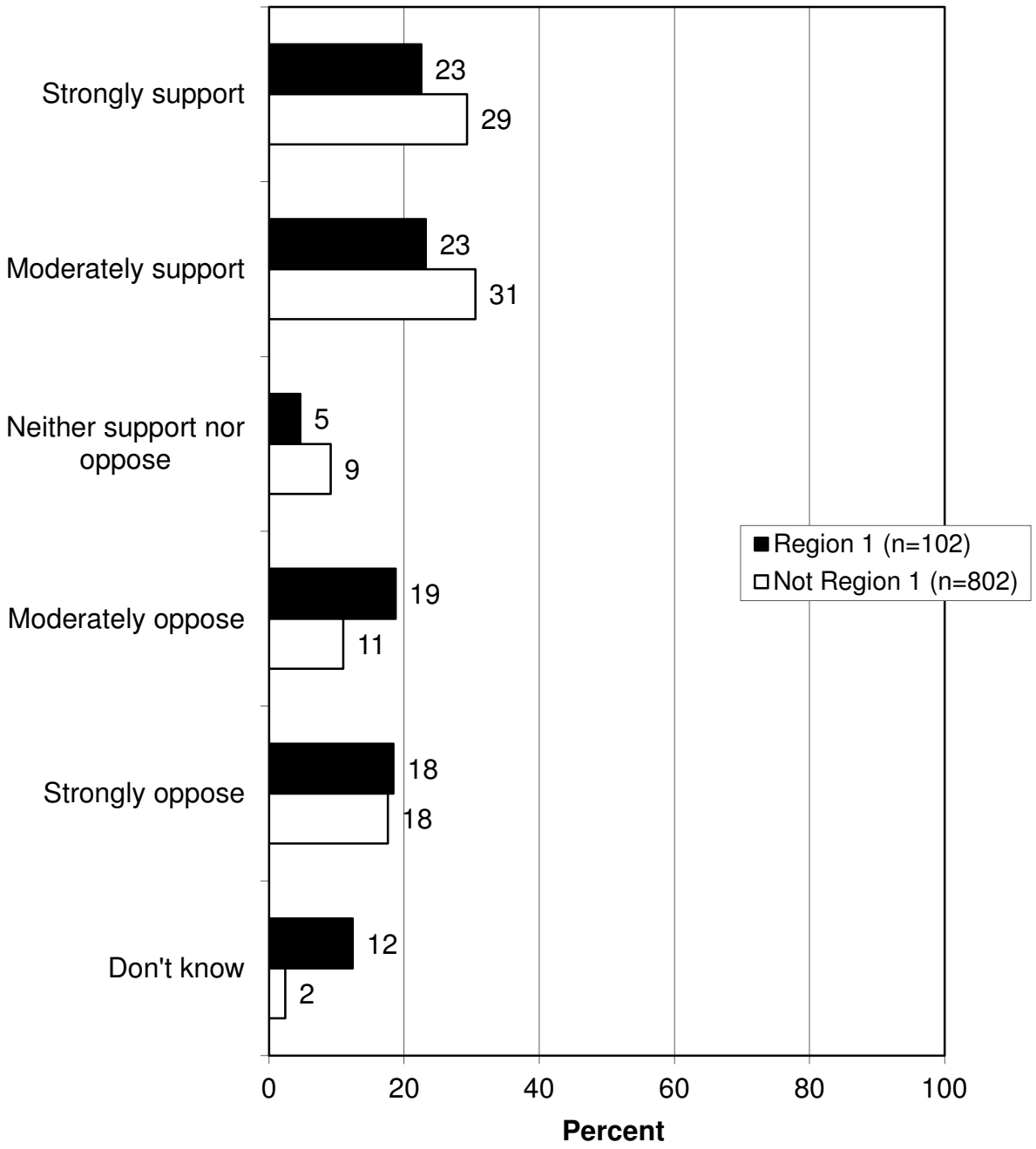

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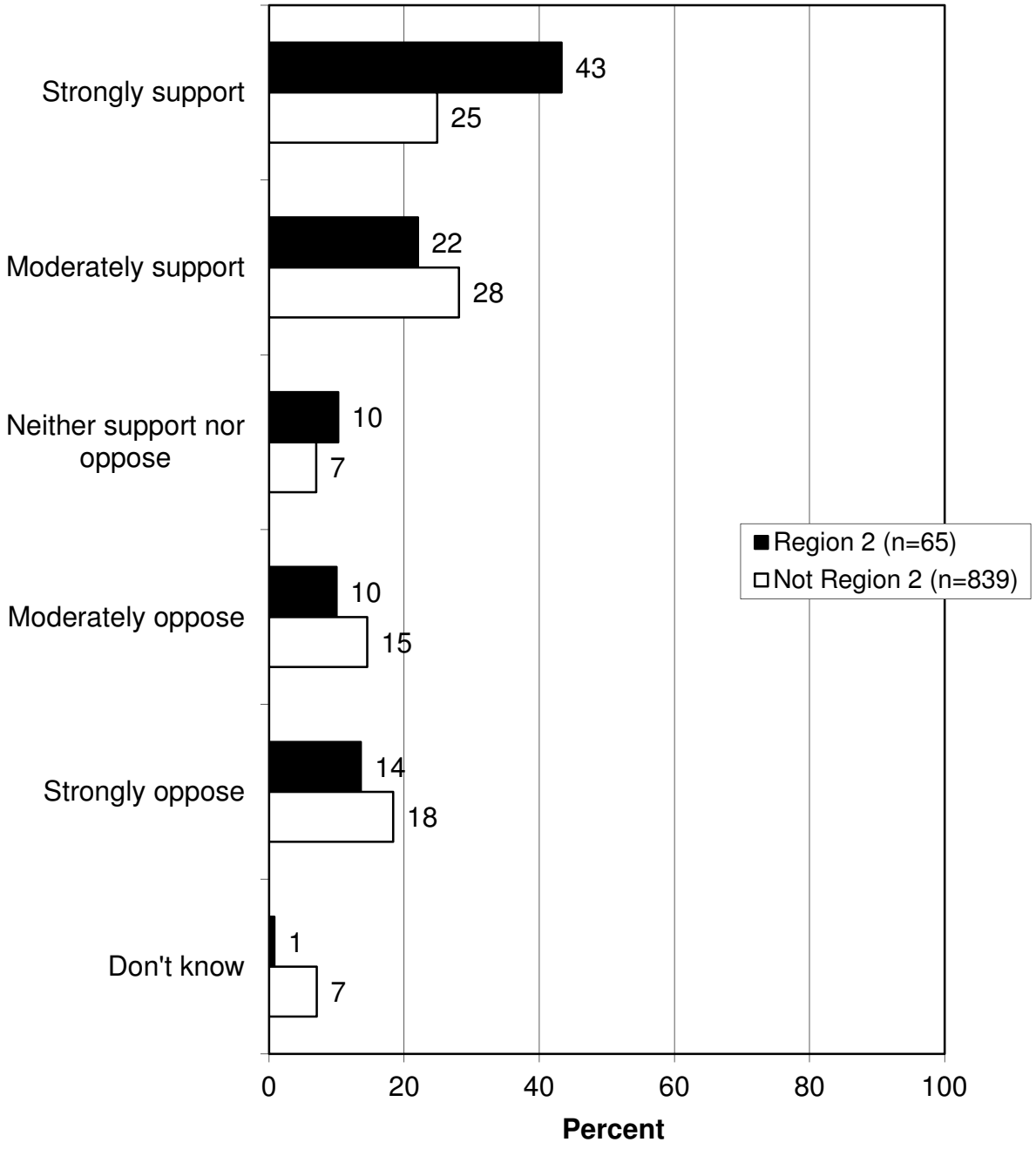

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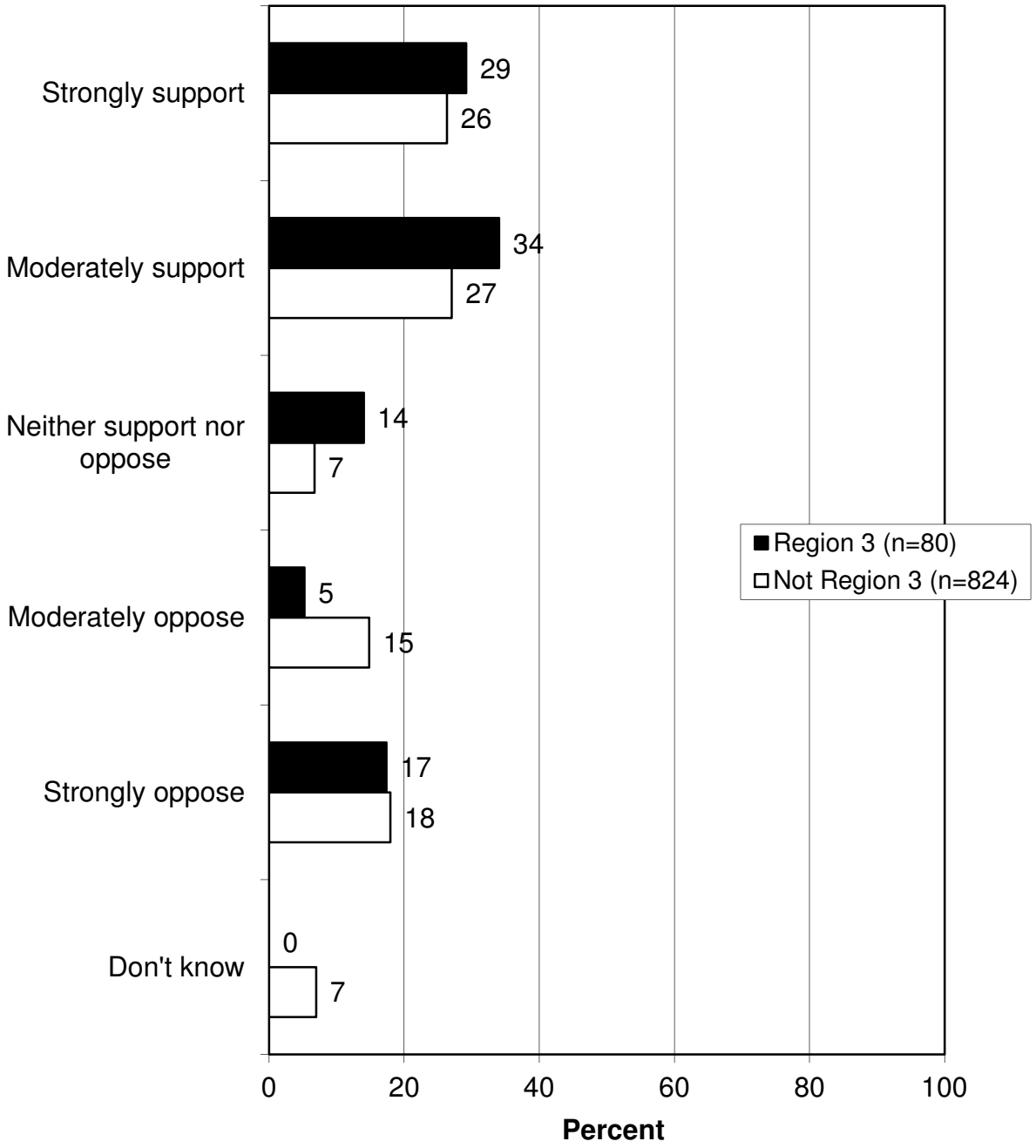

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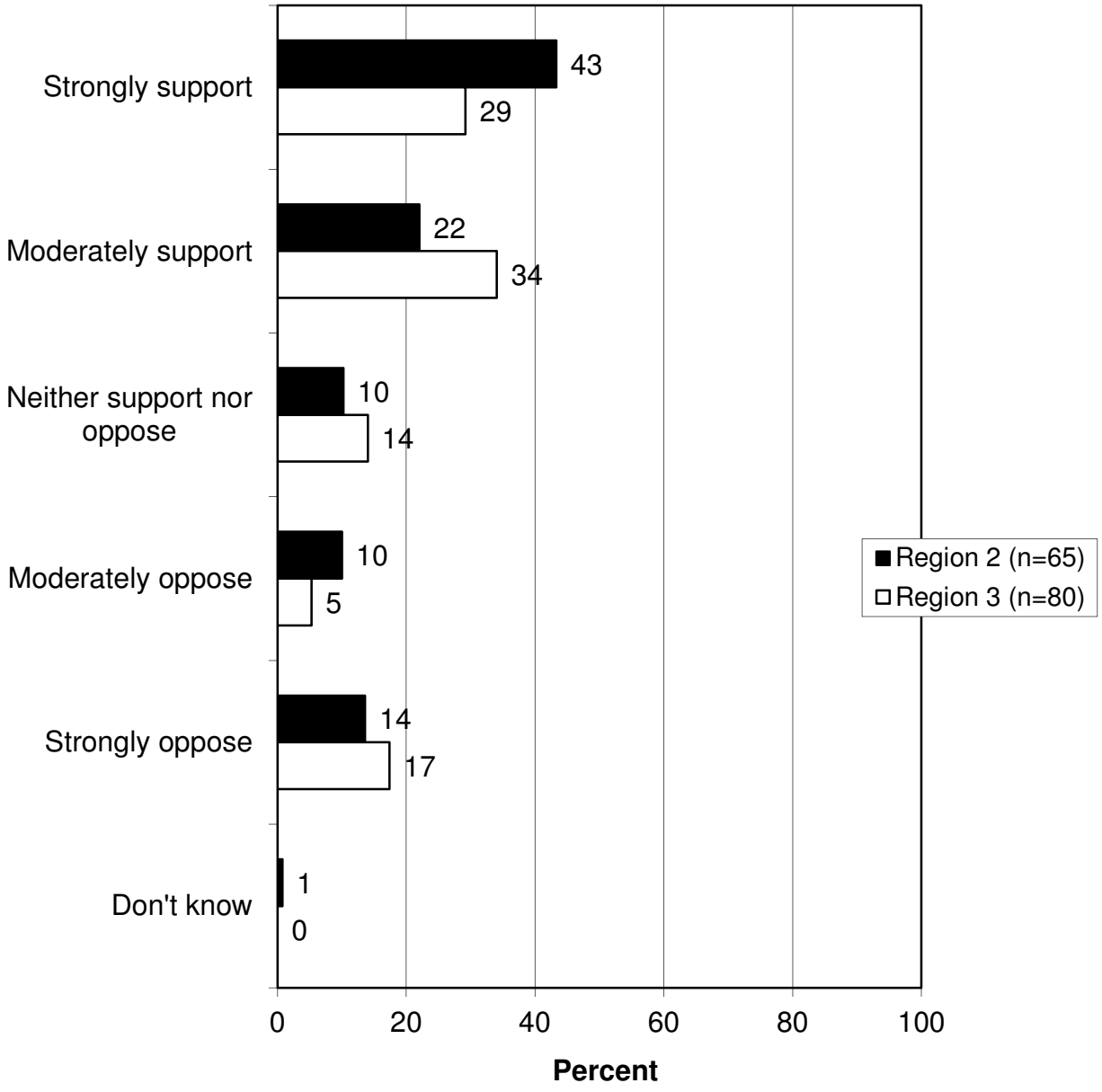

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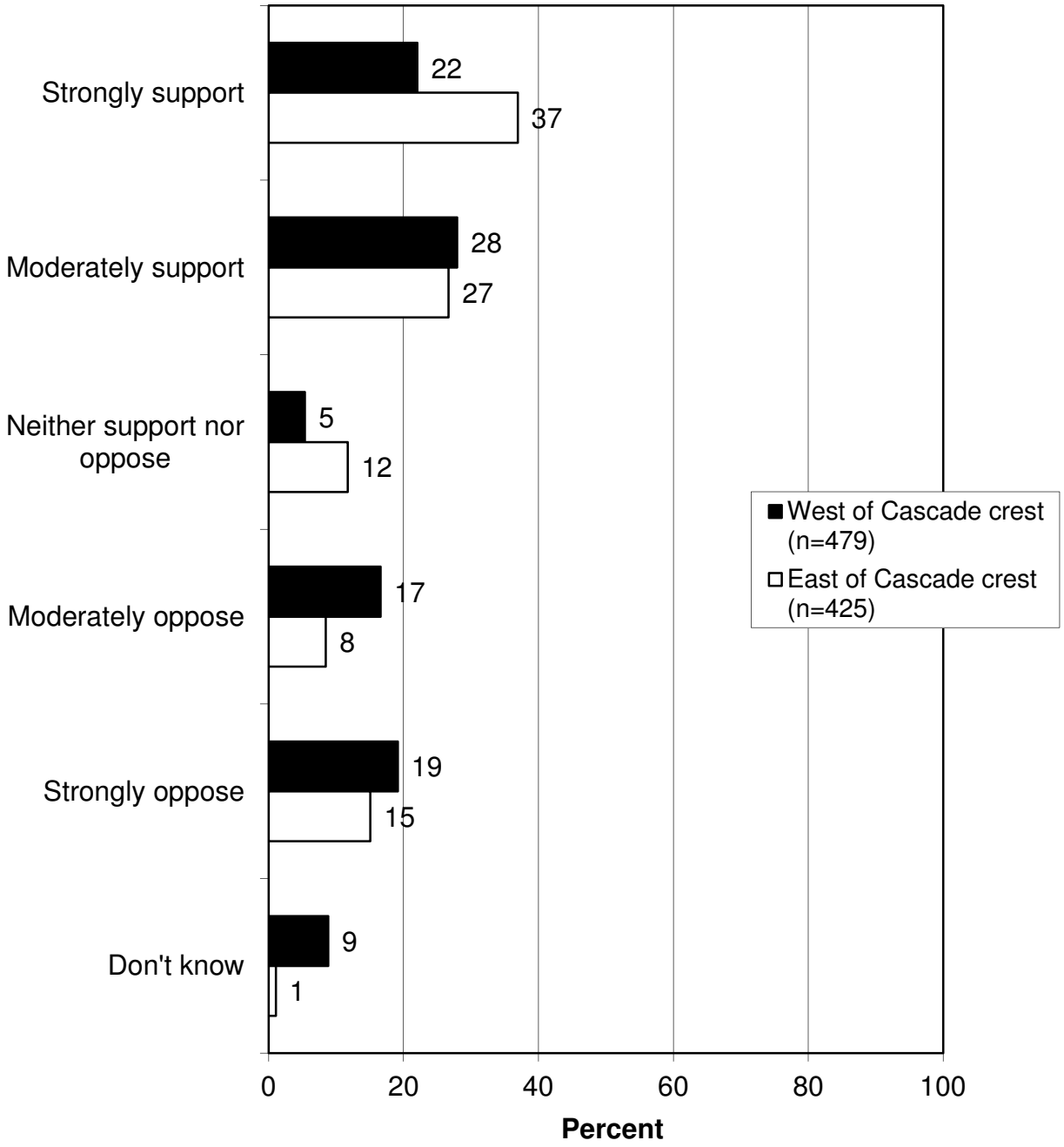
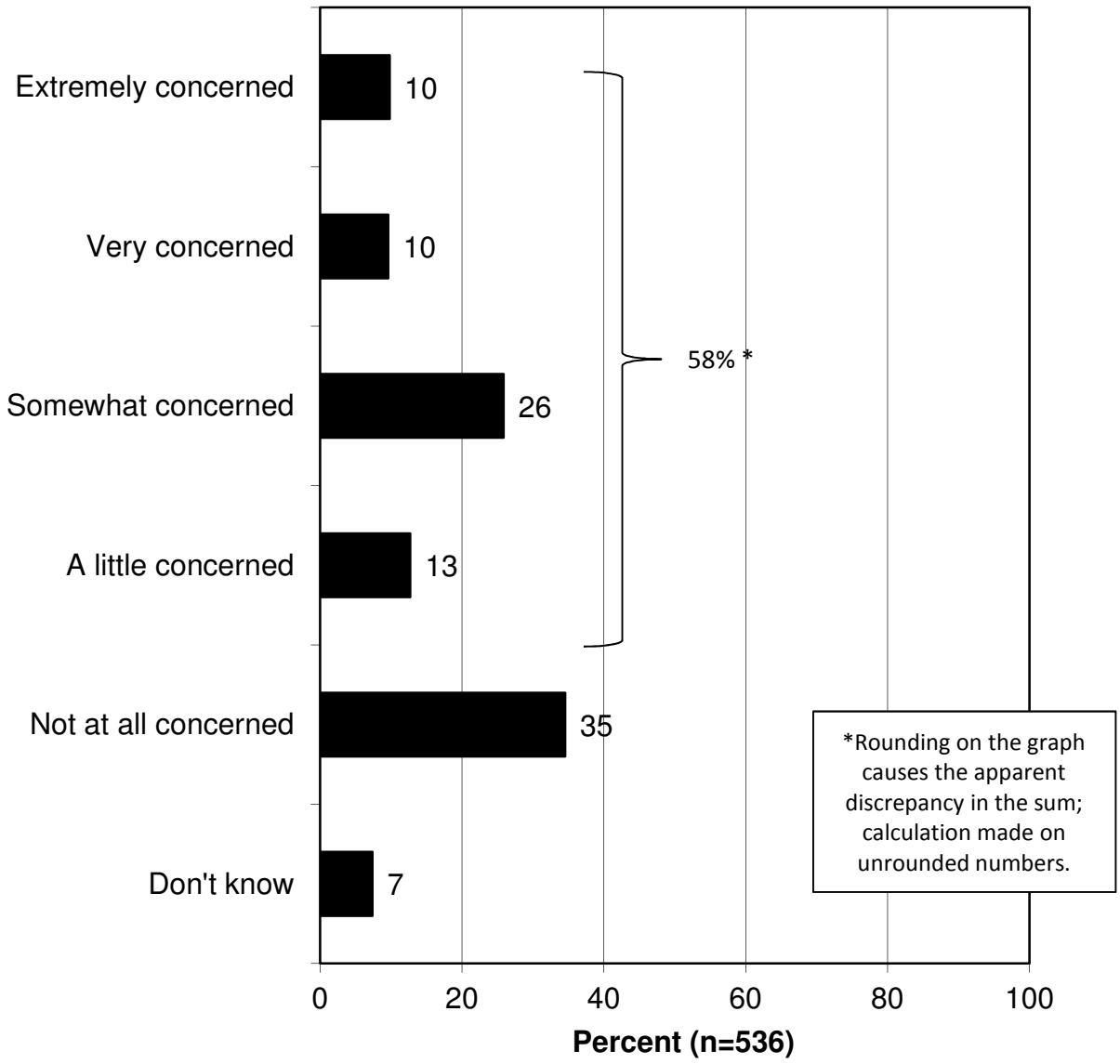


OPINIONS ON IMPACTS OF A FULLY RECOVERED WOLF POPULATION IN WASHINGTON

- While a majority of residents say that they are concerned about the impact wolves might have on elk populations (58% are concerned), most of that concern consists of those saying that they are *somewhat* concerned or *a little* concerned. Only 20% are *extremely* or *very* concerned. At the other end, 35% are *not at all* concerned.

- A similar question to the one above asked about concern regarding the impact wolves might have on livestock. On this question, there is a bit more concern: 71% are concerned, including 29% who are *extremely* or *very* concerned. Those who are *not at all* concerned make up 22%.

Q77. How concerned are you about the impact wolves may have on elk populations when wolves are fully recovered, have reached sustainable population levels, and have been removed from the state endangered species list in Washington?



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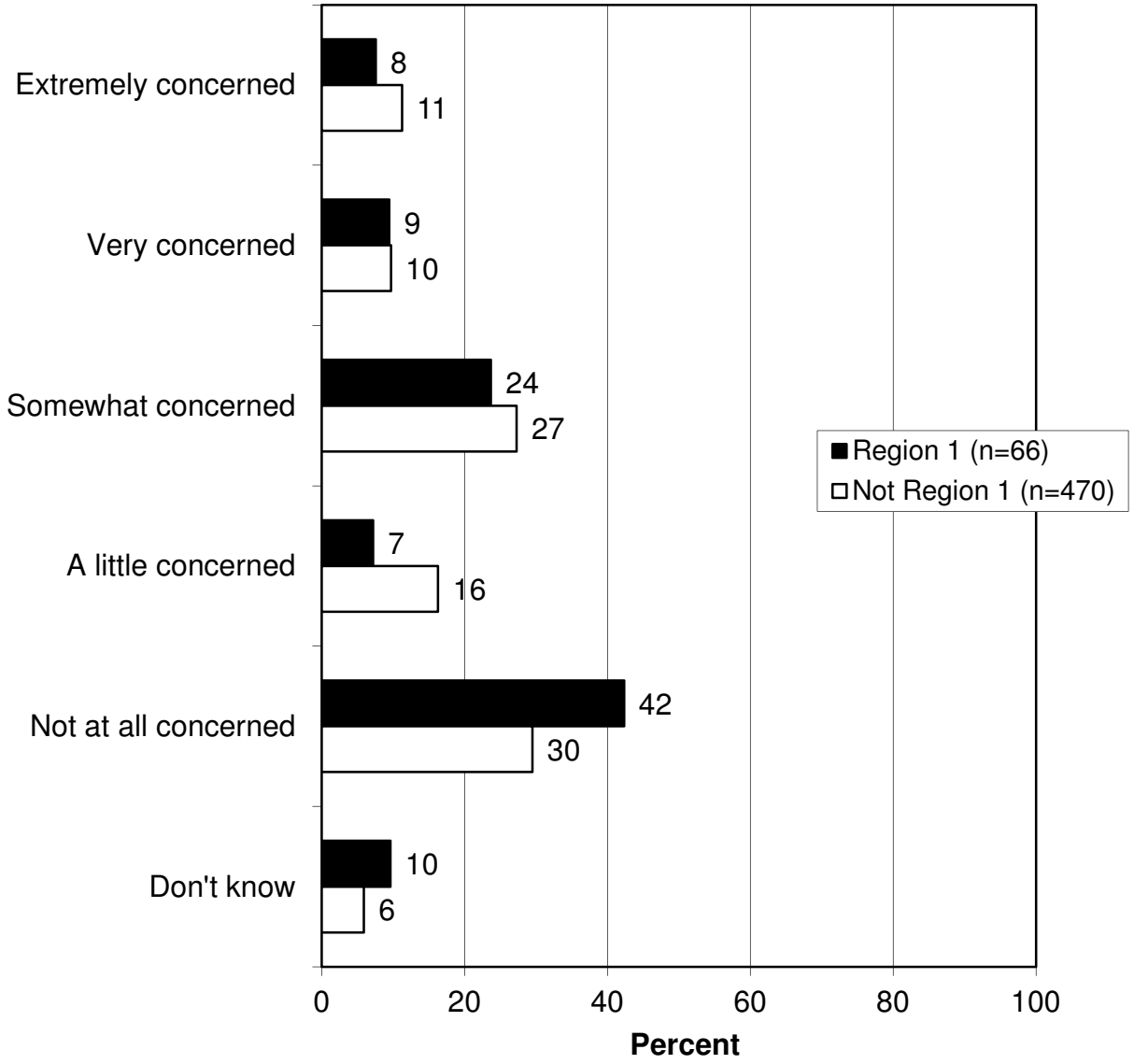

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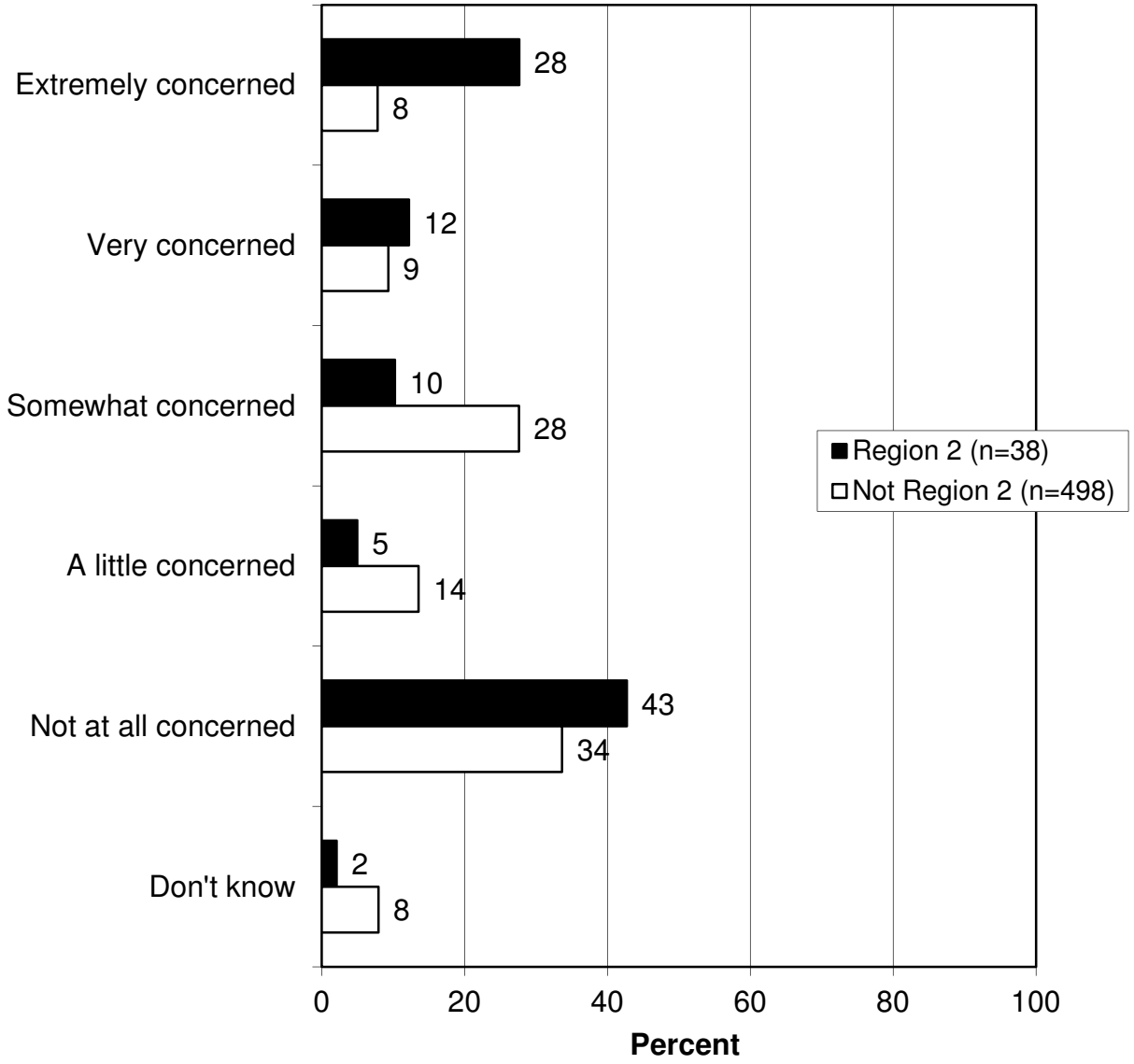

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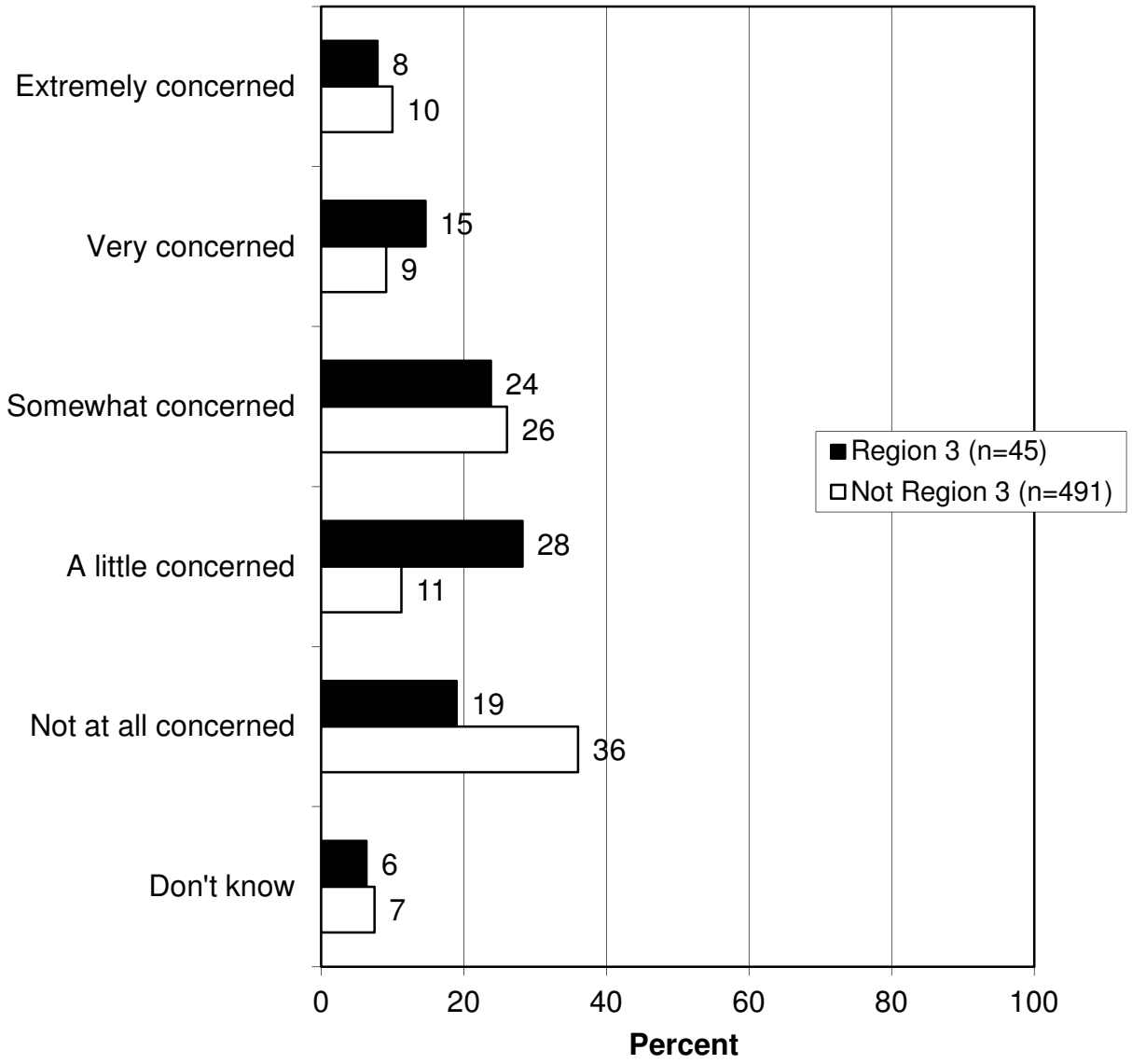

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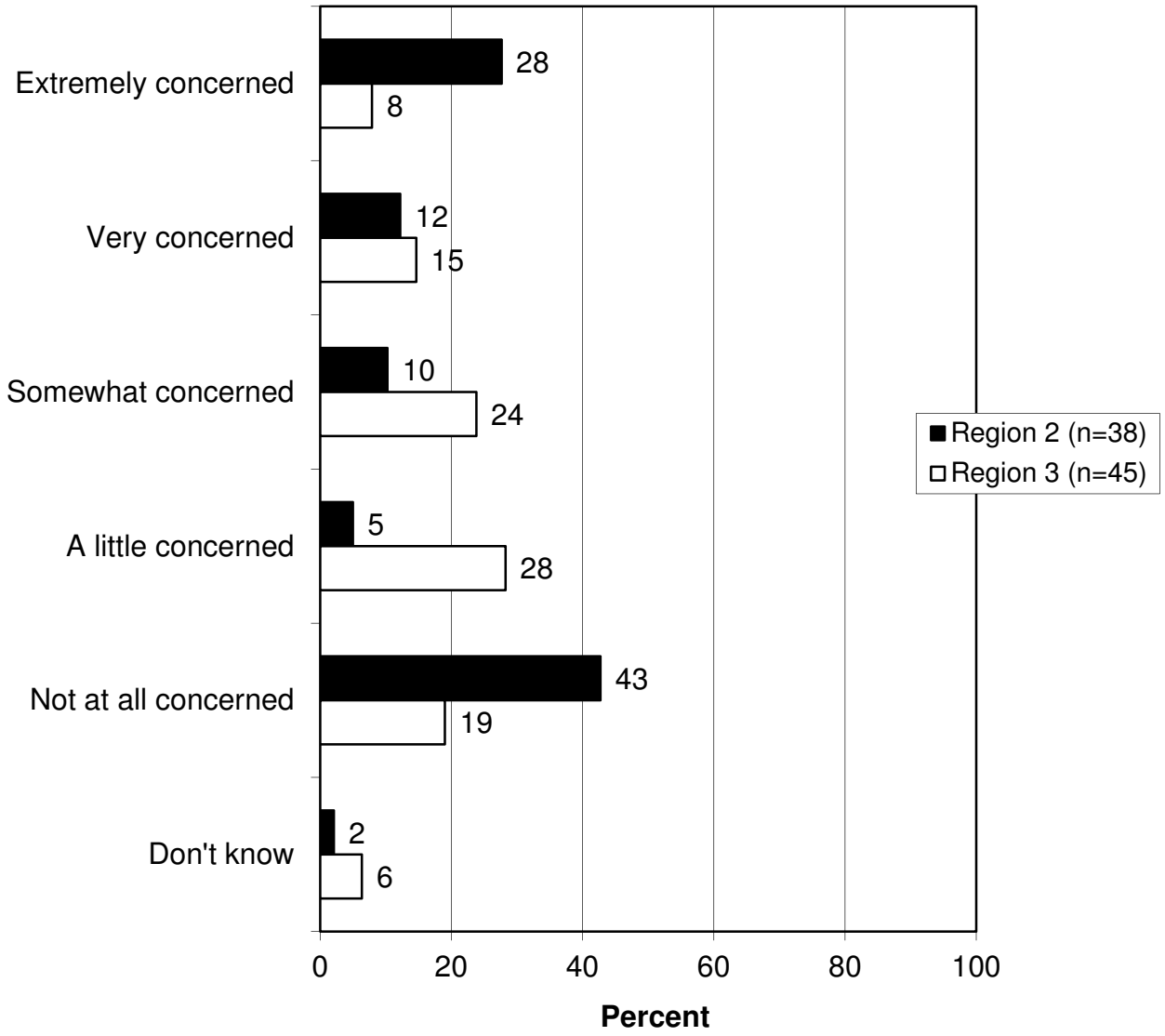

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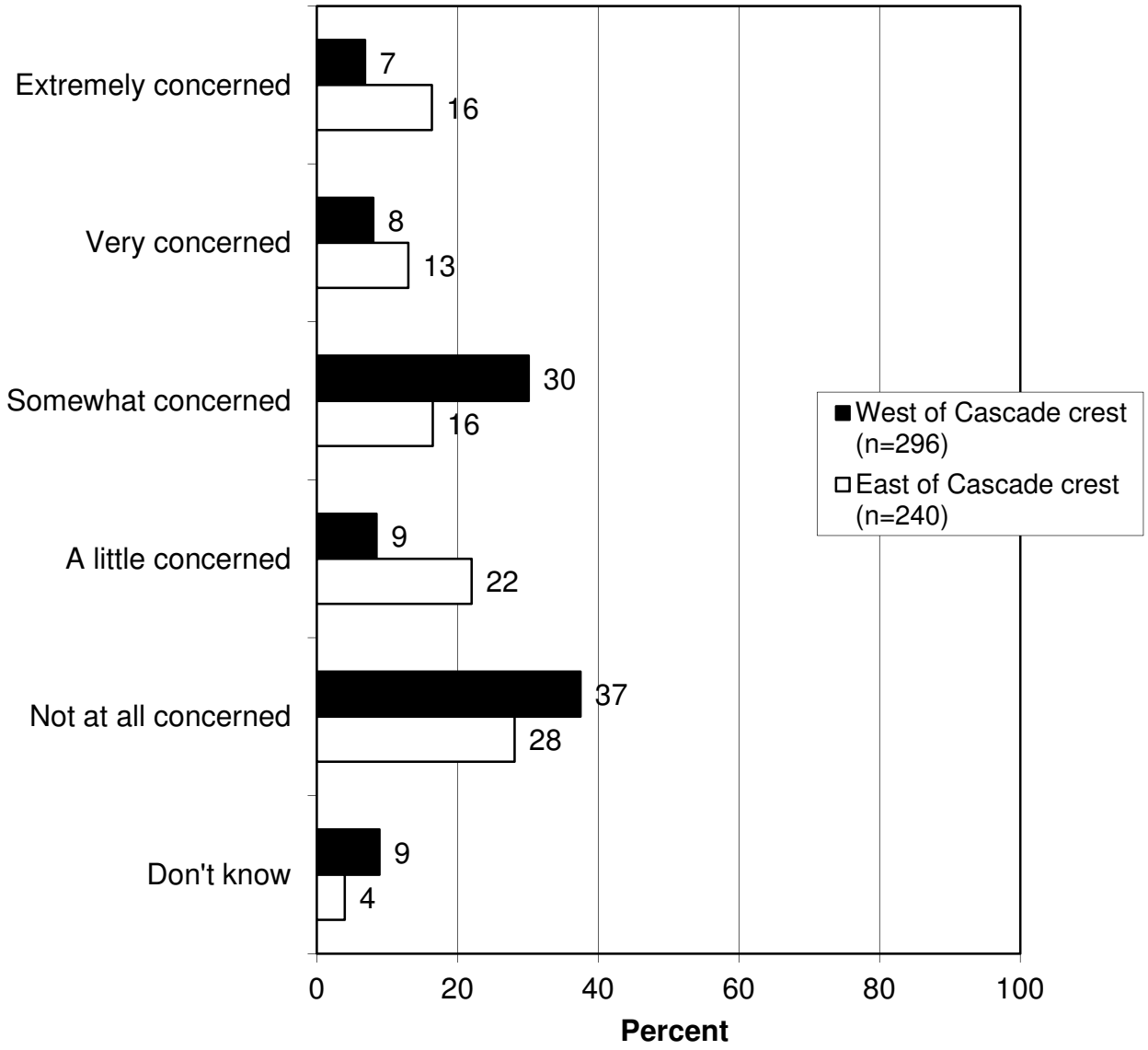

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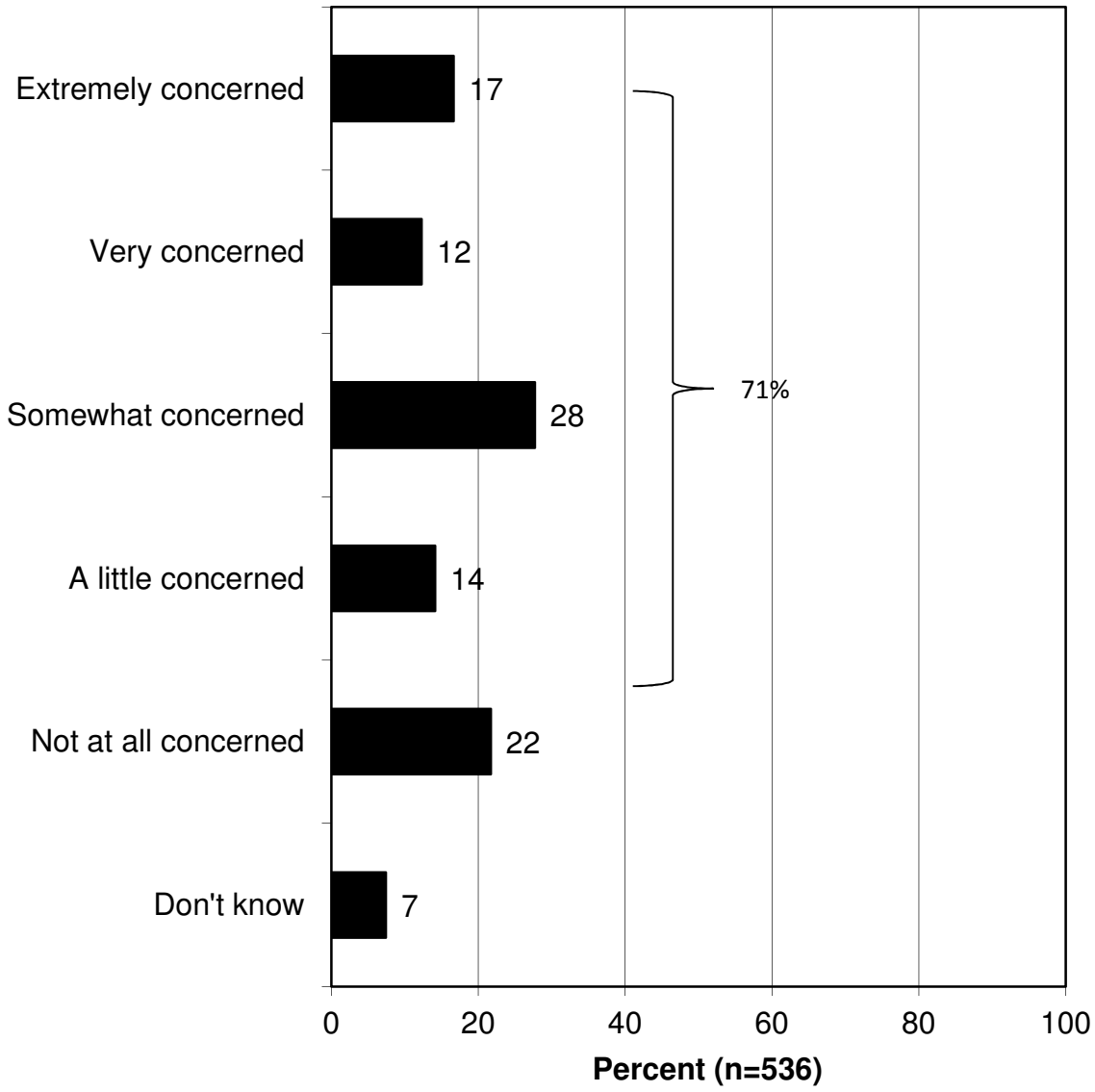

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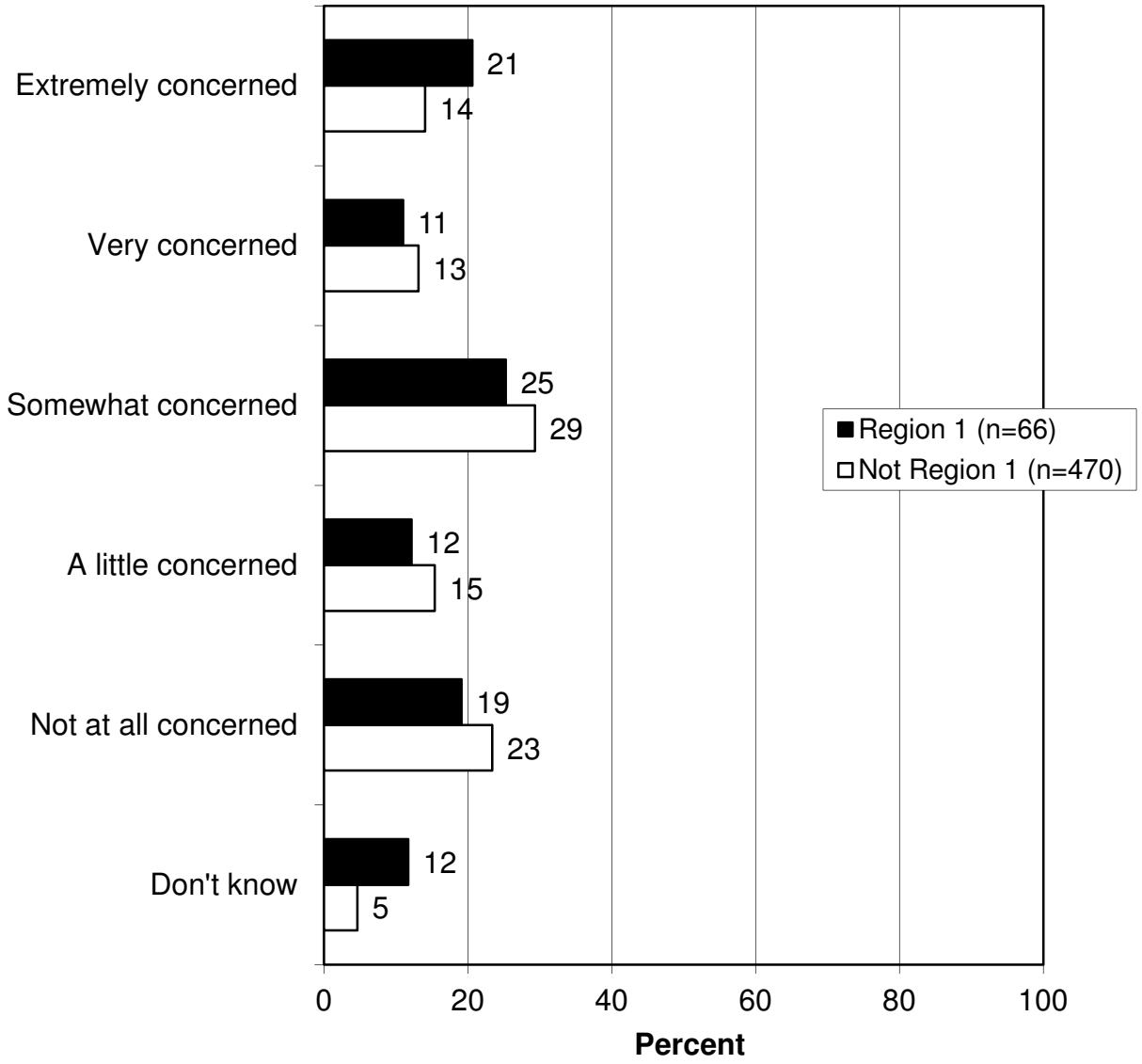

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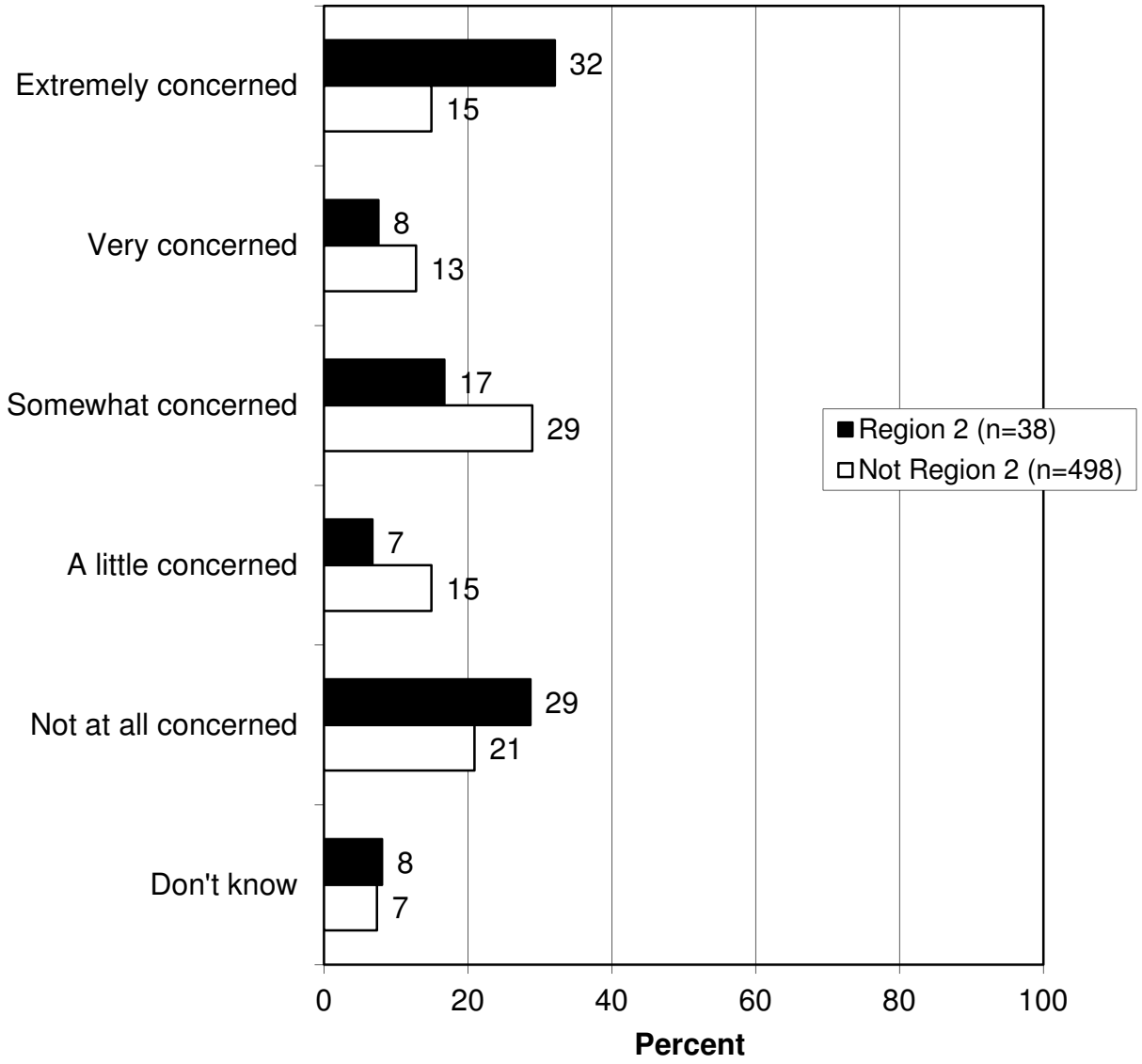

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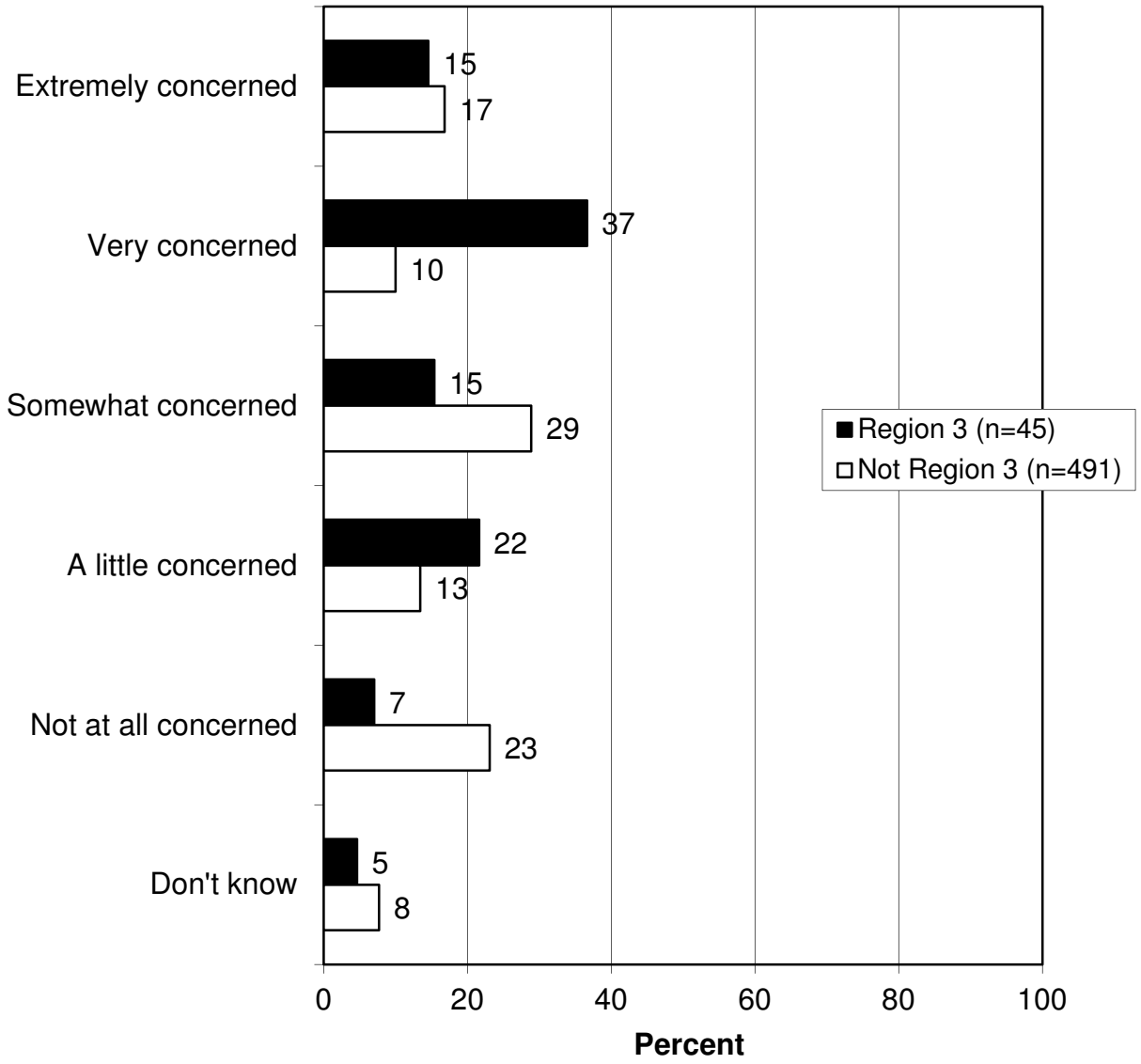

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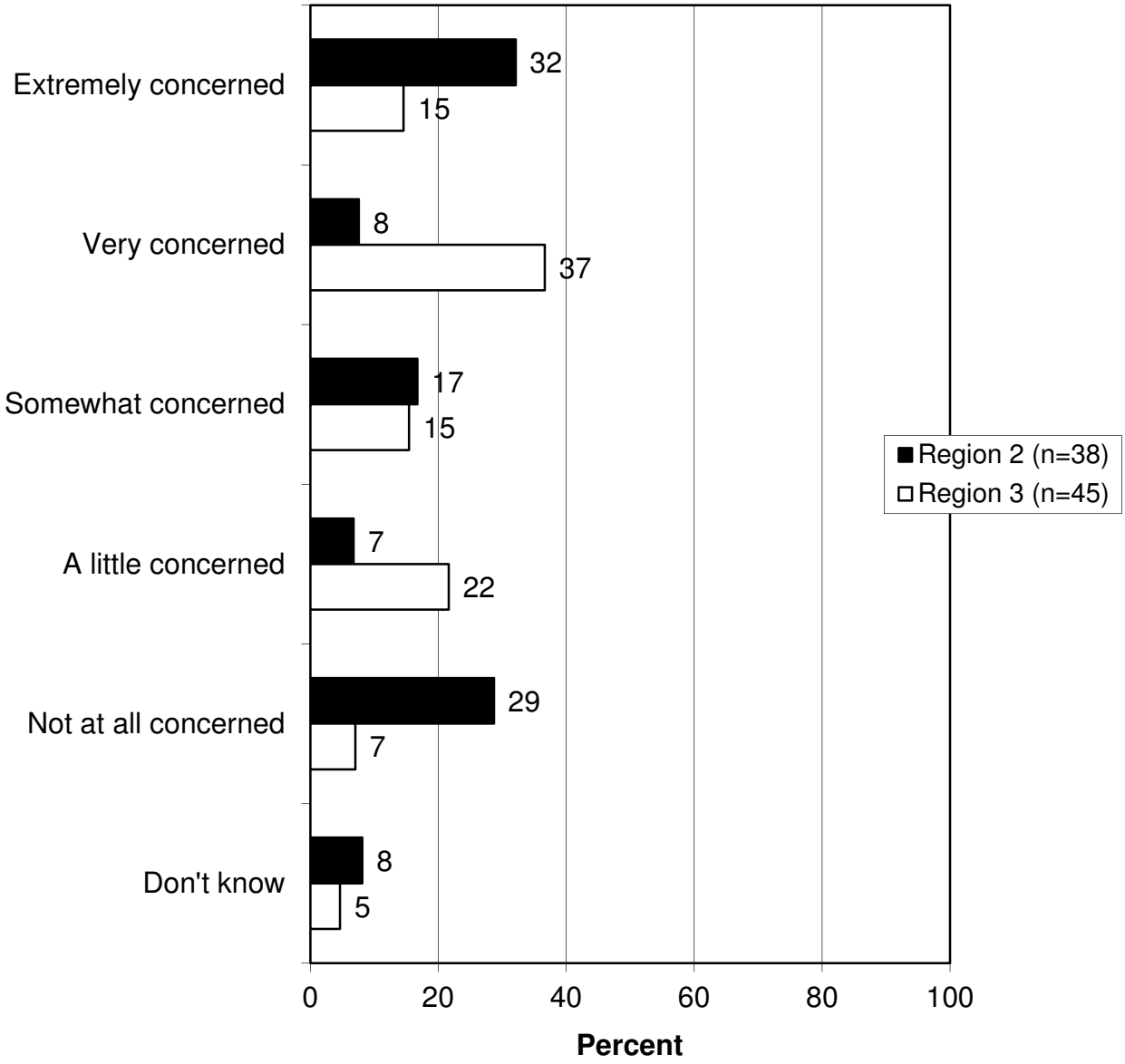

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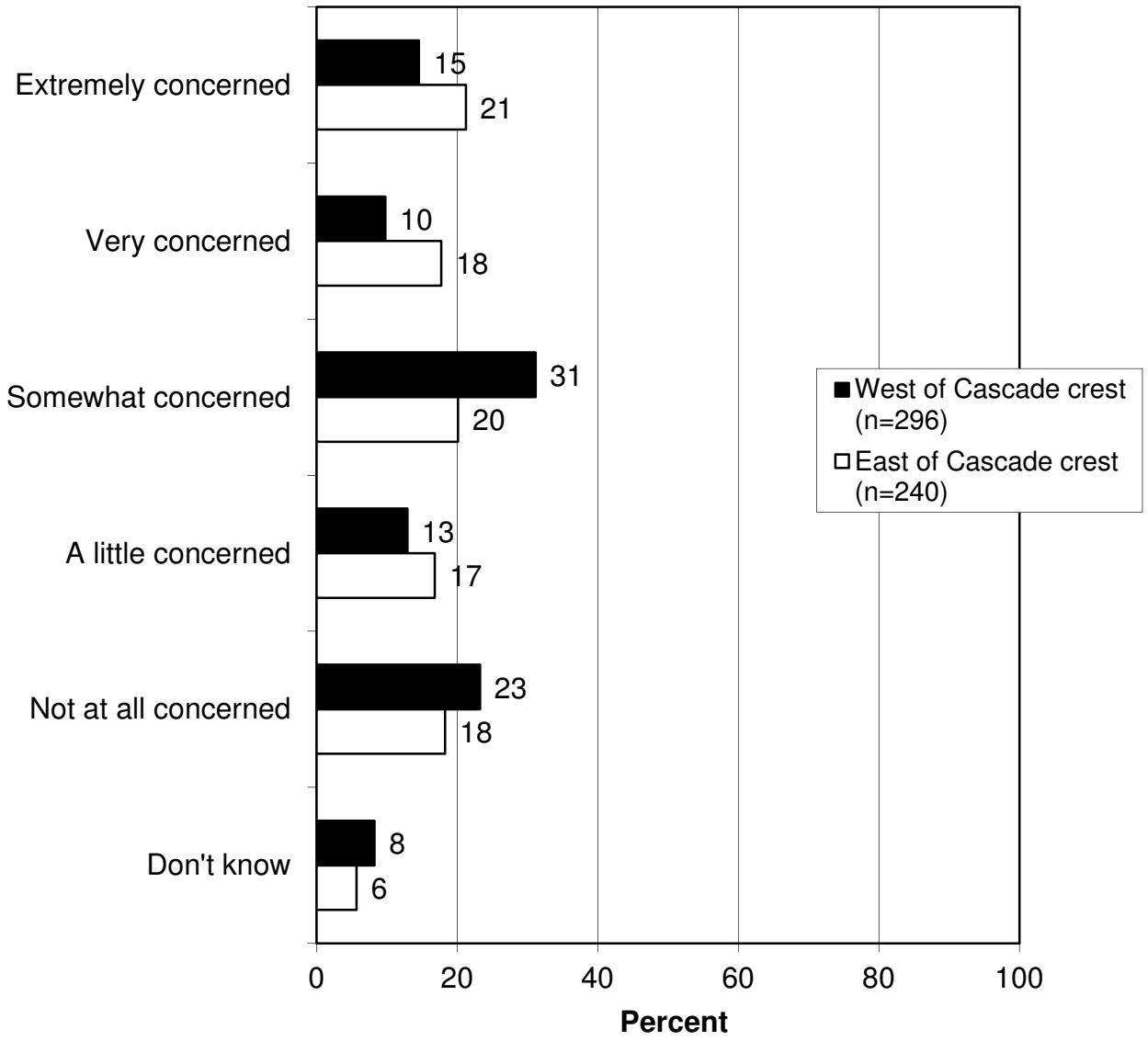
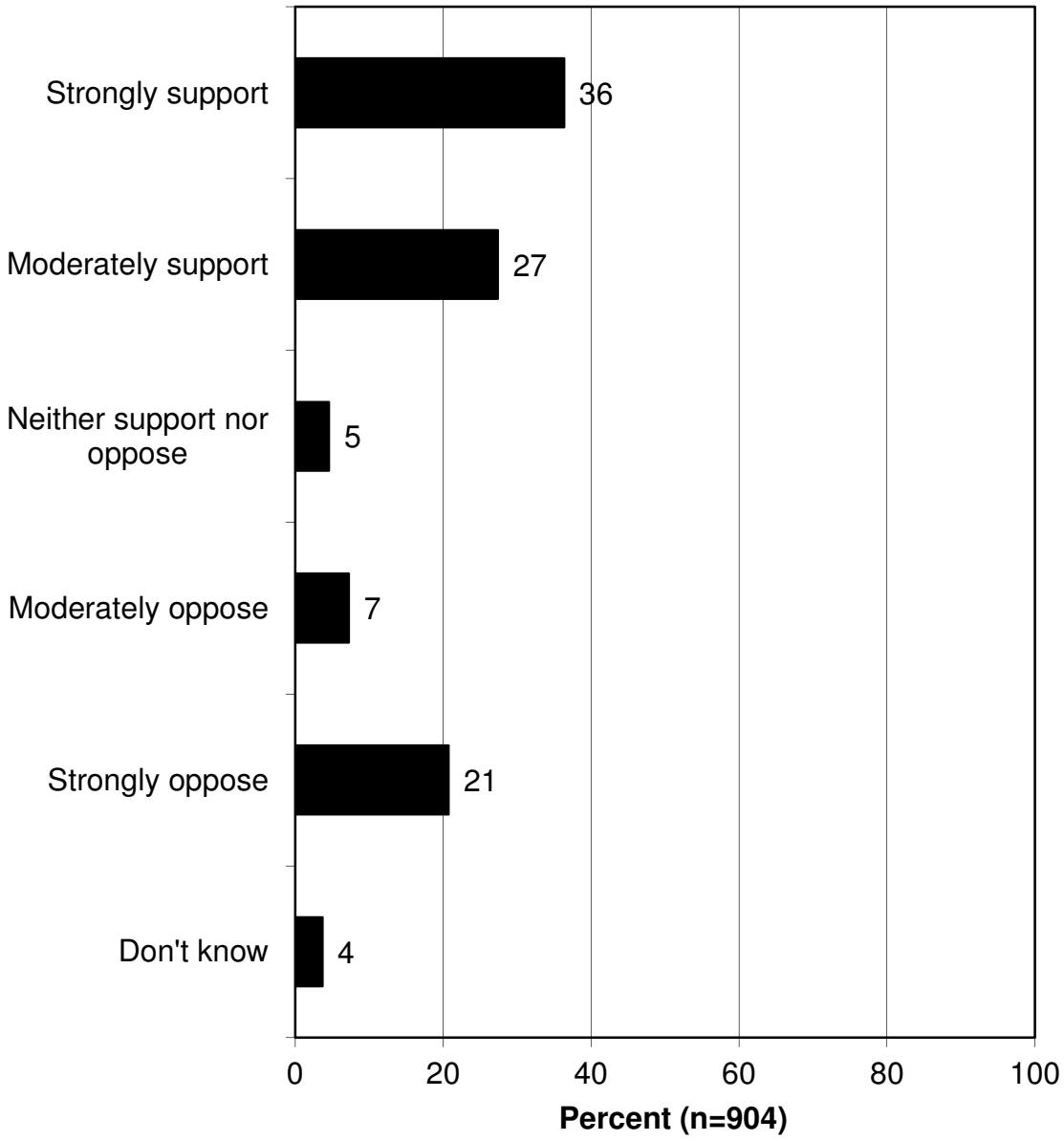


OPINIONS ON A HUNTING SEASON FOR WOLVES

- Given the scenario where wolves are fully recovered, have reached population objectives, and have been removed from the state endangered species list, a majority of residents would support (63%) the establishment of a wolf hunting season; nonetheless, 28% would oppose.
  - Those who opposed were asked to rate the importance that a general opposition to hunting plays in their reason for opposing a hunting season for wolves: about a quarter of them (24%) gave the highest rating to this reason for opposing, but about the same (28%) gave the lowest rating to this reason for their opposition. In other words, about a quarter of those who oppose a hunting season for wolves are opposed because of a general opposition to hunting.
  - A similar question asked those who oppose to rate the importance of this reason: that they do not support the hunting of wolves specifically. This reason is much more important than a general anti-hunting stance: nearly all those who oppose gave this reason a rating of the midpoint or higher.
  - Meanwhile, a follow-up question found that 5% of those who oppose do so because they think there are better ways to manage wolves, and 3% do so because they support hunting only for meat, and wolves are not generally eaten.

- Several questions asked about support for or opposition to a wolf hunting season for various reasons.
  - A wolf hunting season to maintain population objectives is supported by 69%, while it is opposed by 23%. This is the reason for hunting wolves with the highest level of support, of the four questions discussed here.
  - A wolf hunting season to provide a recreational hunting opportunity has less support (38%) than opposition (53%). Most opposition is *strong* opposition. Of the four reasons, this has, by far, the lowest support.
  - A wolf hunting season to address livestock attacks or depredation is supported by 65% and opposed by 25%.
  - Finally, a wolf hunting season to address impacts wolves have on other wildlife populations, such as deer, elk, and moose, is supported by 61% and opposed by 29%.

Q80. Would you support or oppose a regulated hunting season for wolves when wolves are fully recovered, have reached sustainable population levels, and have been removed from the state endangered species list in Washington?



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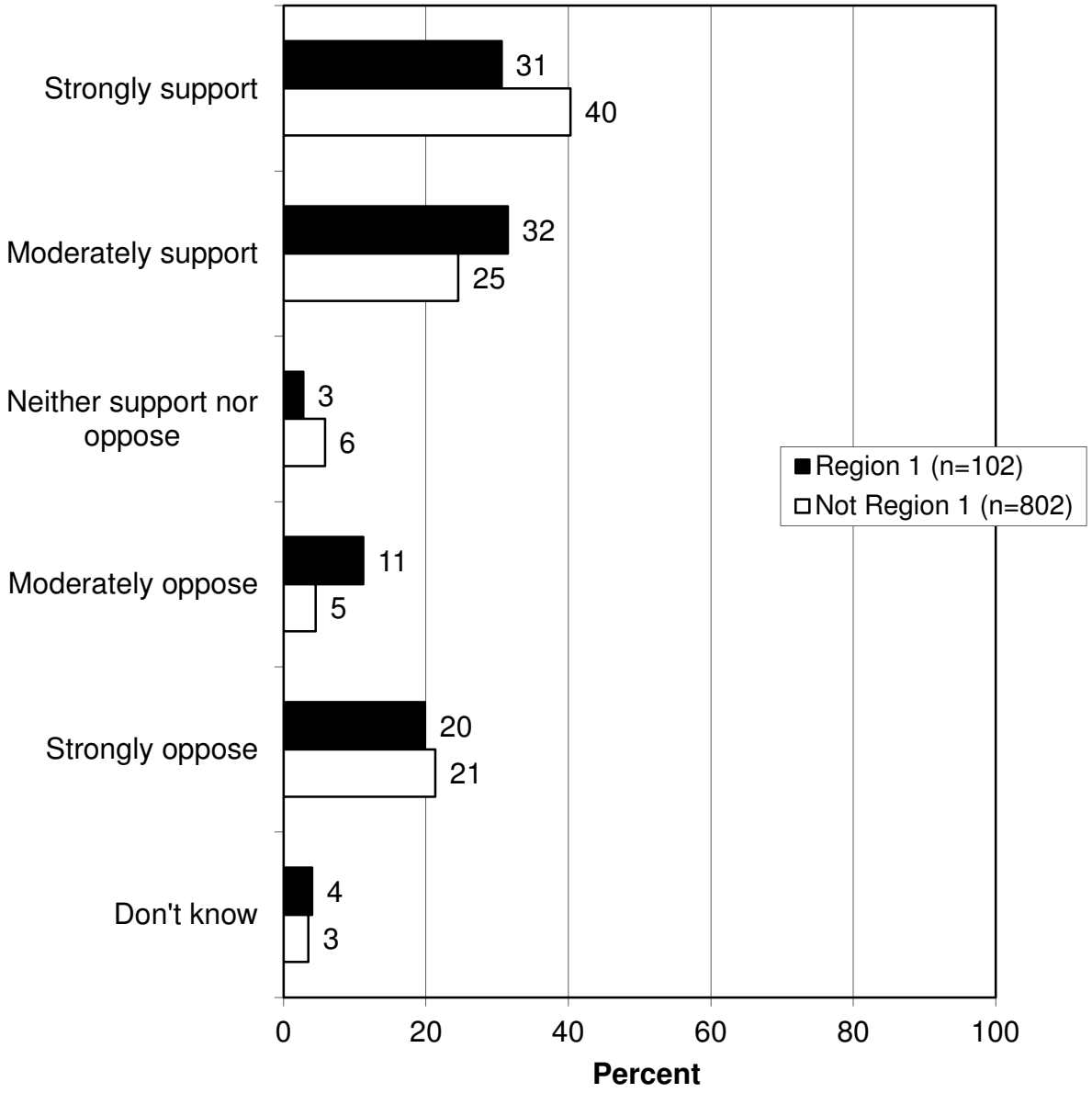

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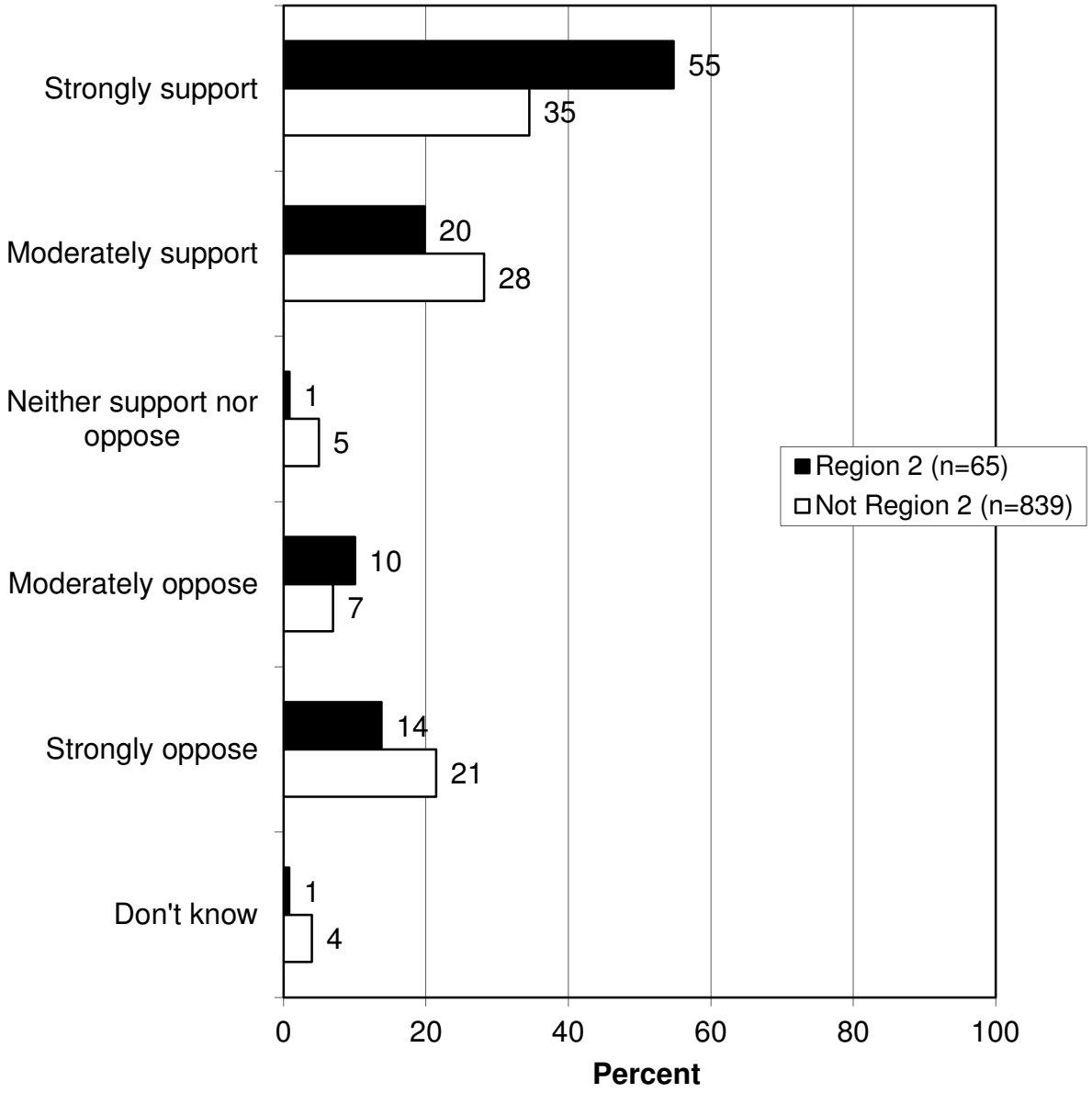

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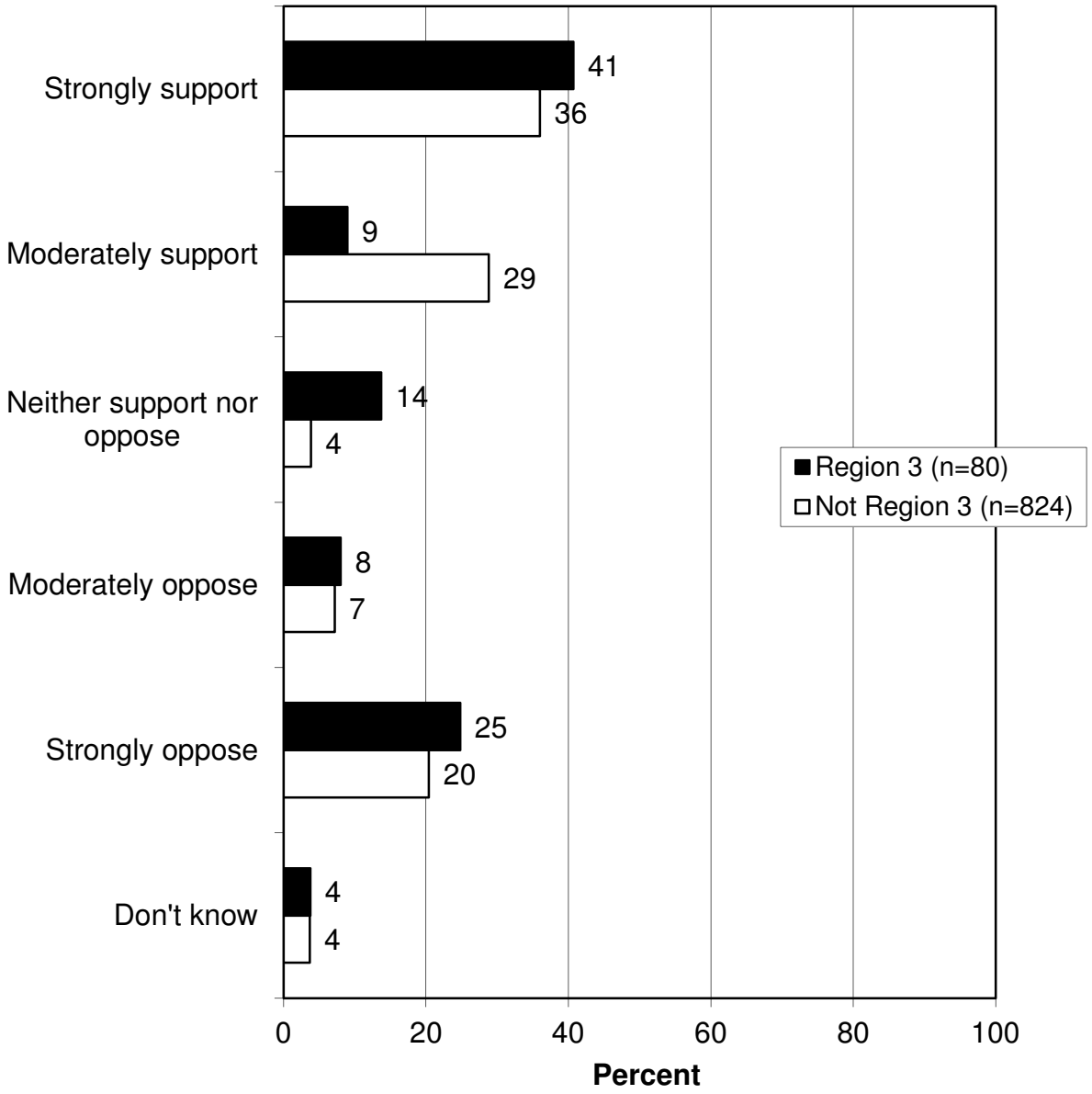

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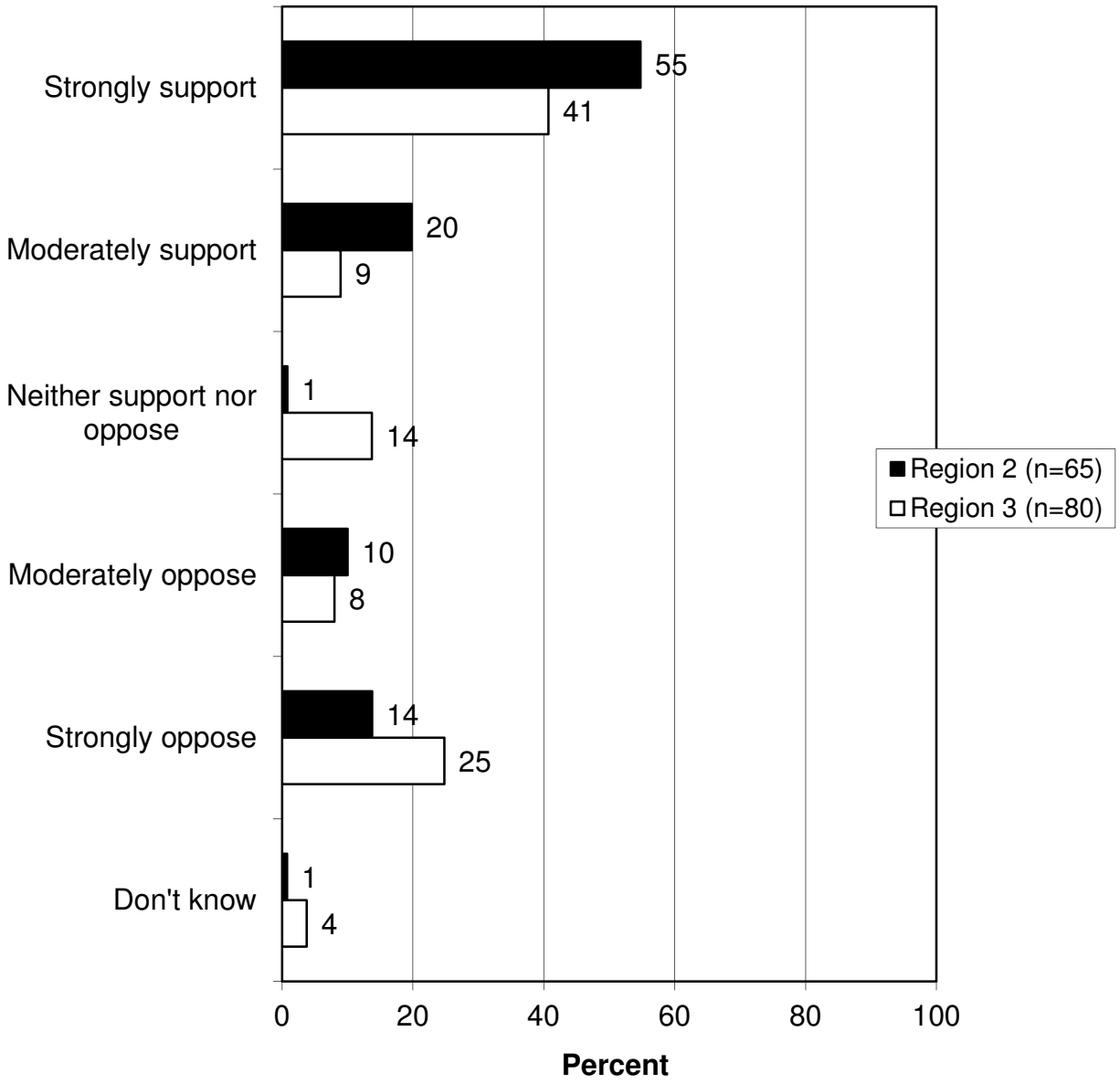

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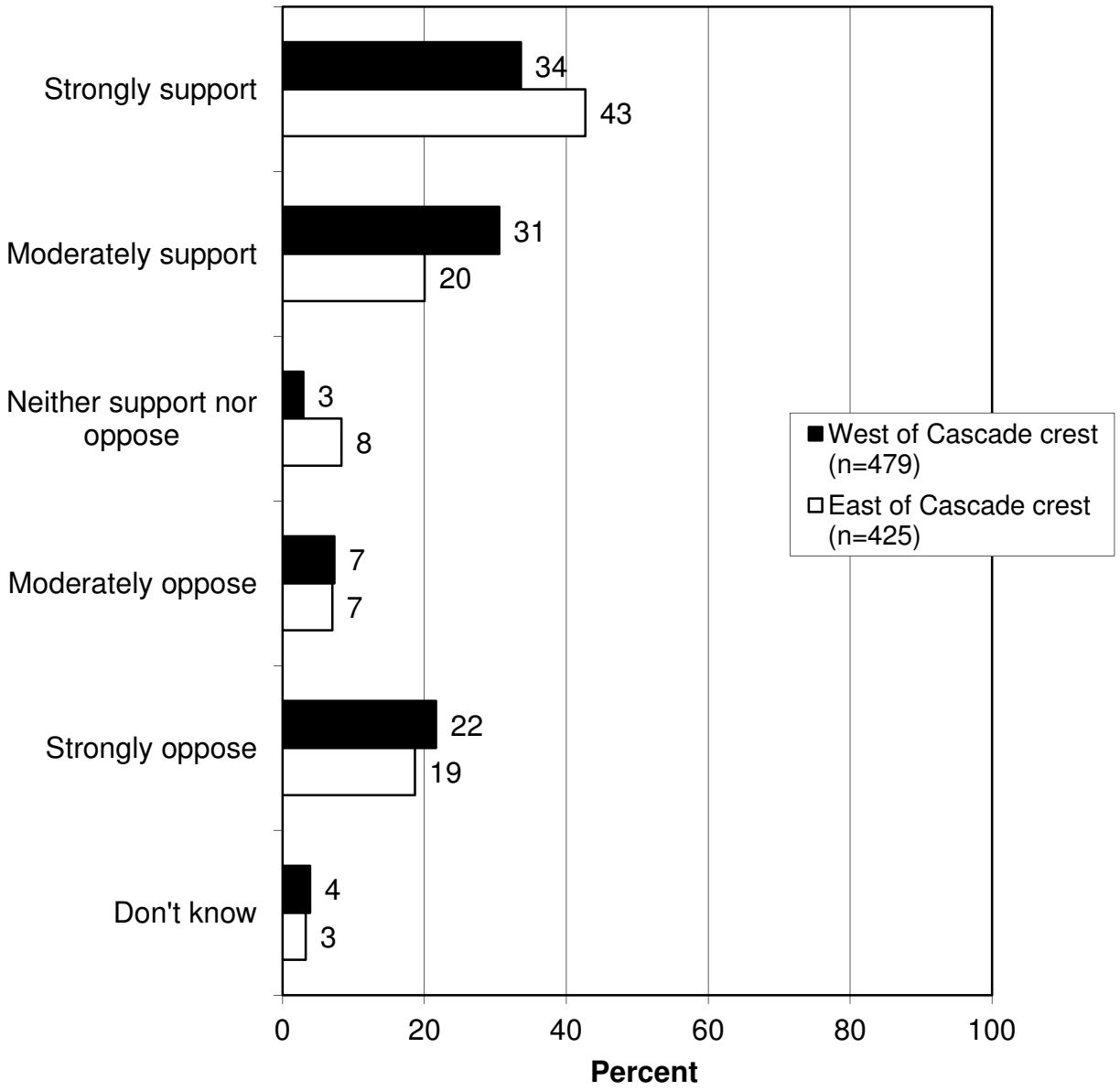

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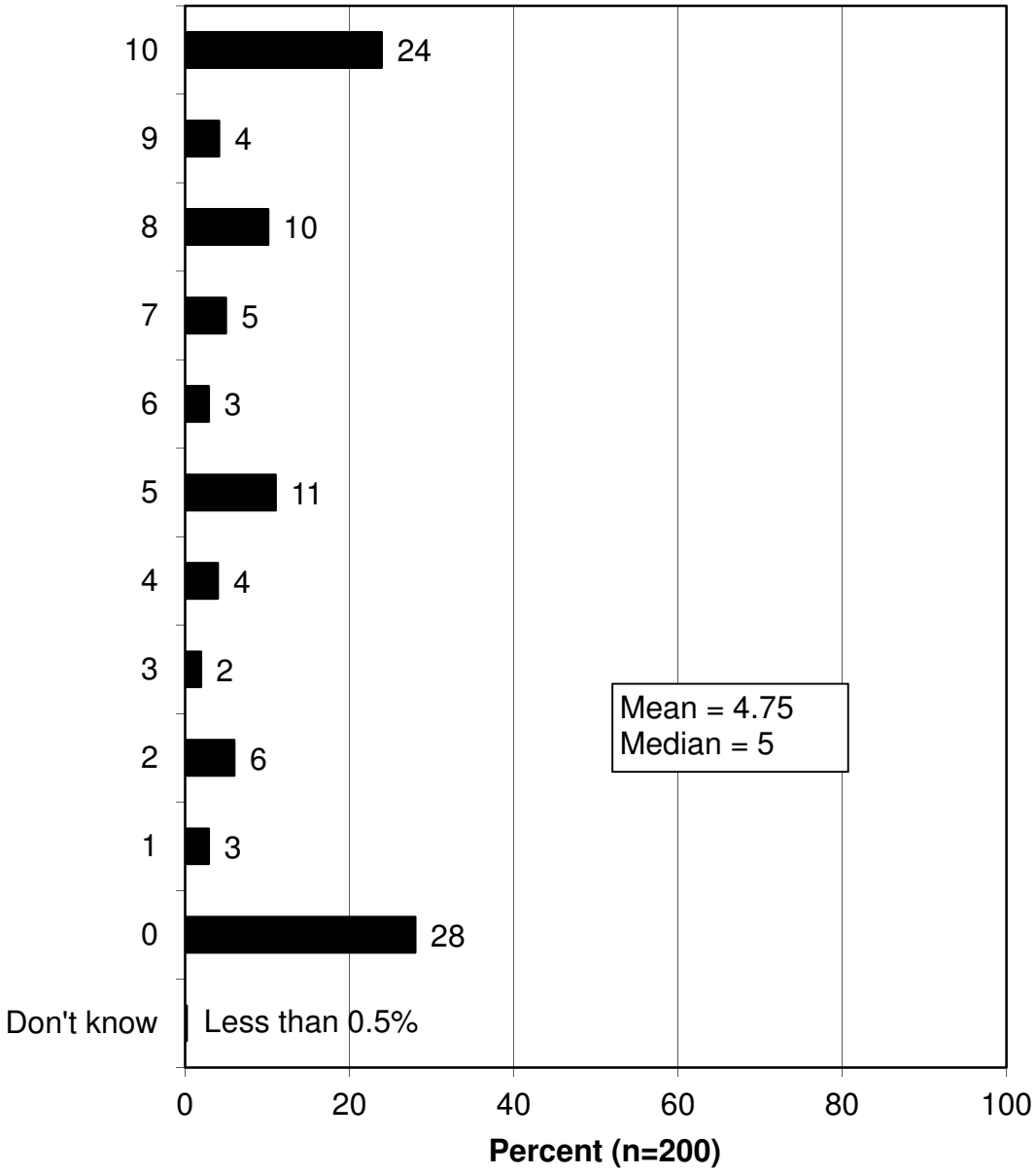

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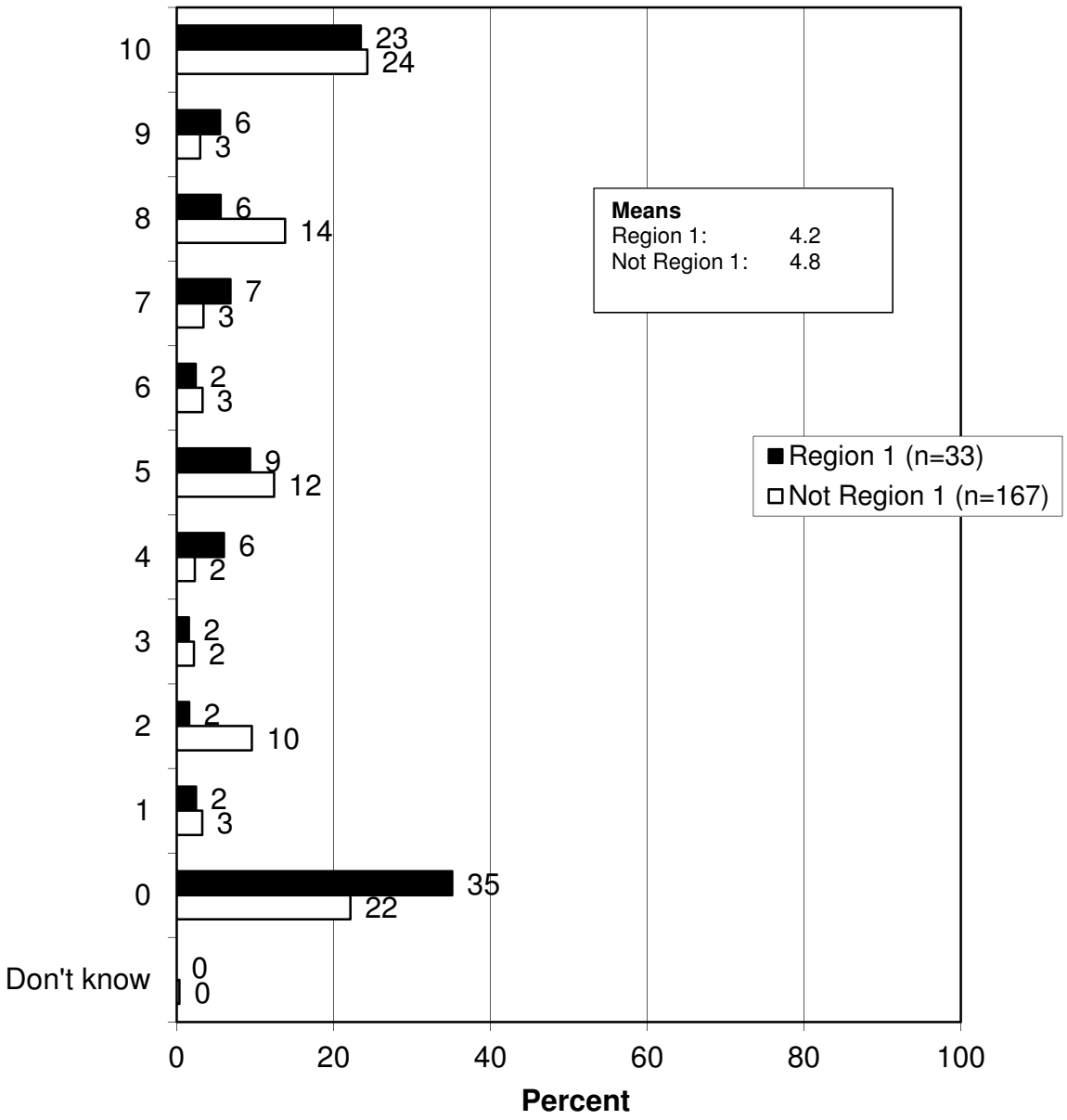

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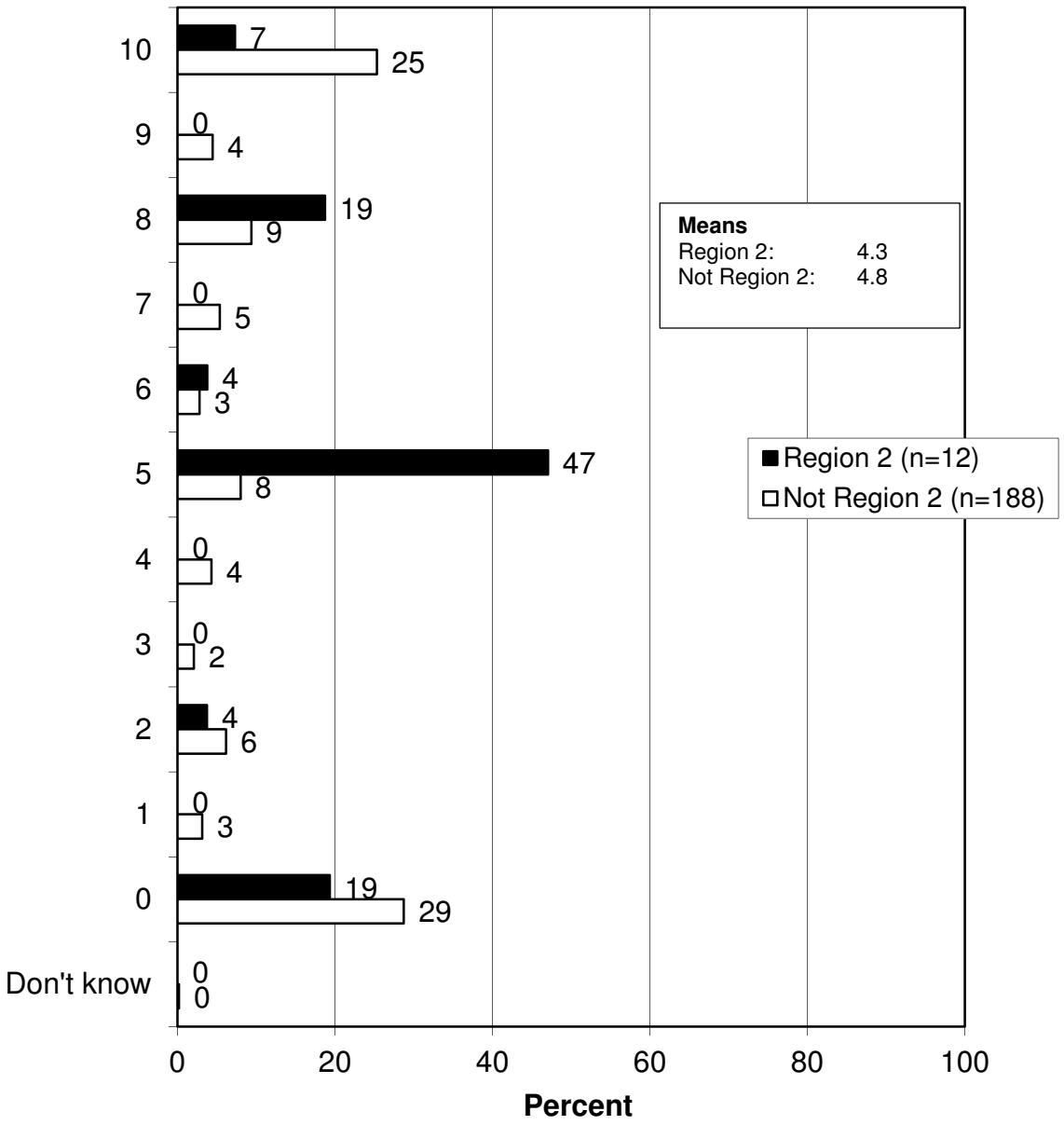

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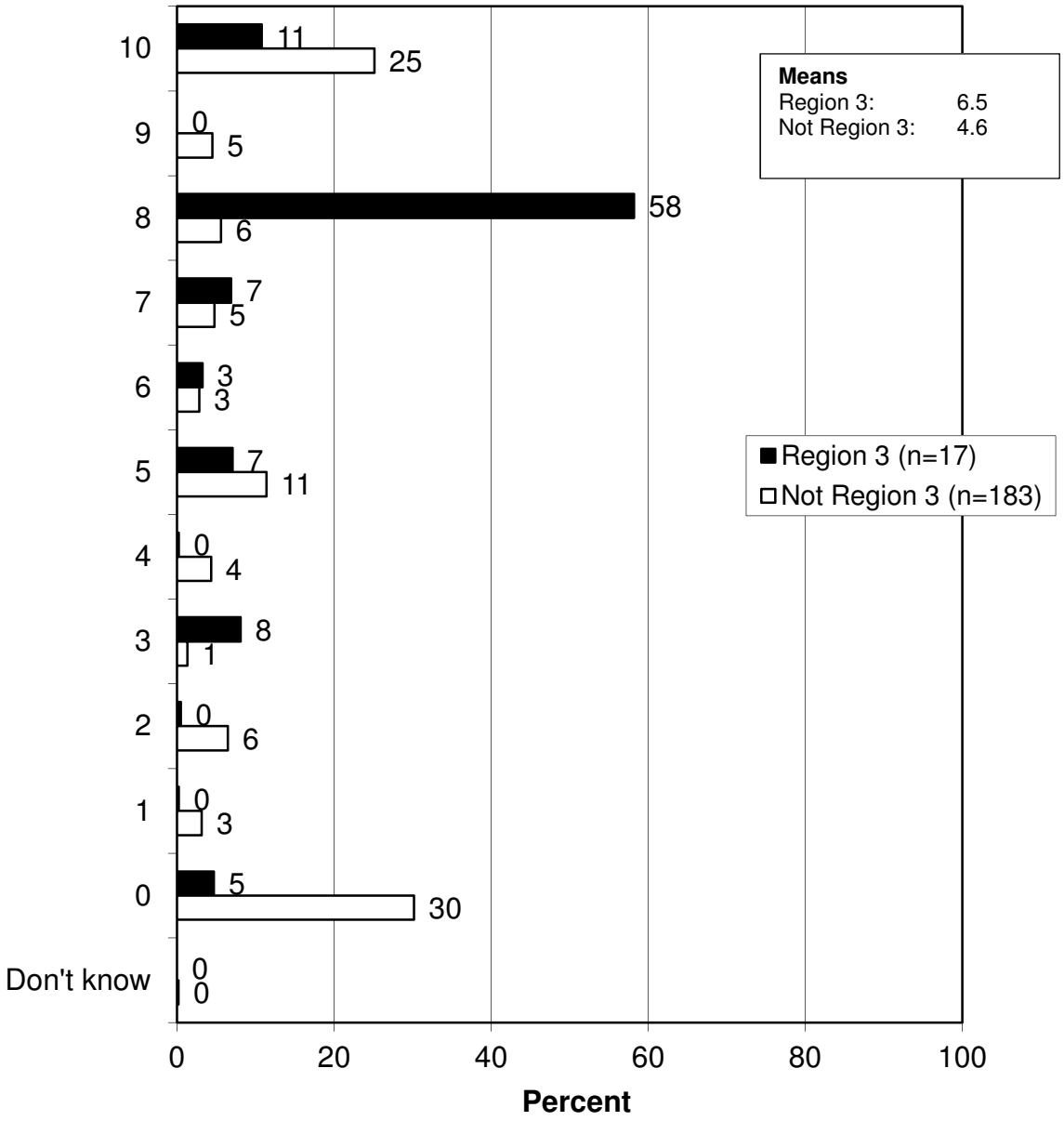

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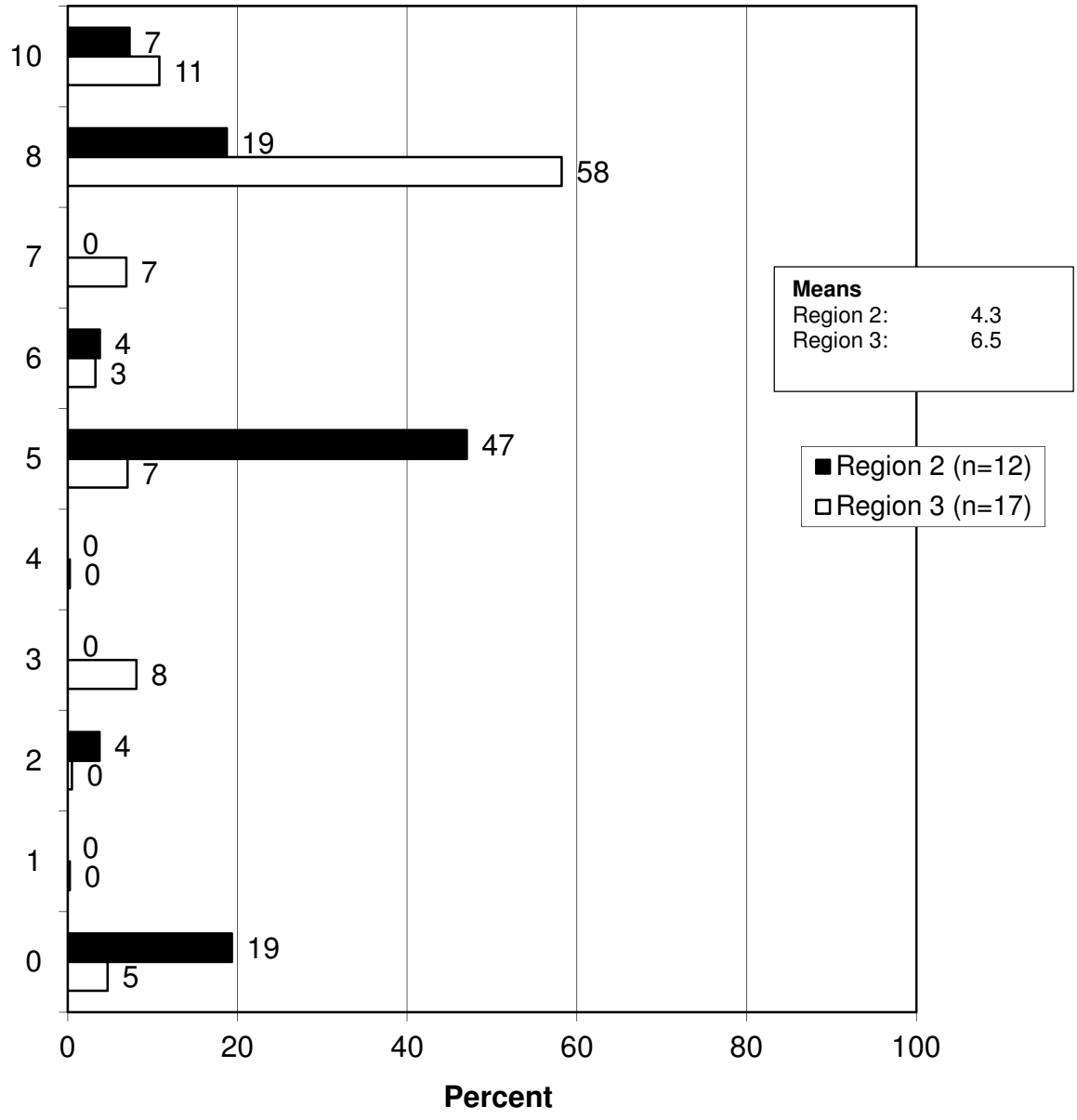

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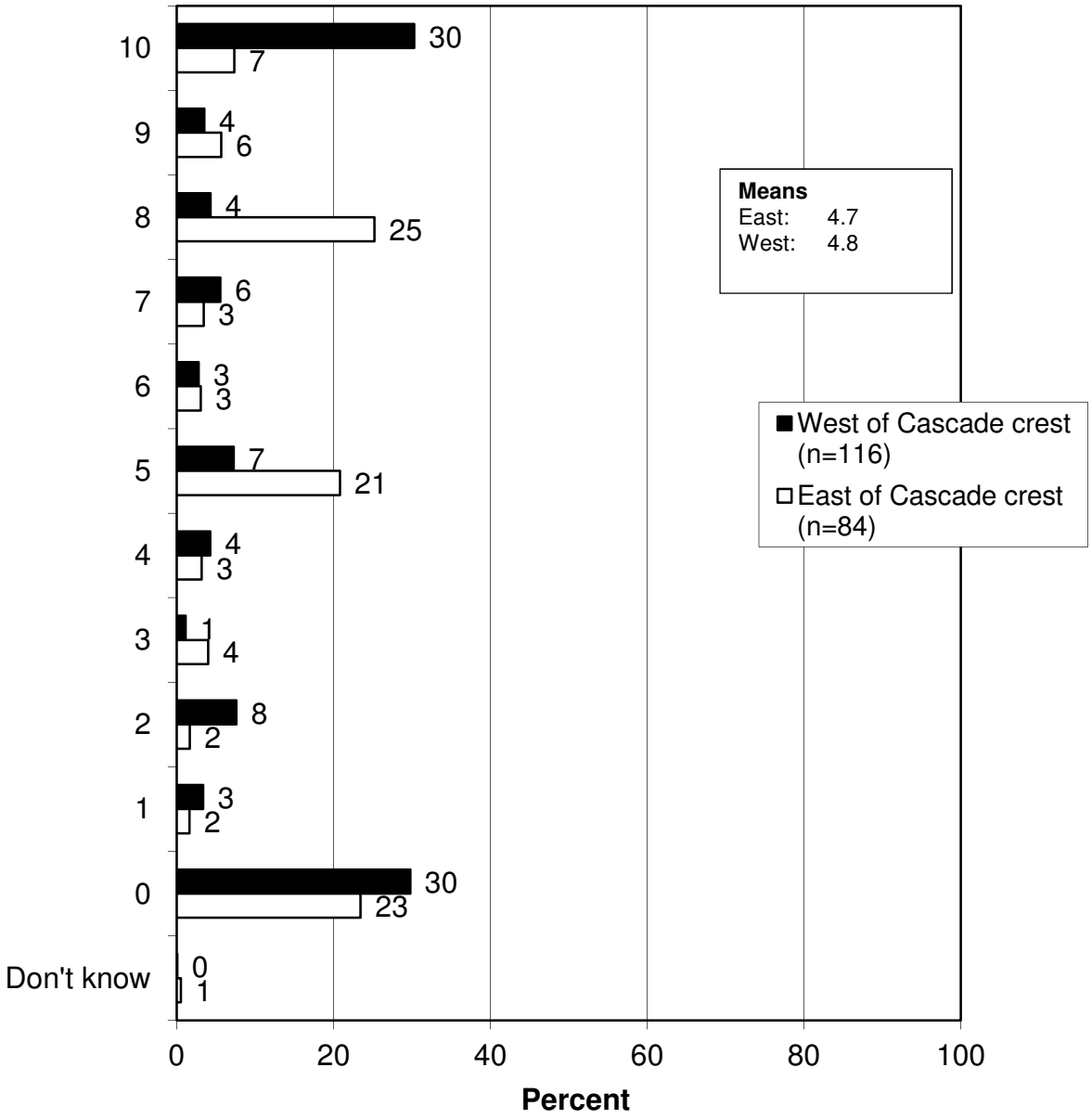

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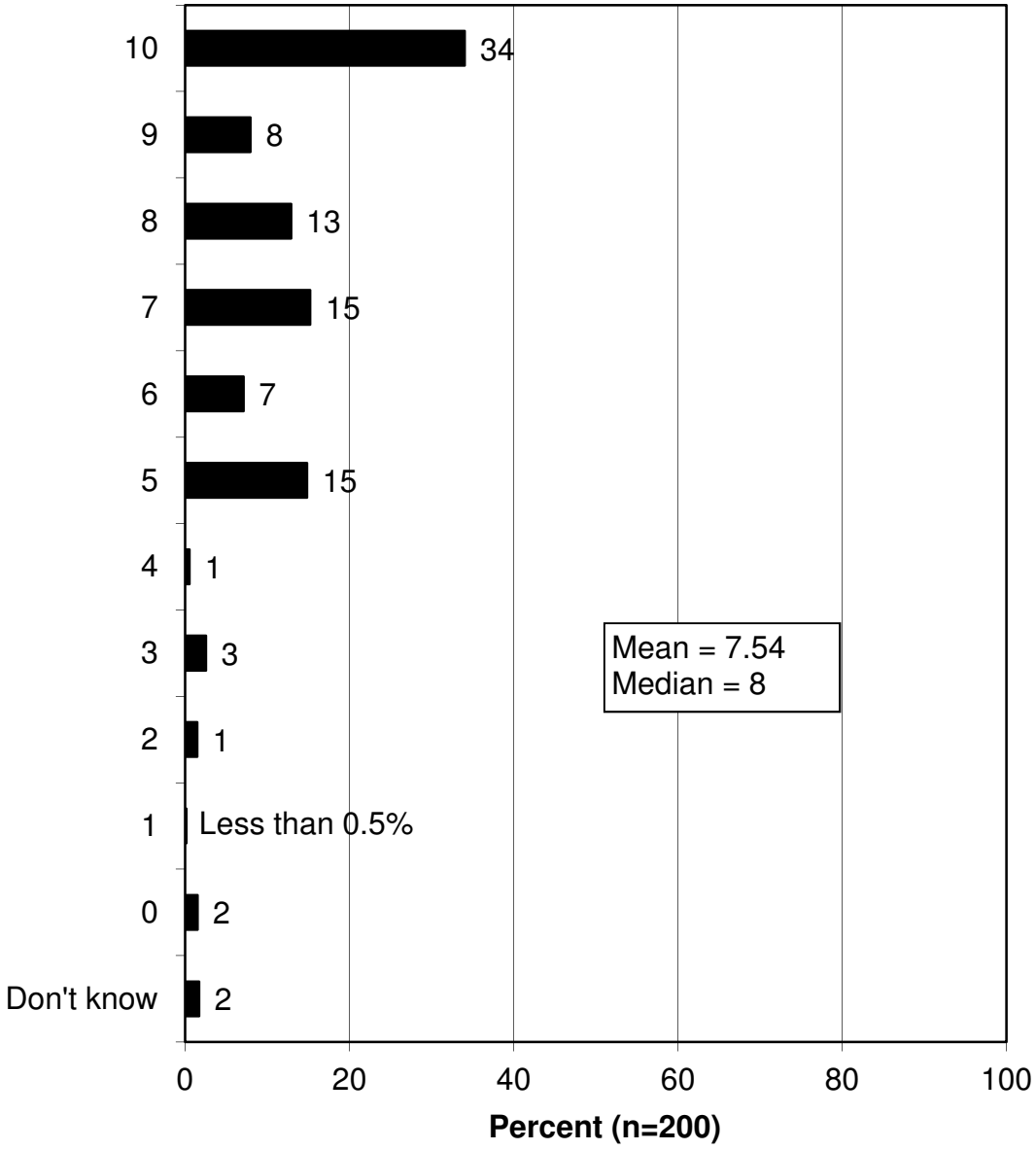

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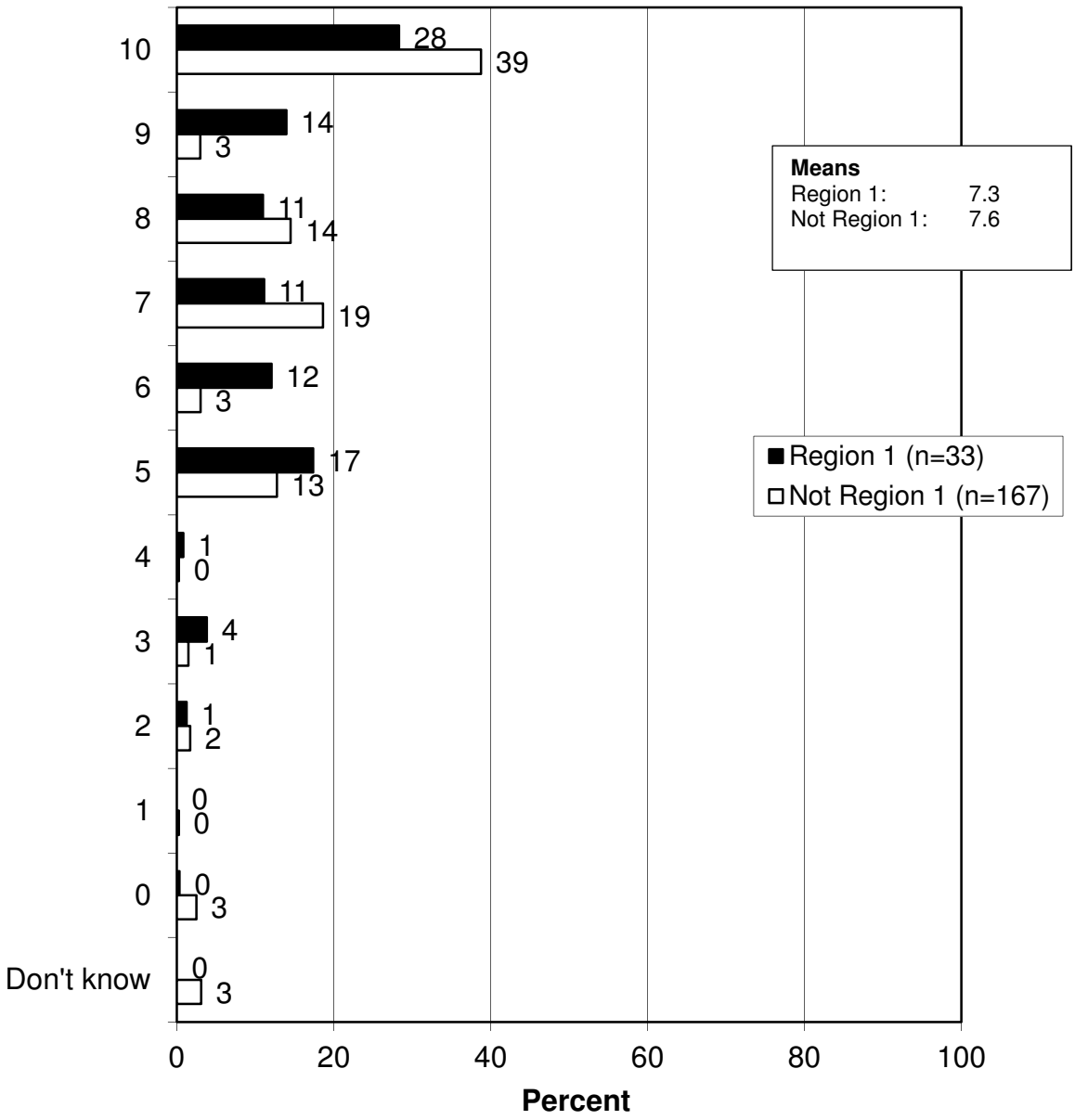

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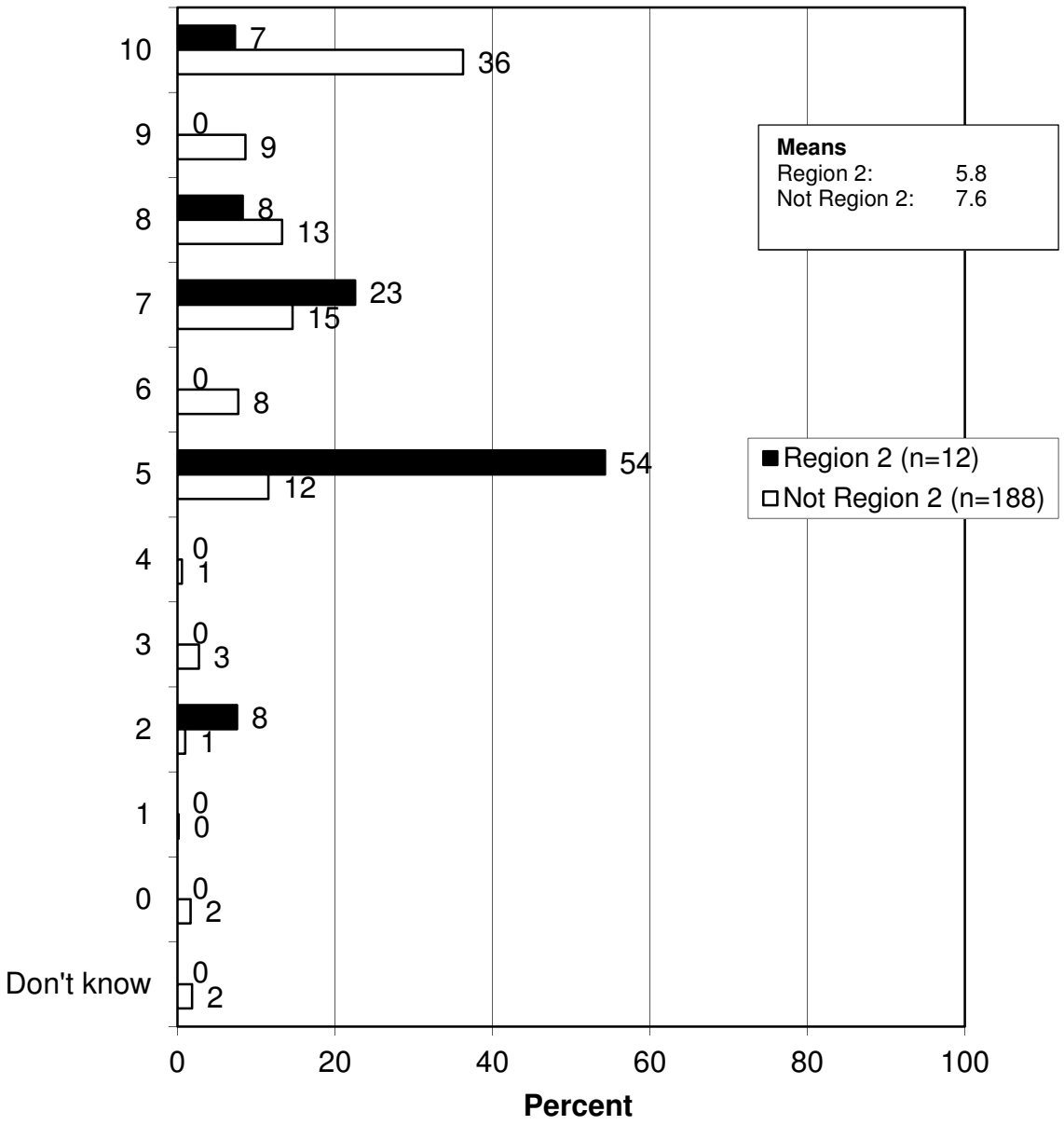

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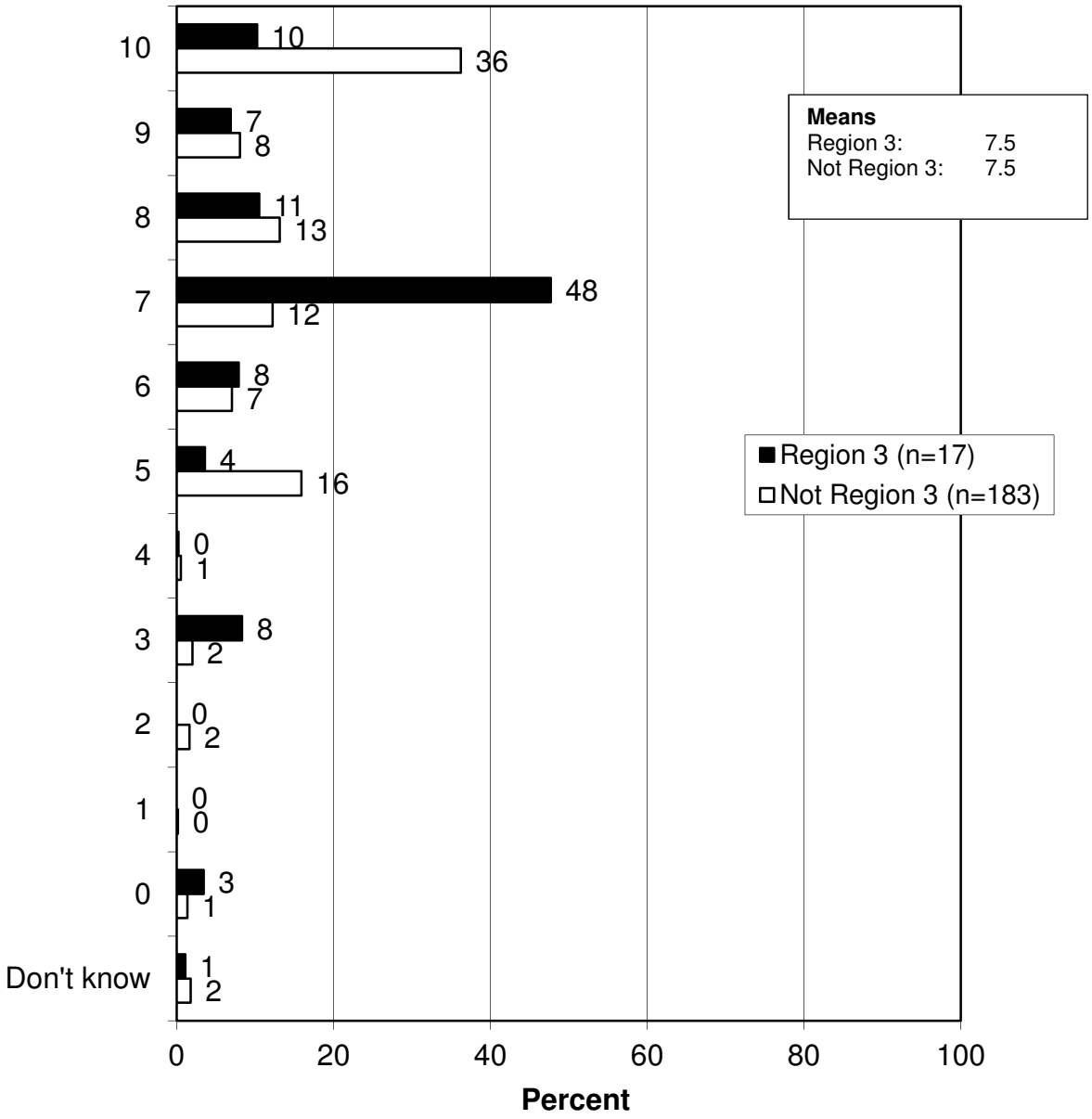

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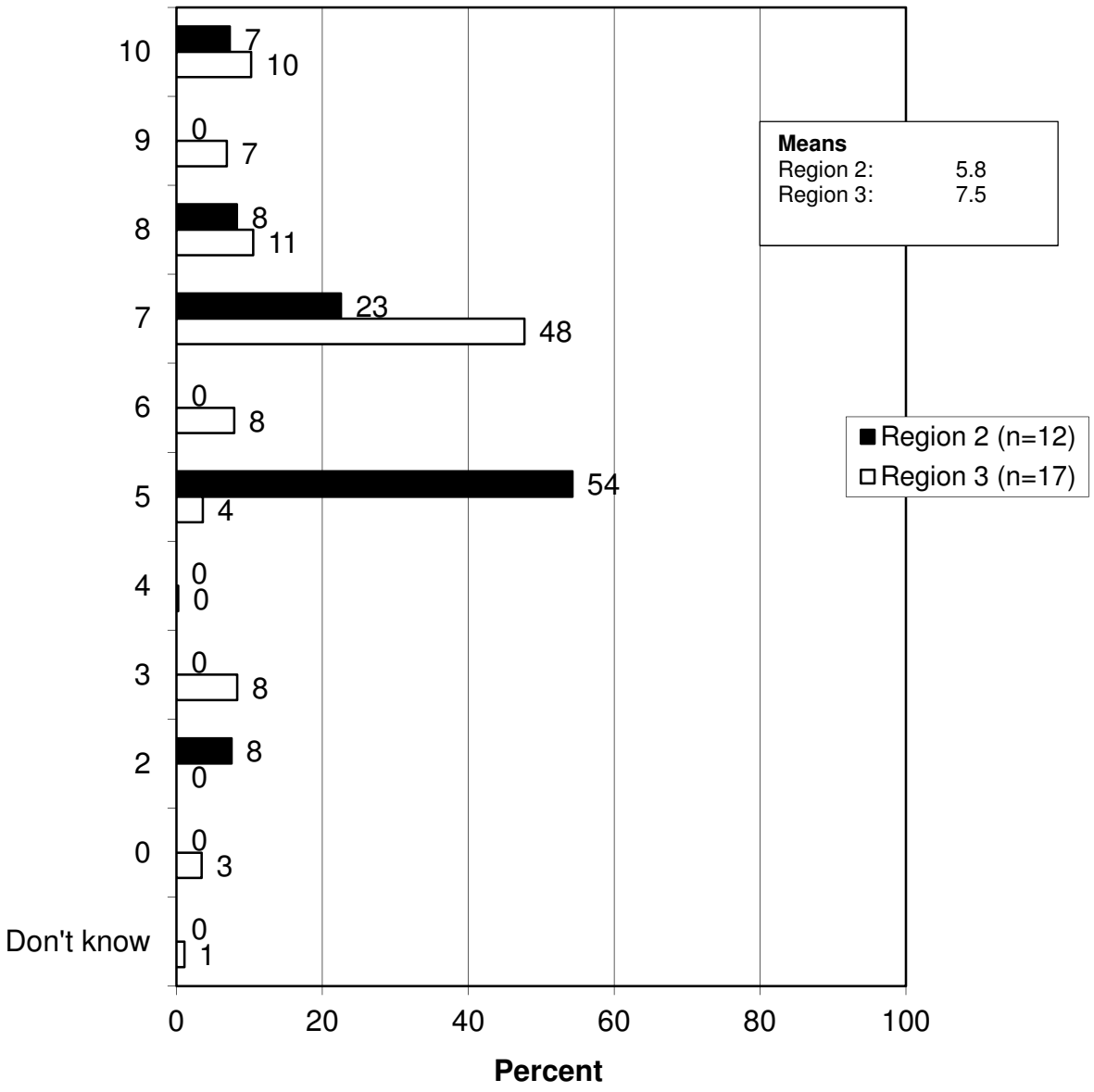

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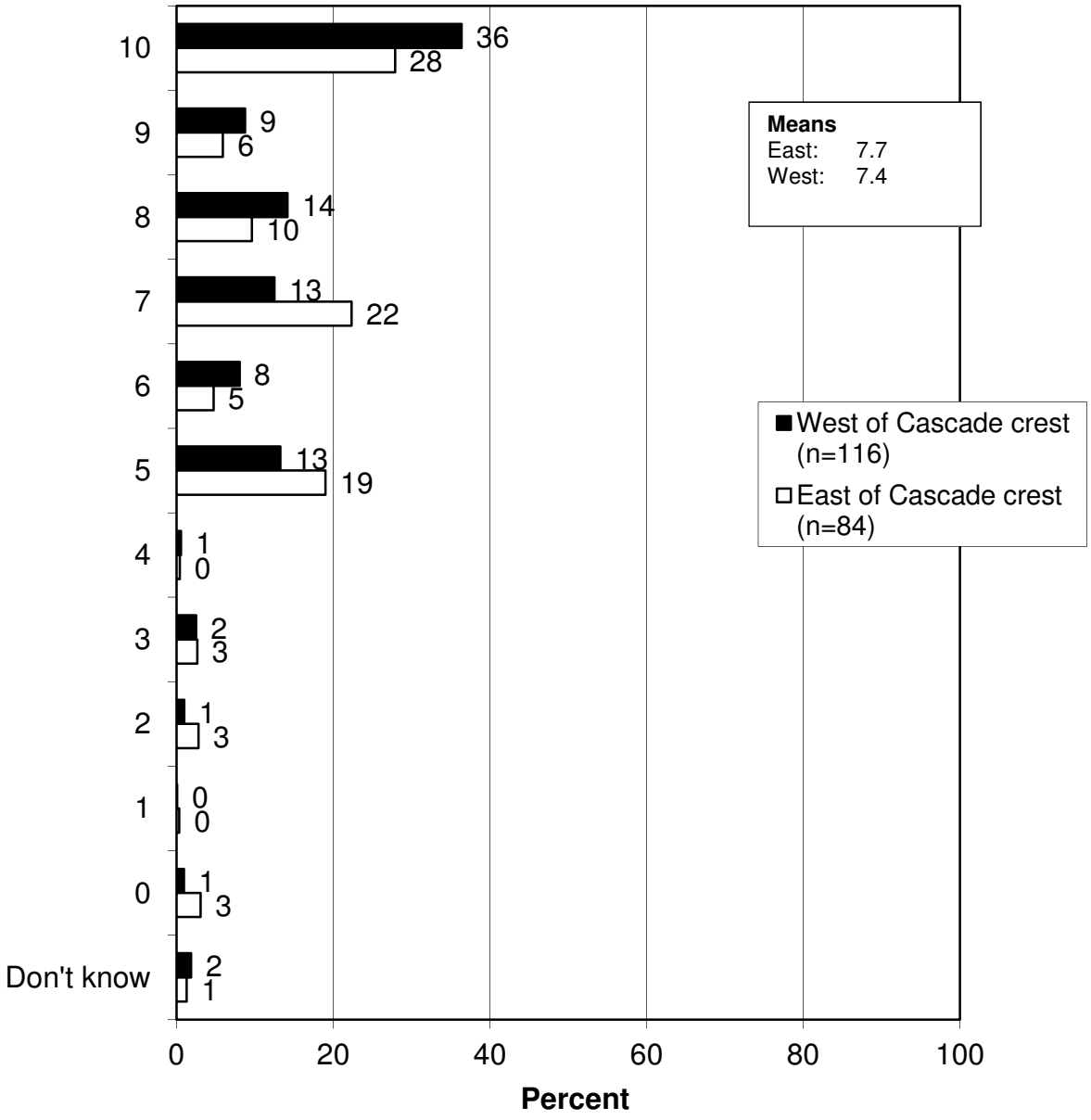
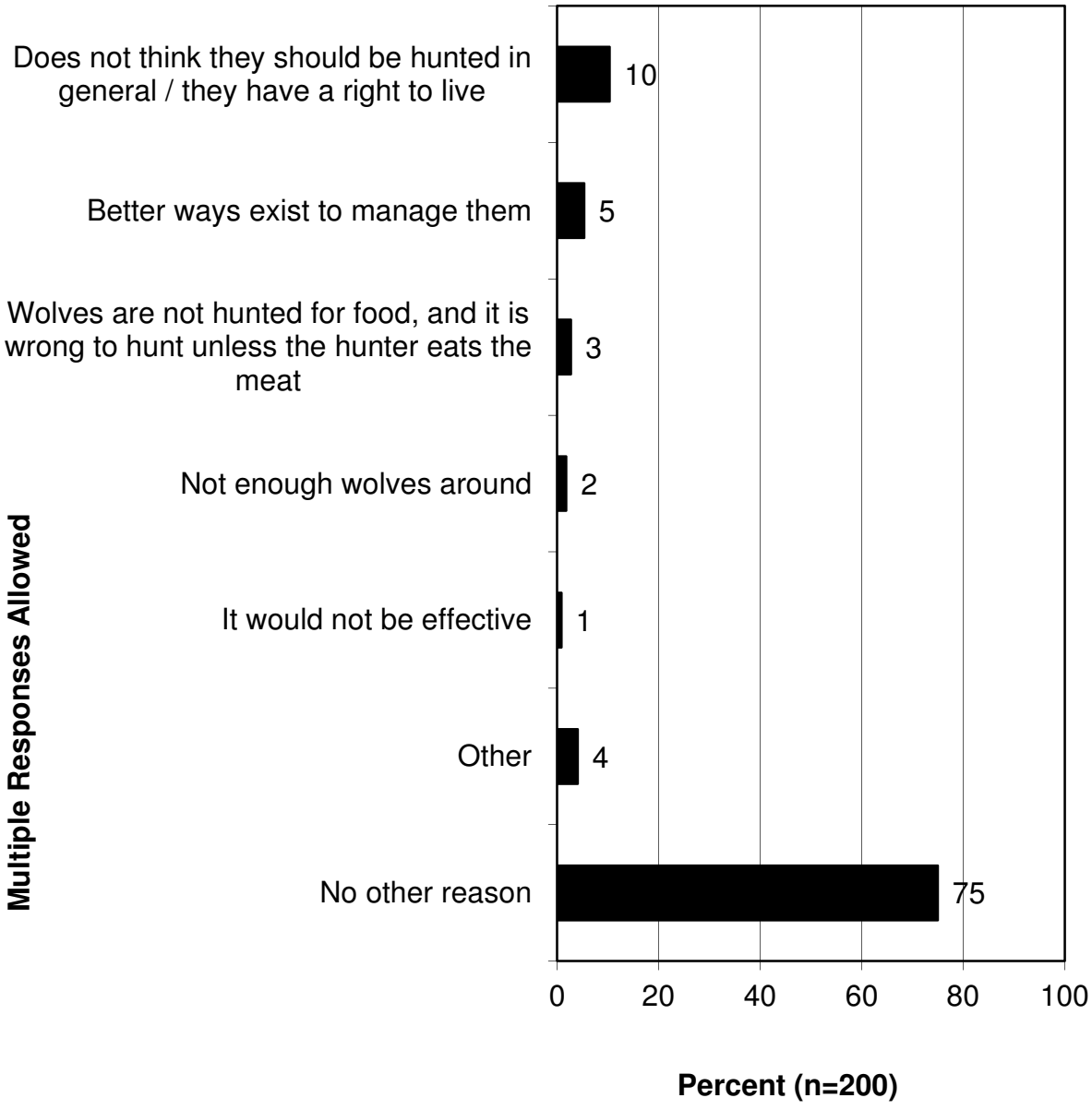
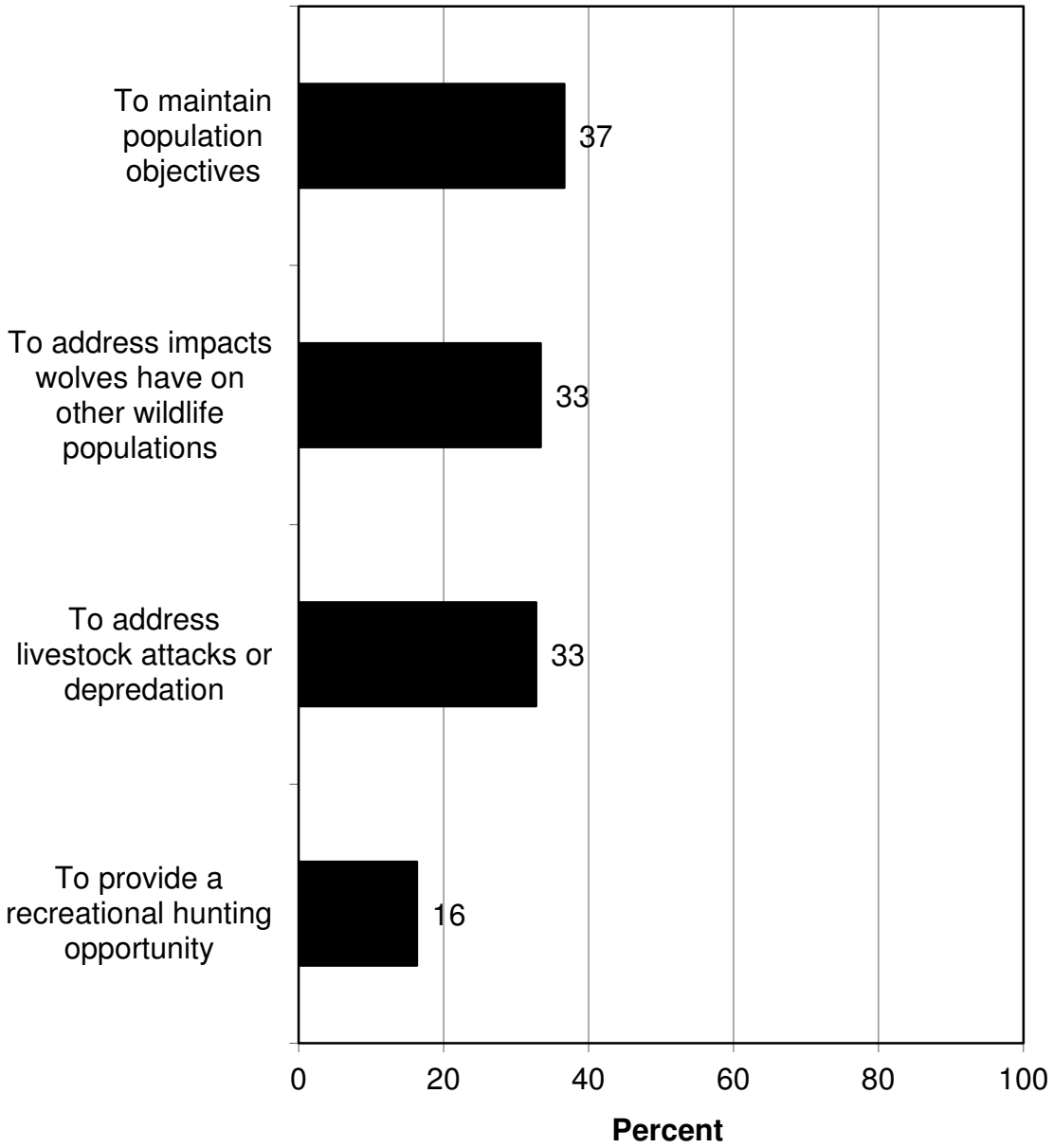


Q96. Are there any other reasons you oppose a regulated hunting season for wolves? Q97. What are those reasons? (Asked of those who opposed a regulated hunting season for wolves when wolves are fully recovered.)



Q84-Q87. Percent of respondents who would strongly support a regulated hunting season for wolves for each of the following reasons:



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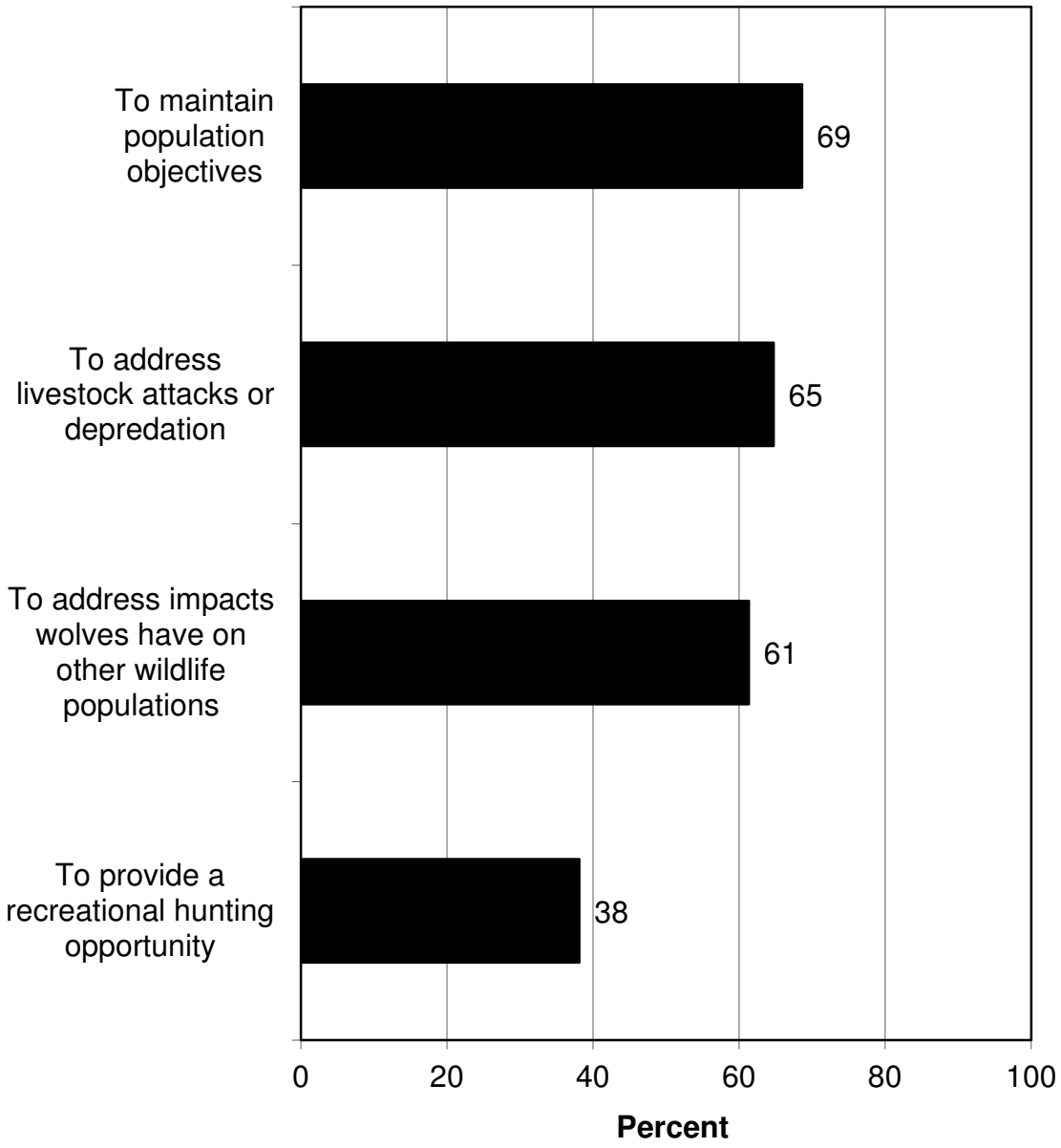

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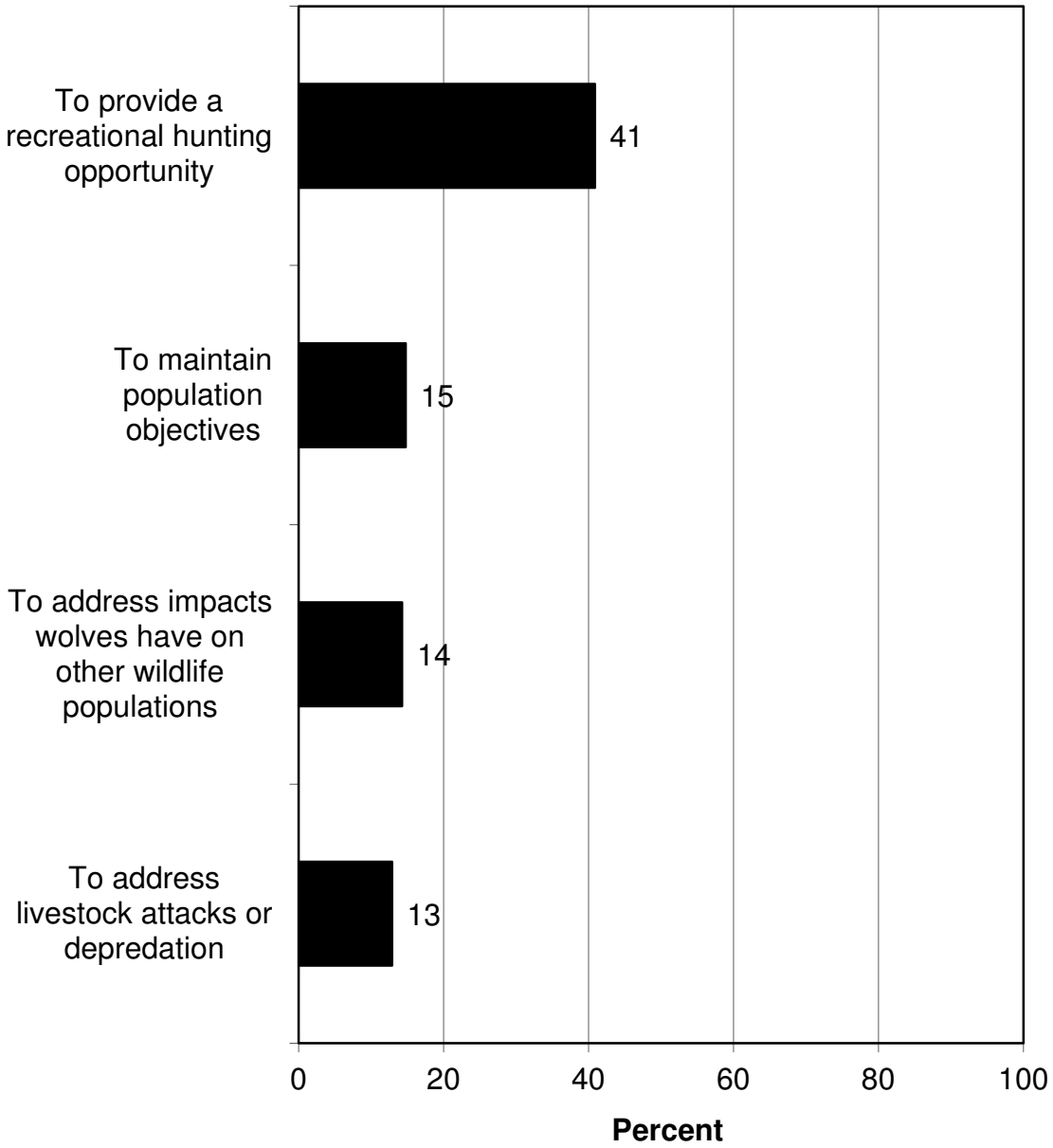

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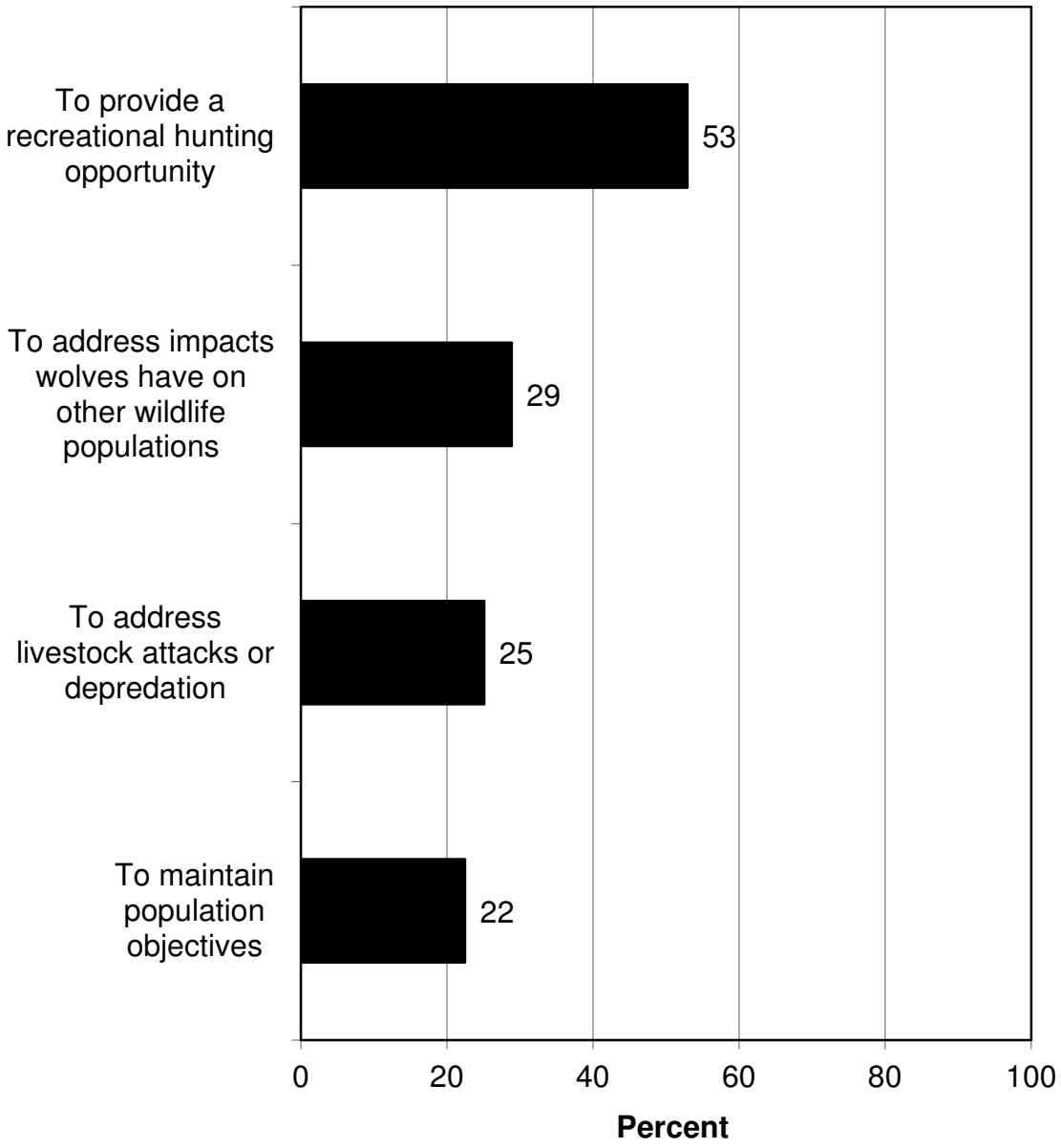

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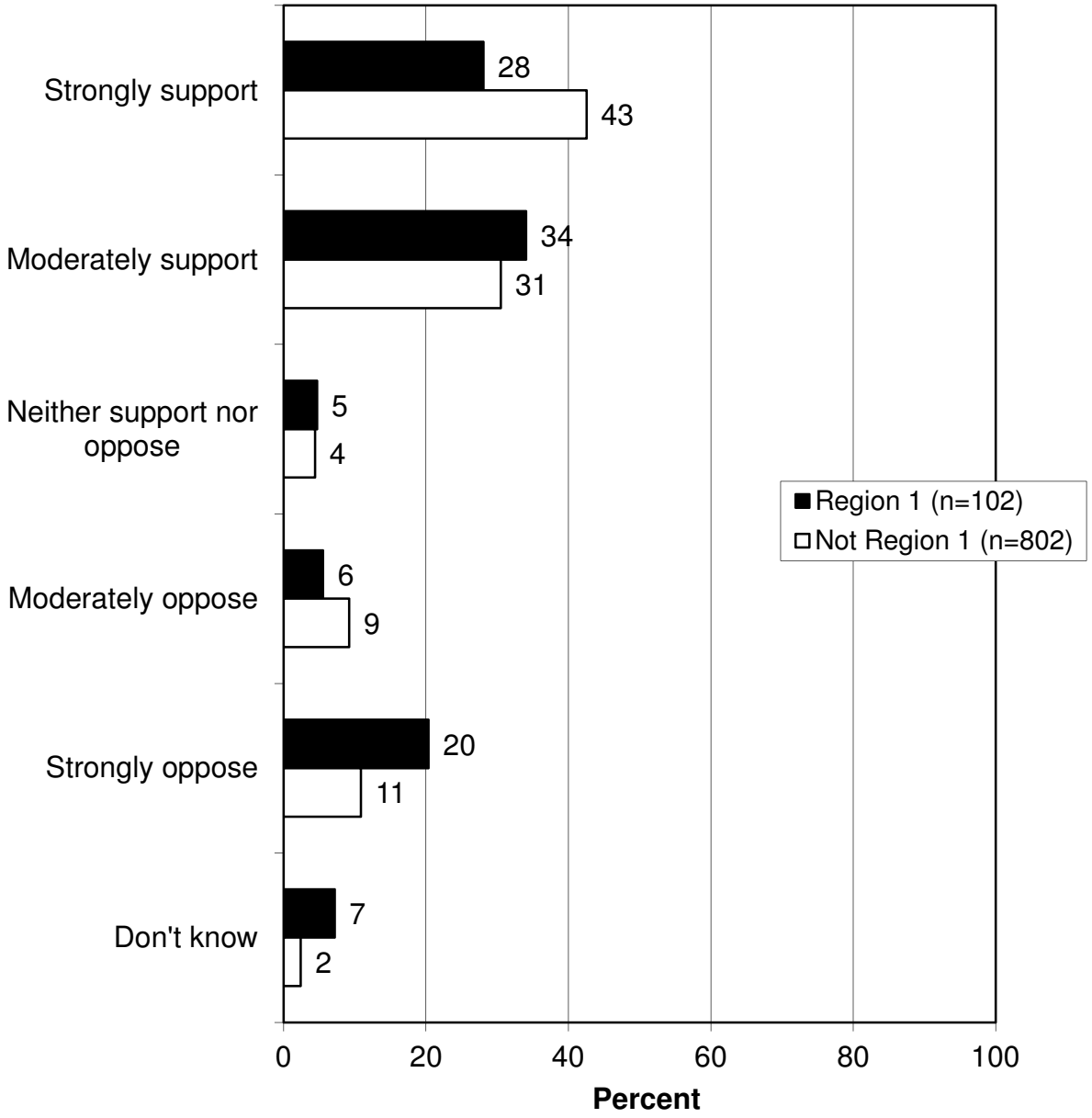

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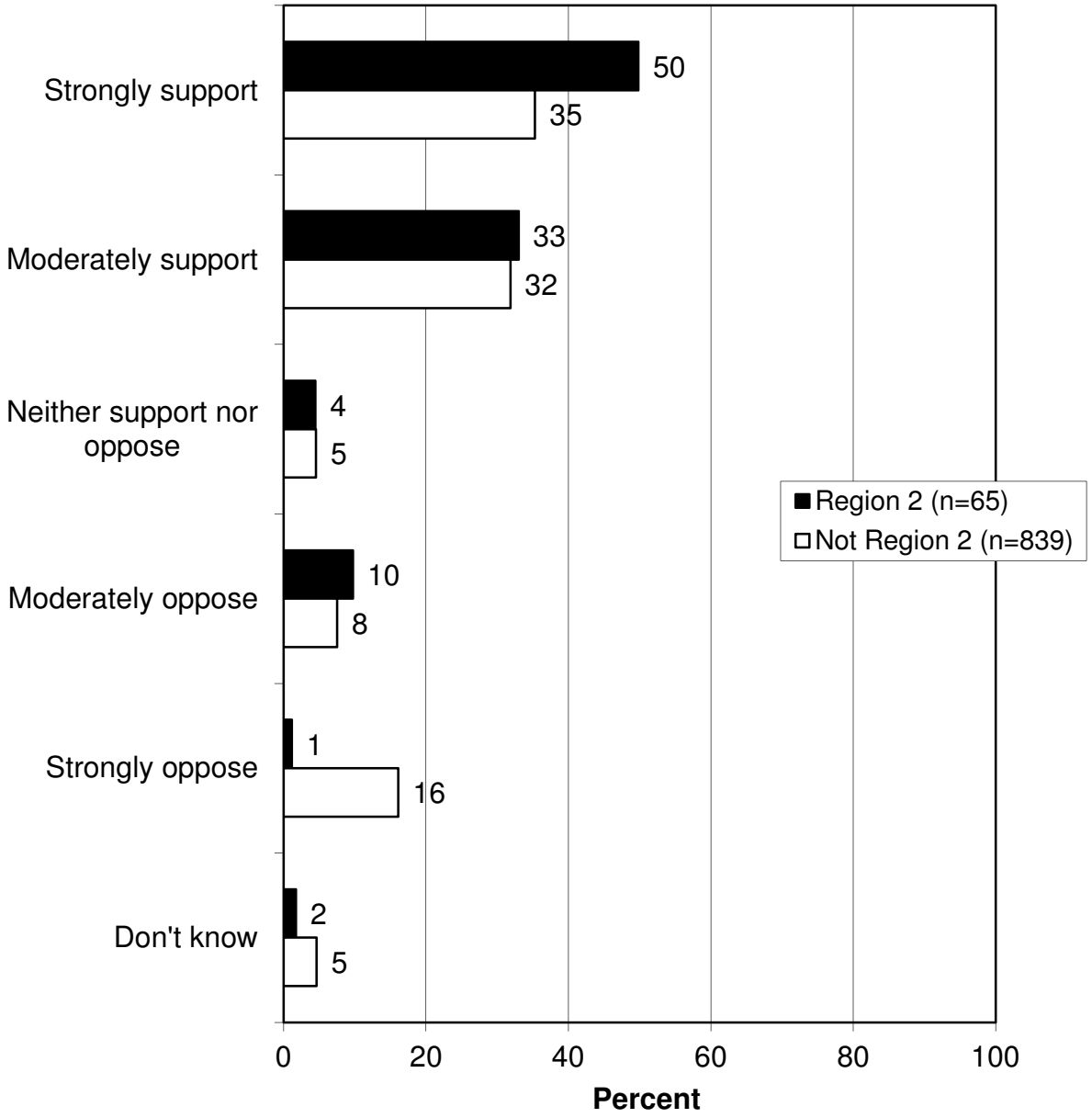

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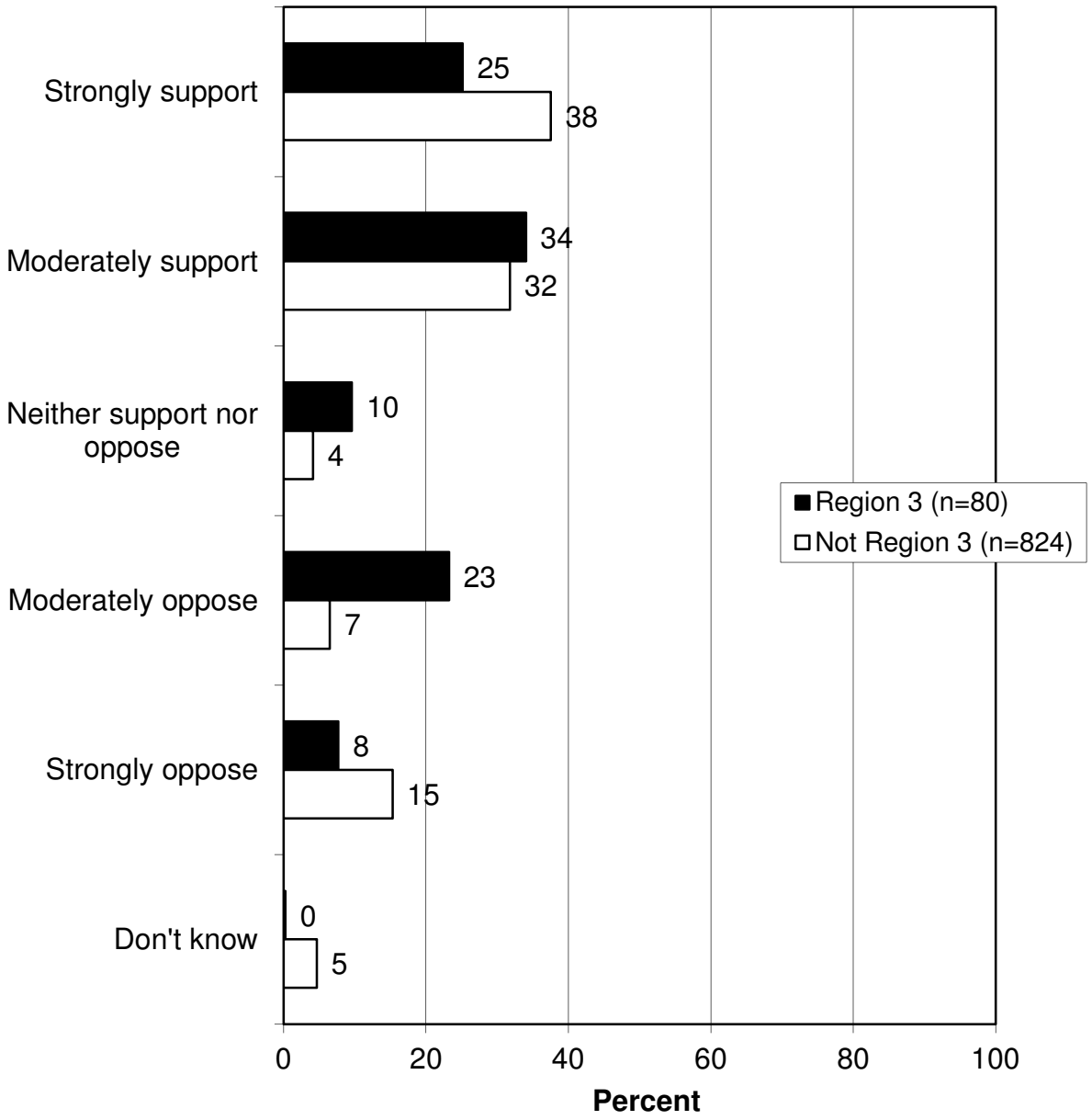

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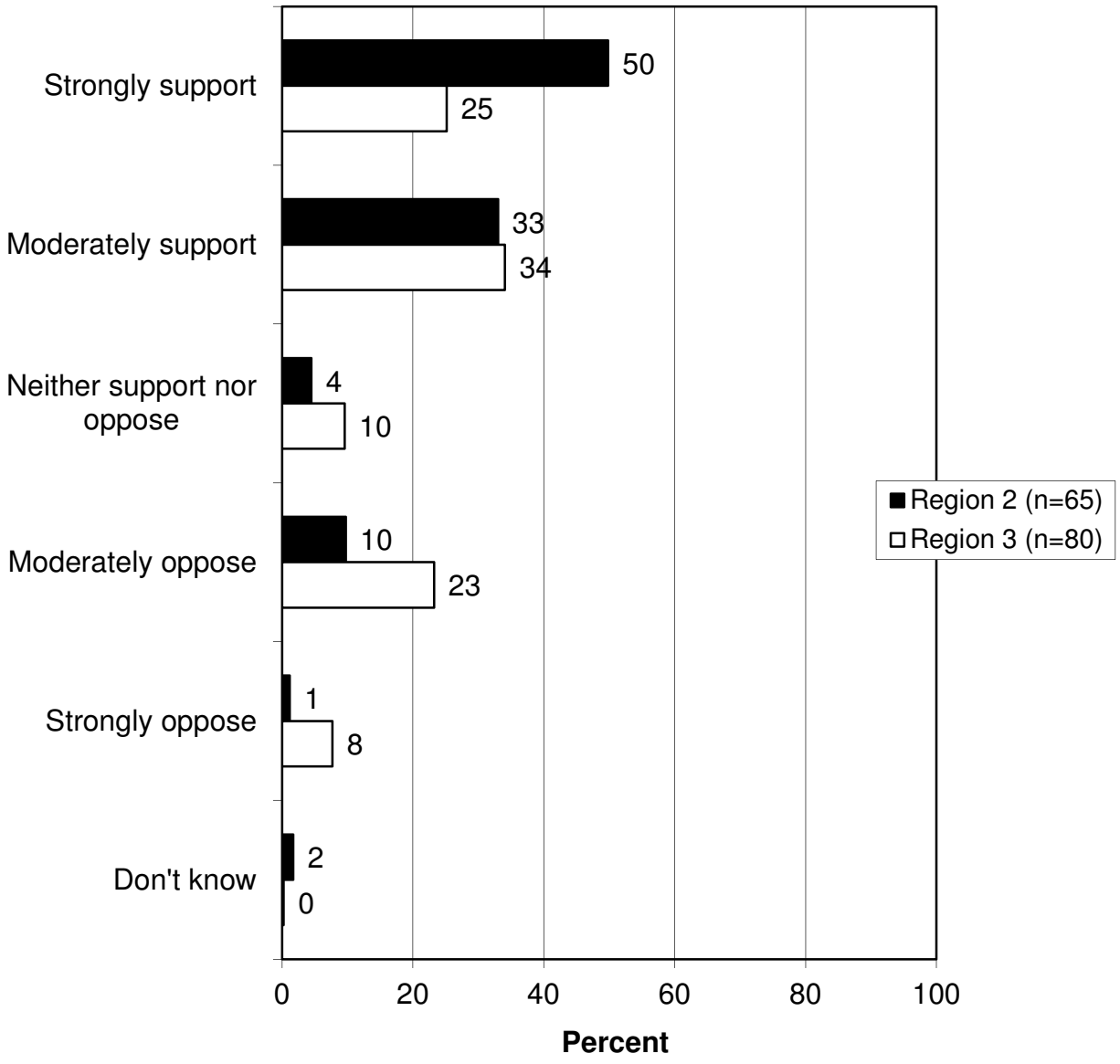
Q84. How about to maintain population objectives? (Would you support or oppose a regulated hunting season for wolves for this reason?)



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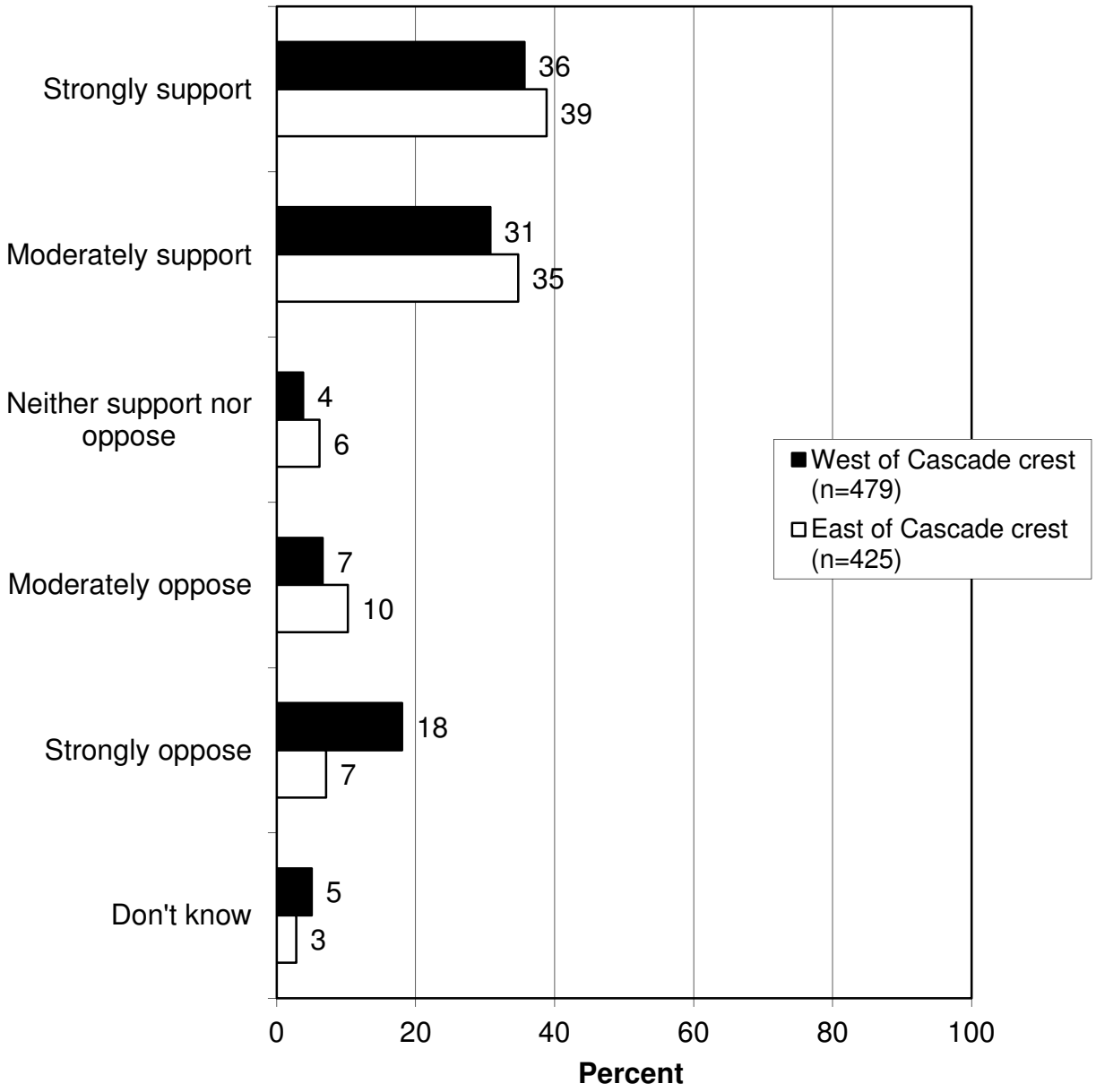
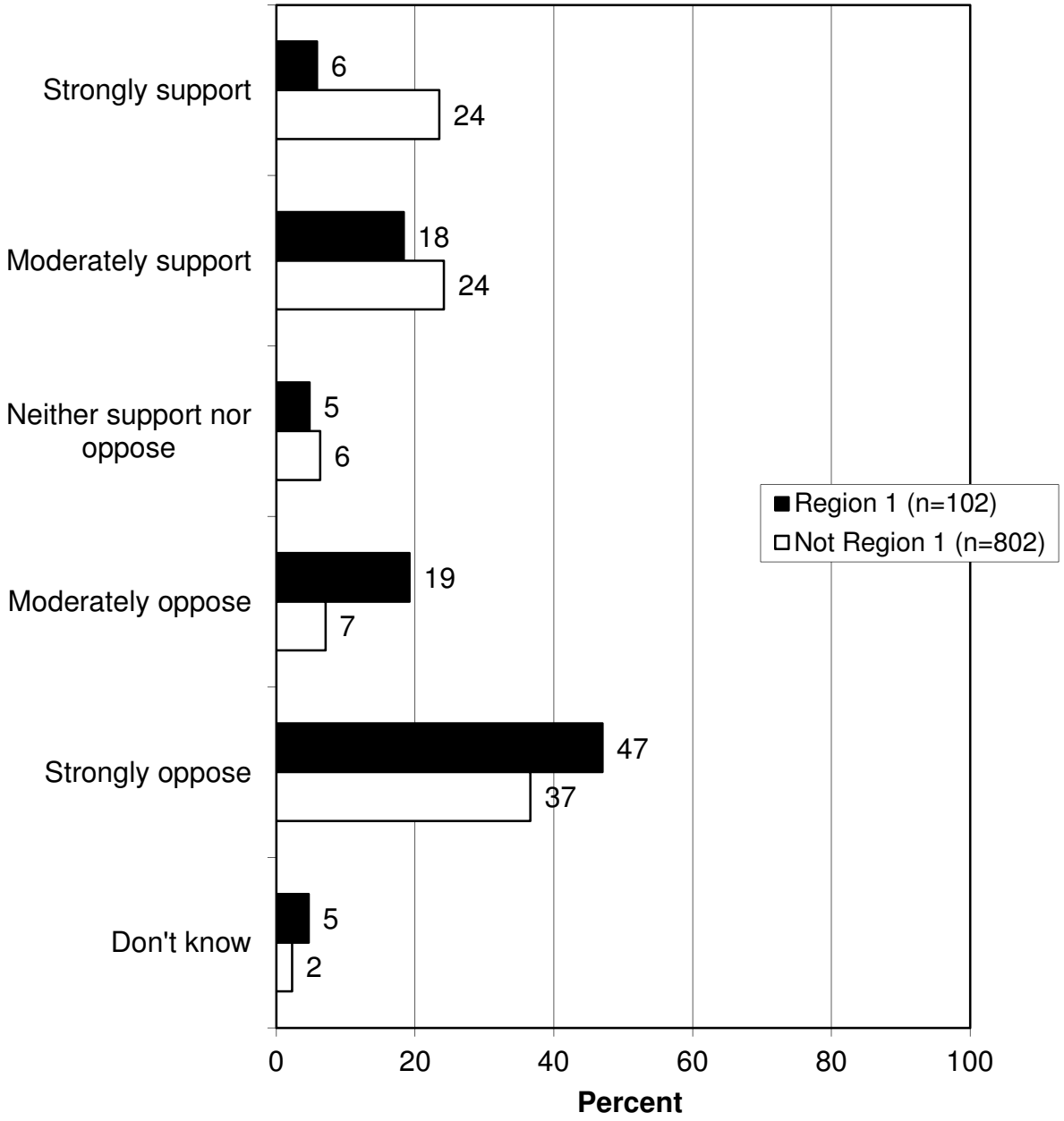


Region 1 consists of selected counties near the Puget Sound: Jefferson, Snohomish, King, Pierce, and Thurston.

Q85. How about to provide a recreational hunting opportunity? (Would you support or oppose a regulated hunting season for wolves for this reason?)



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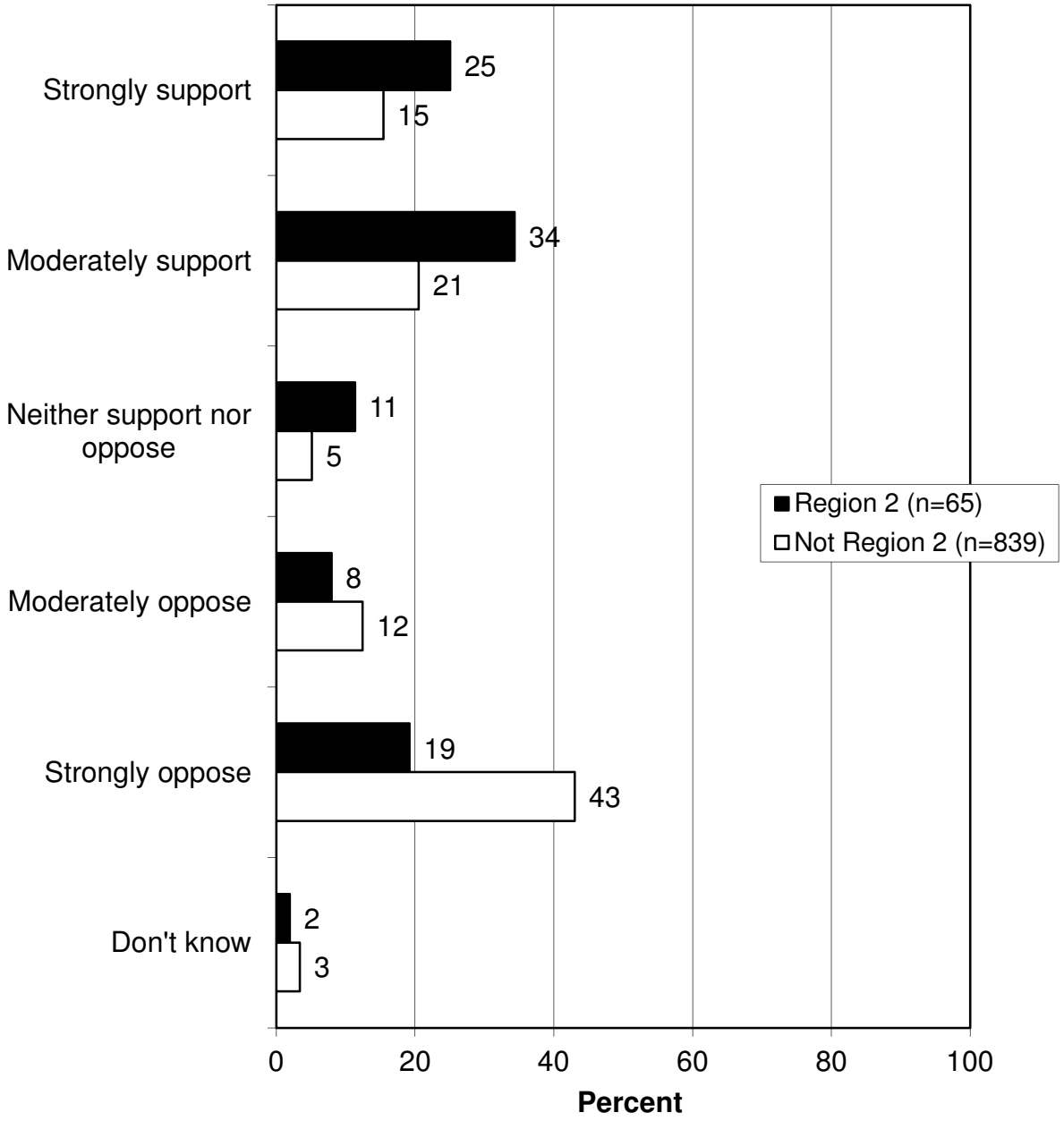

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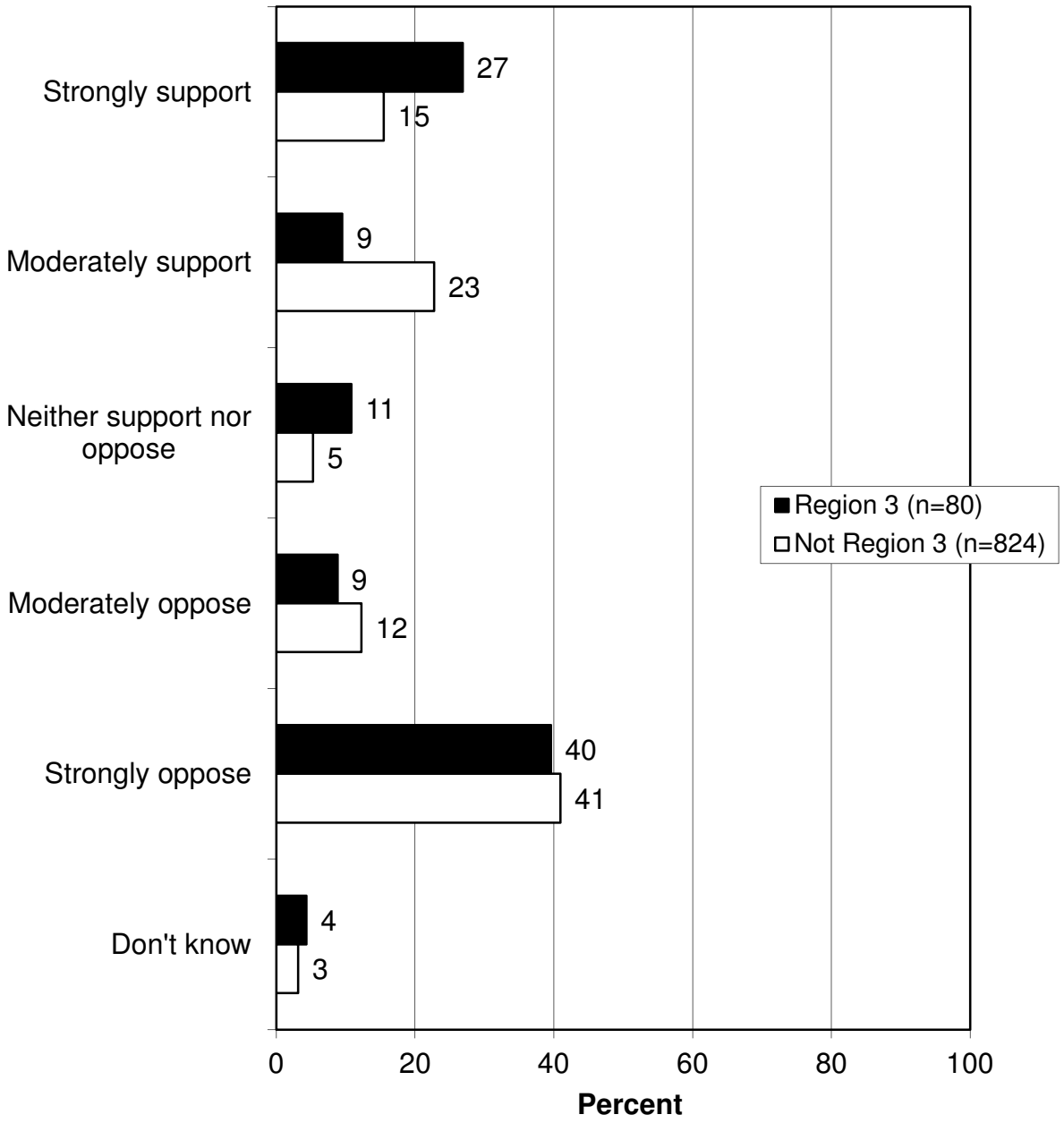

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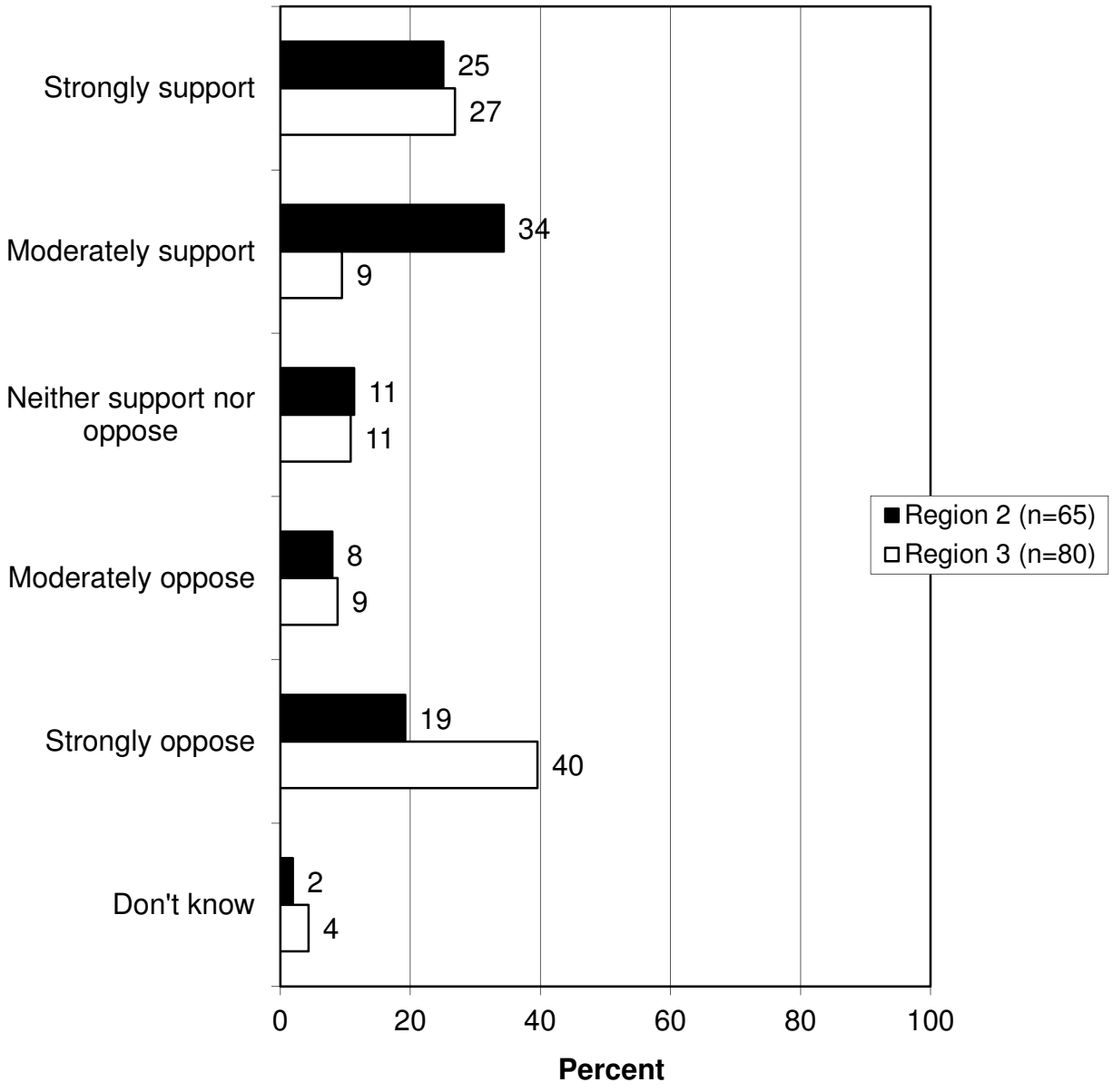

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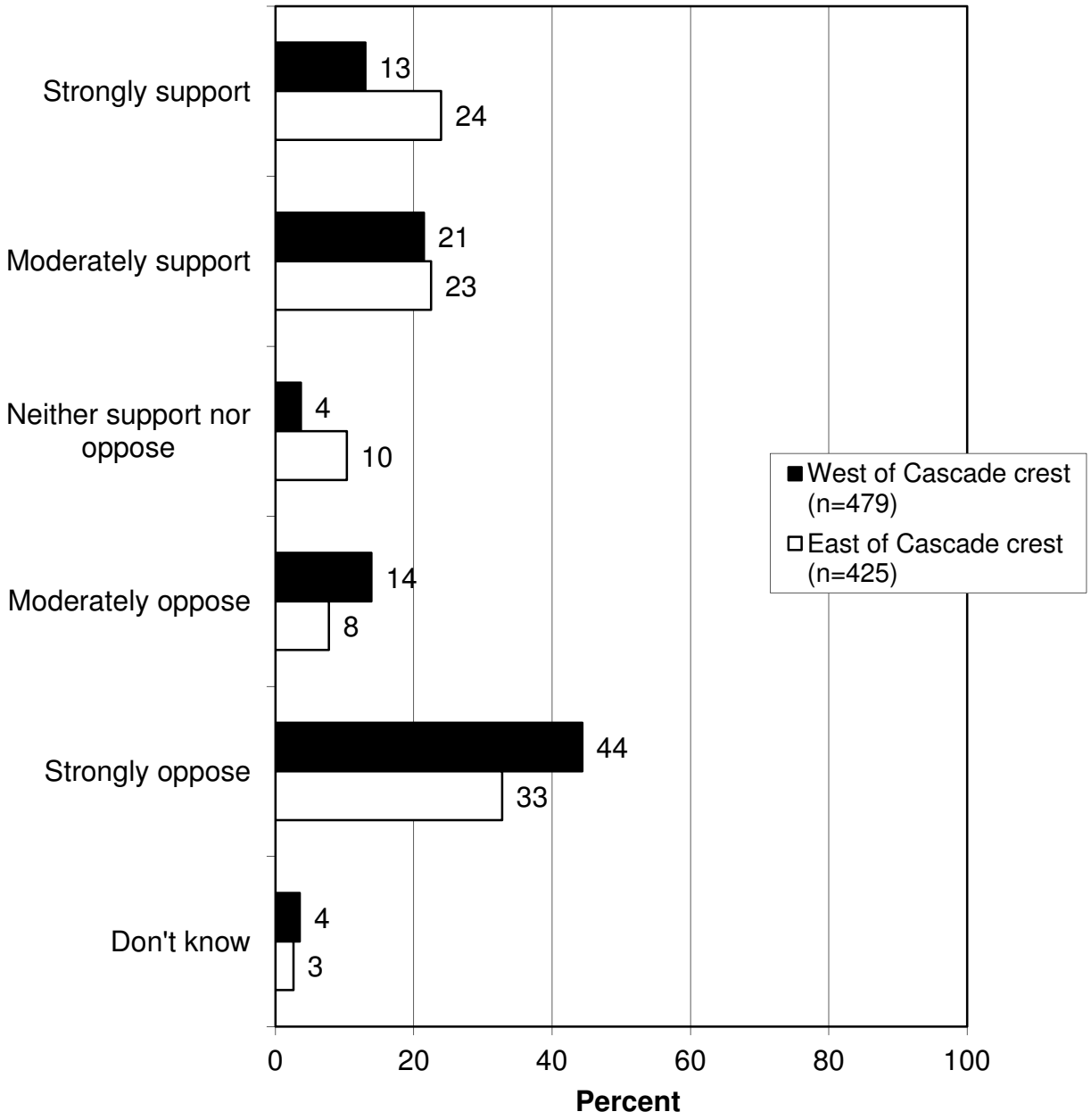

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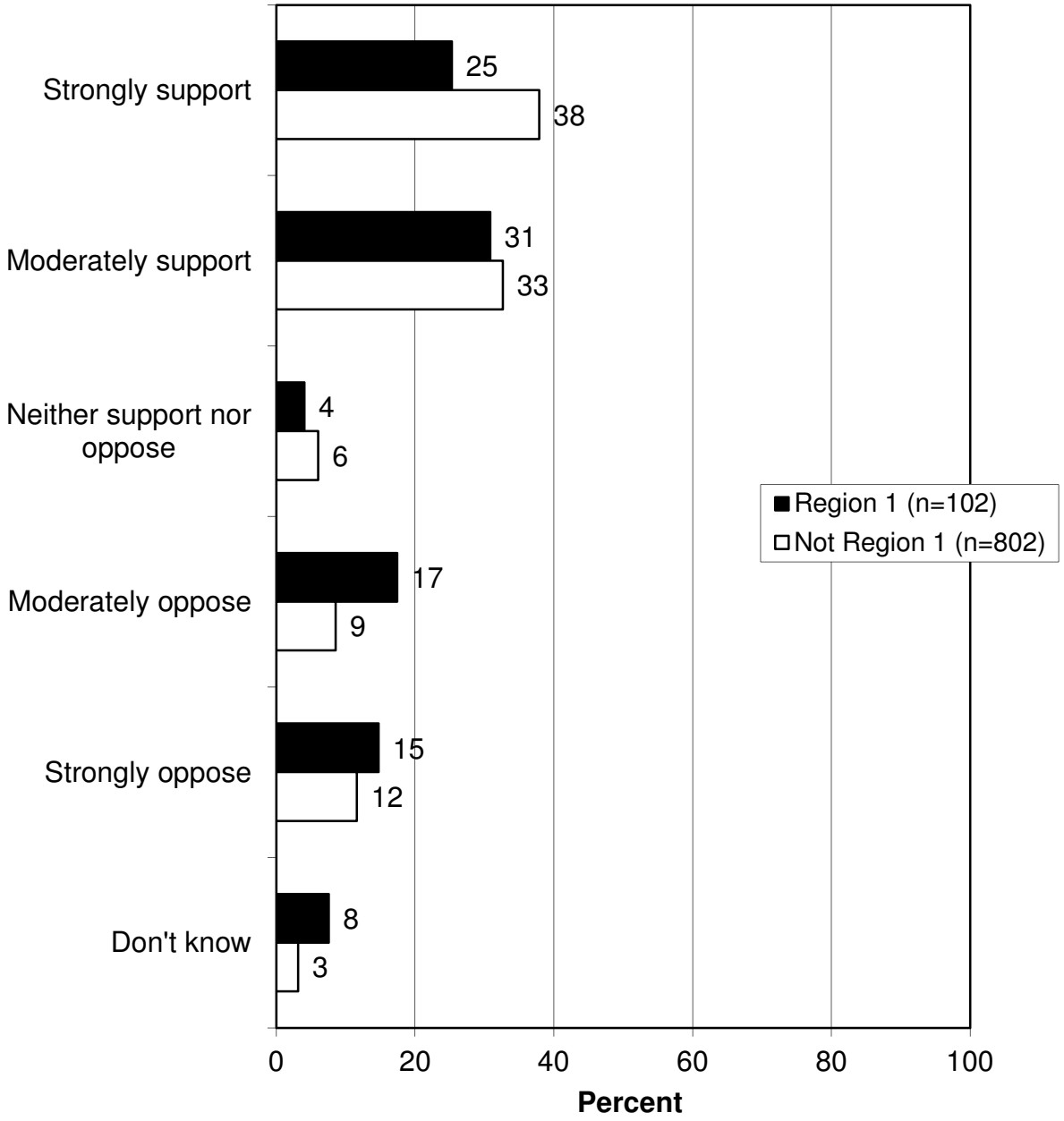

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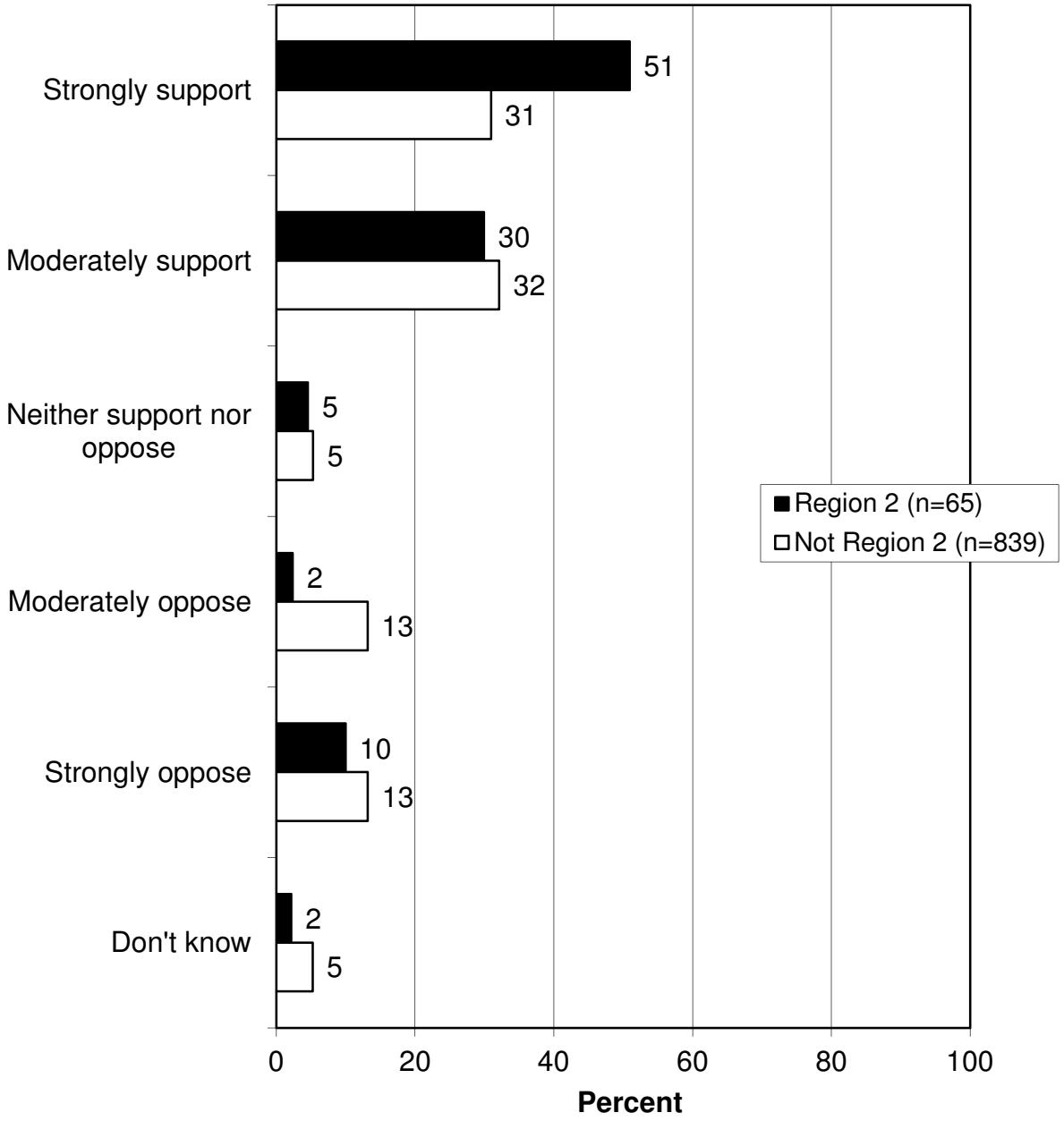

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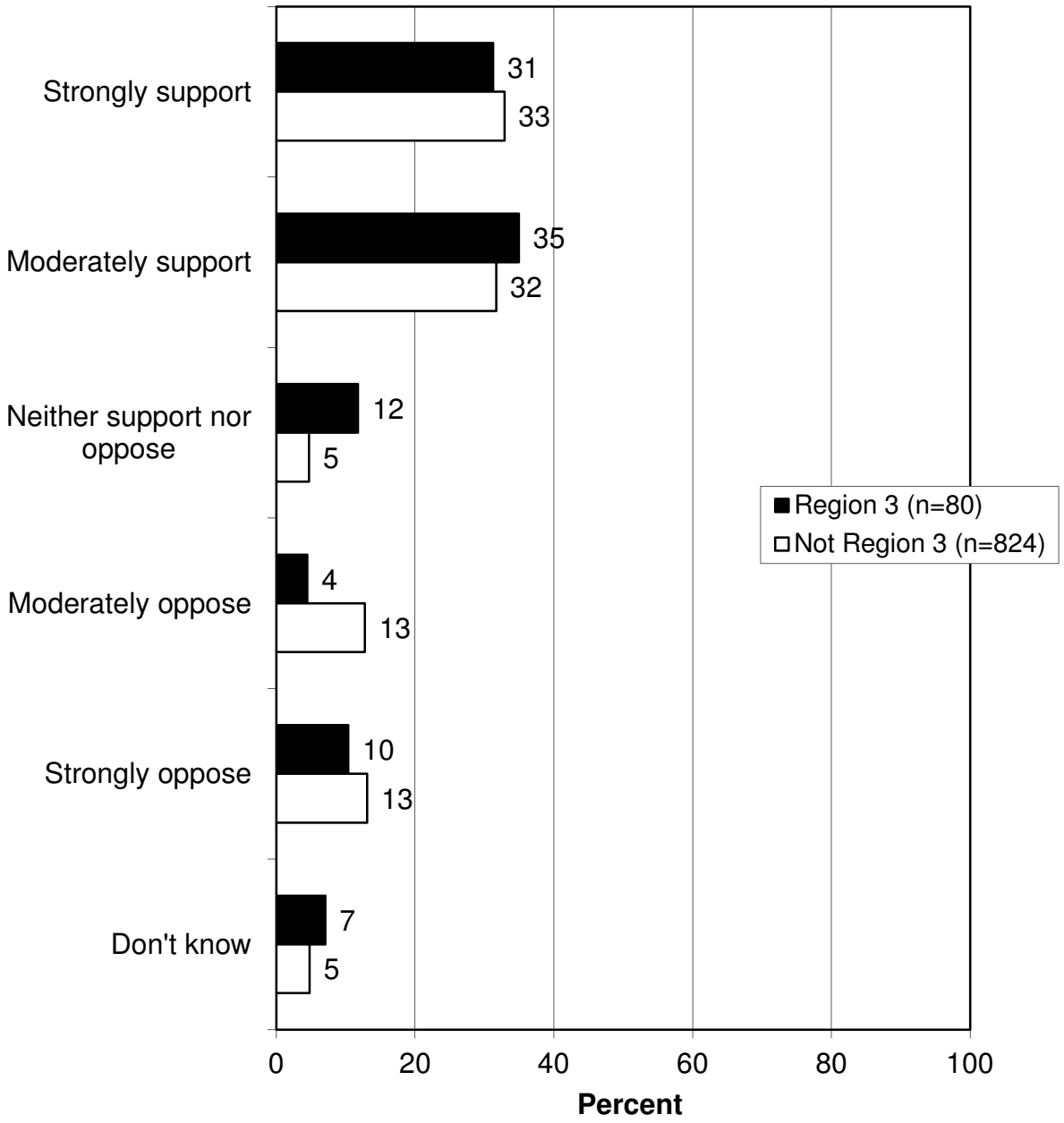

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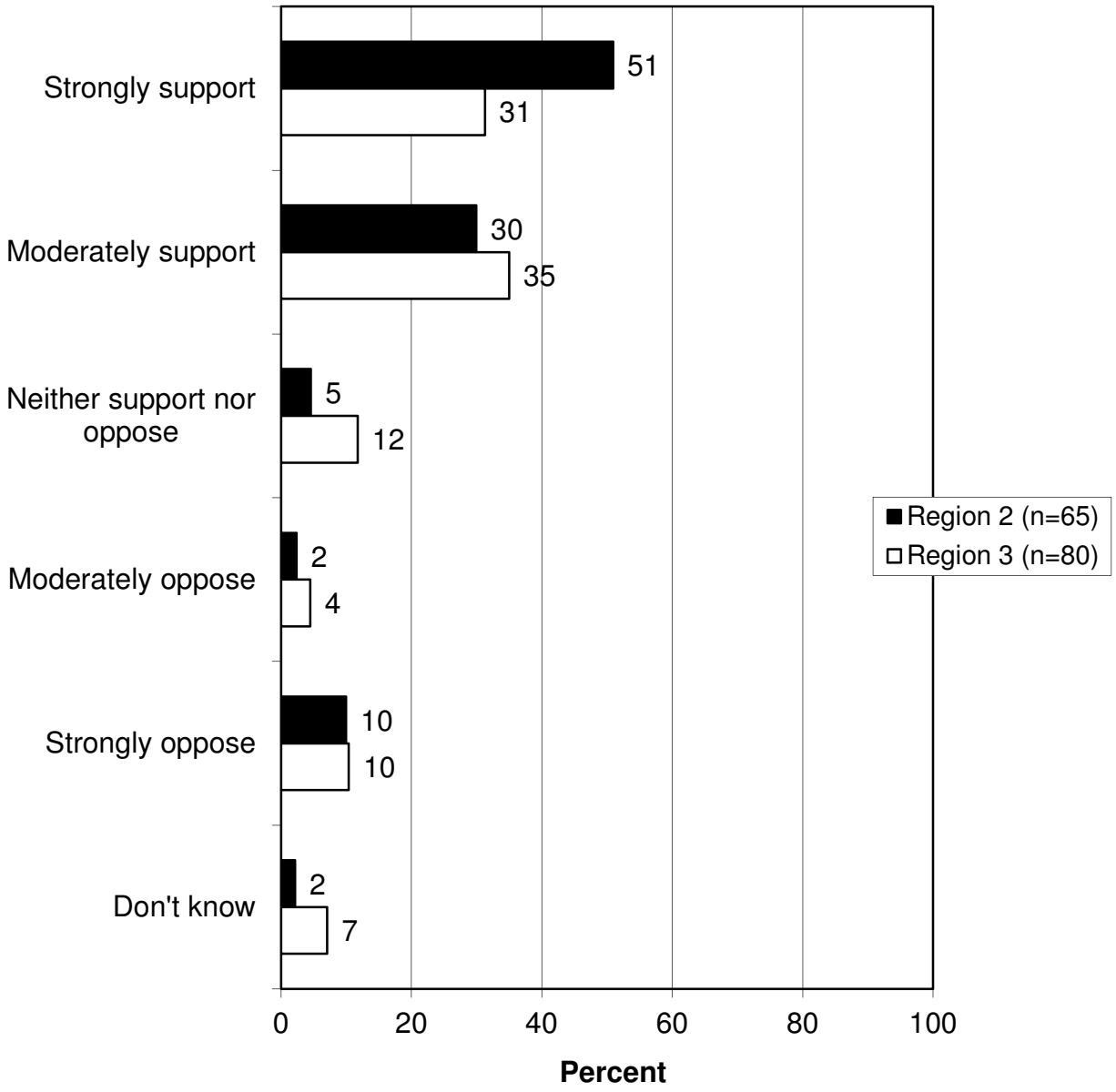

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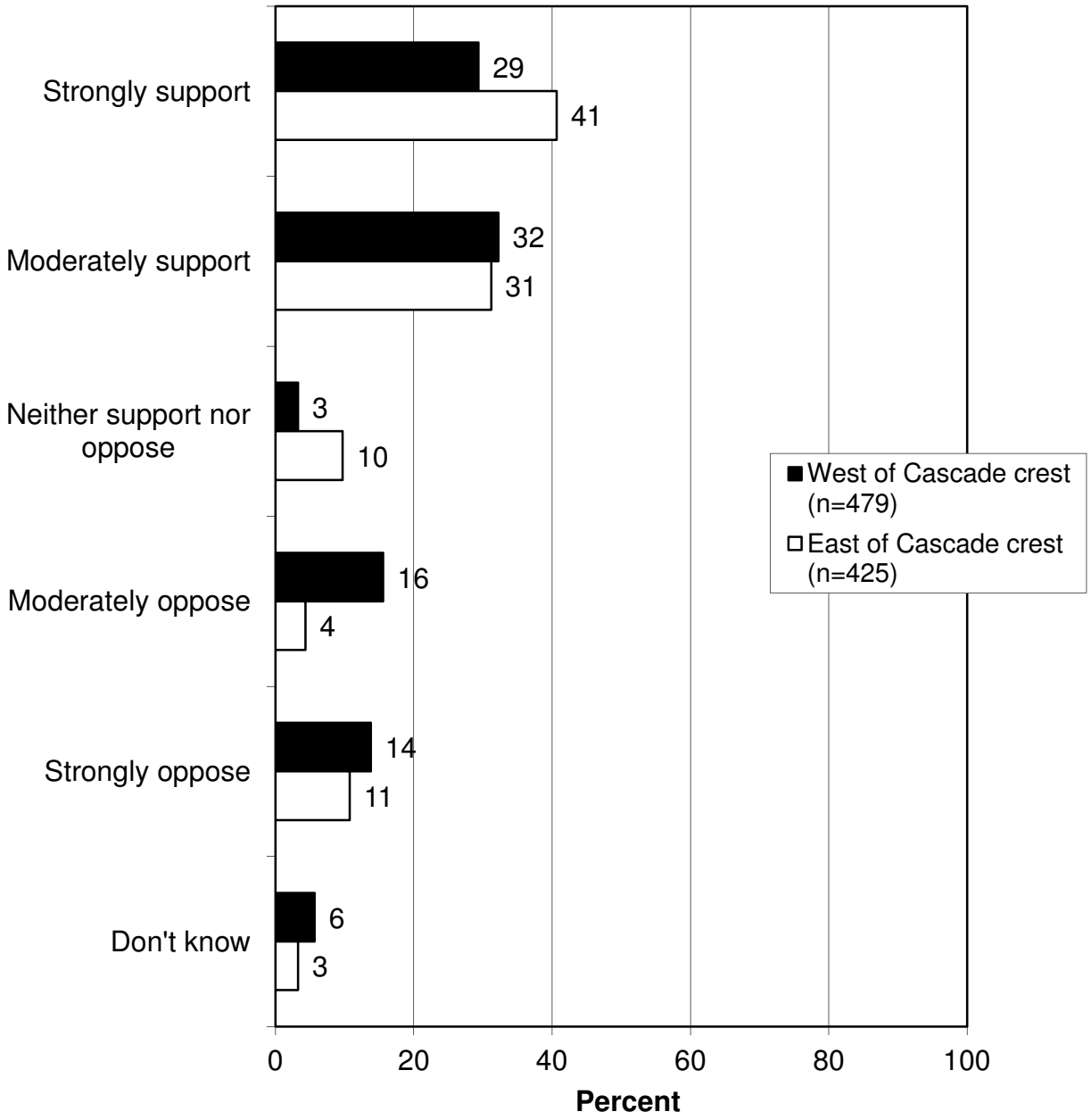

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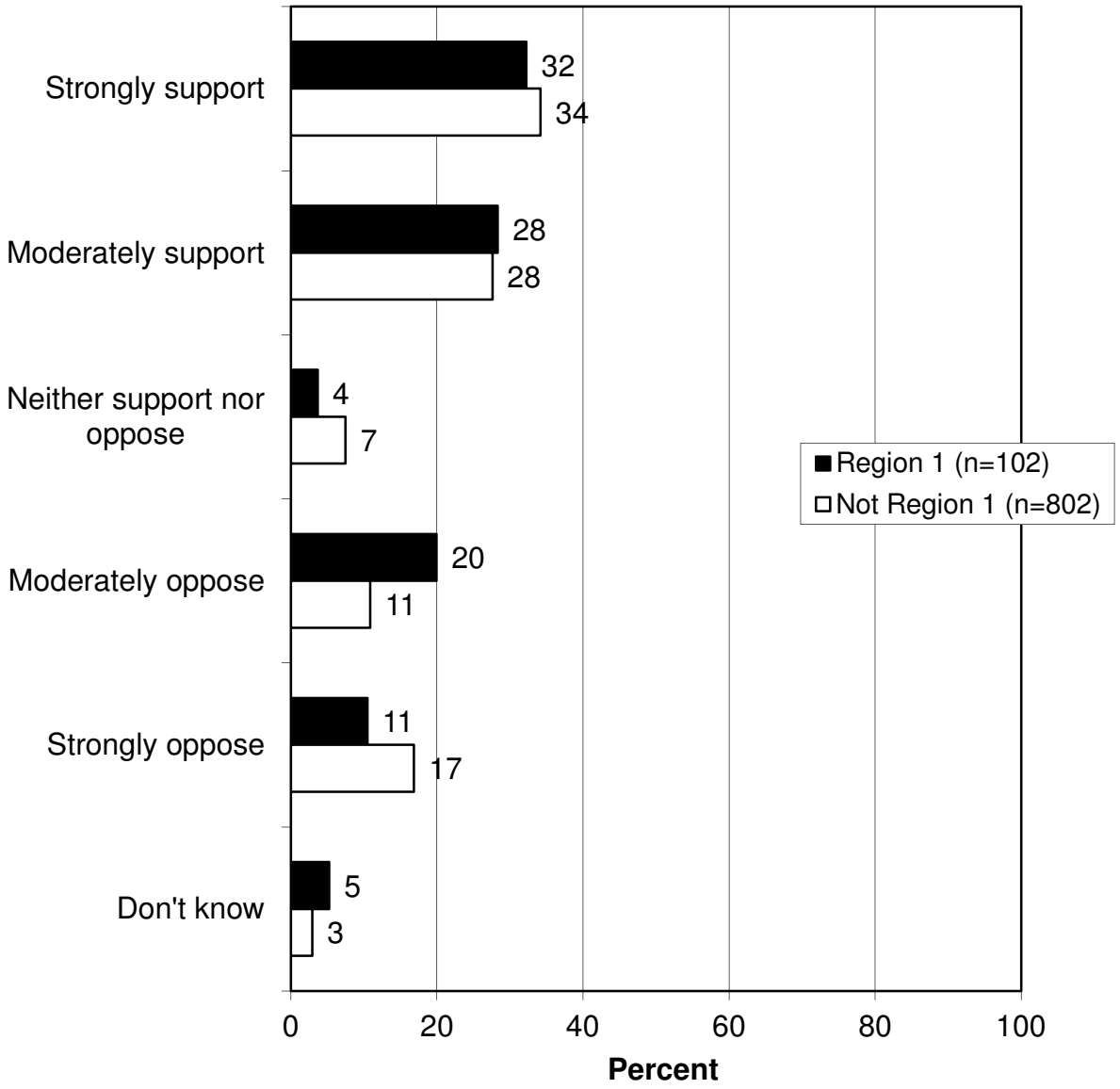

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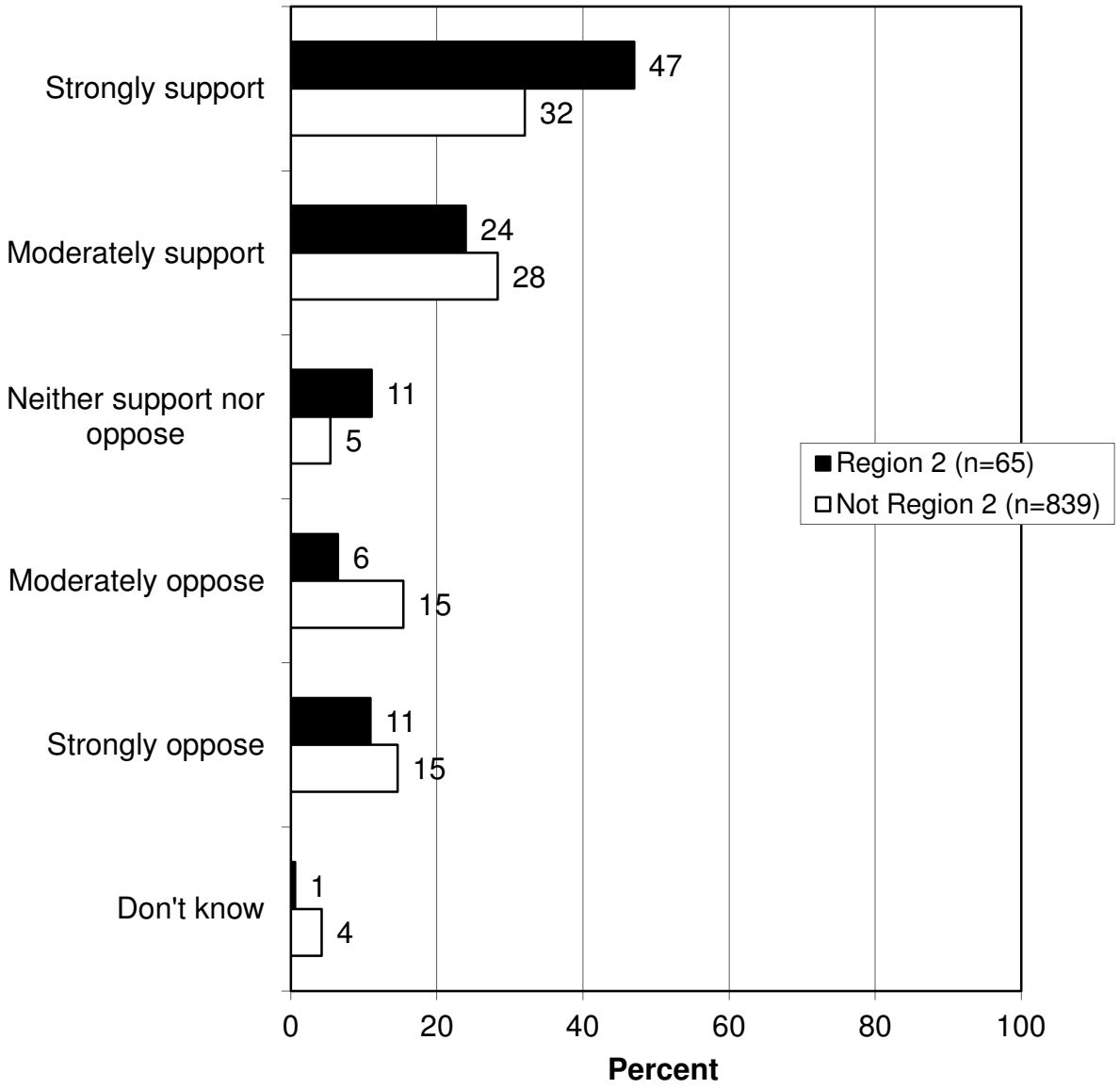

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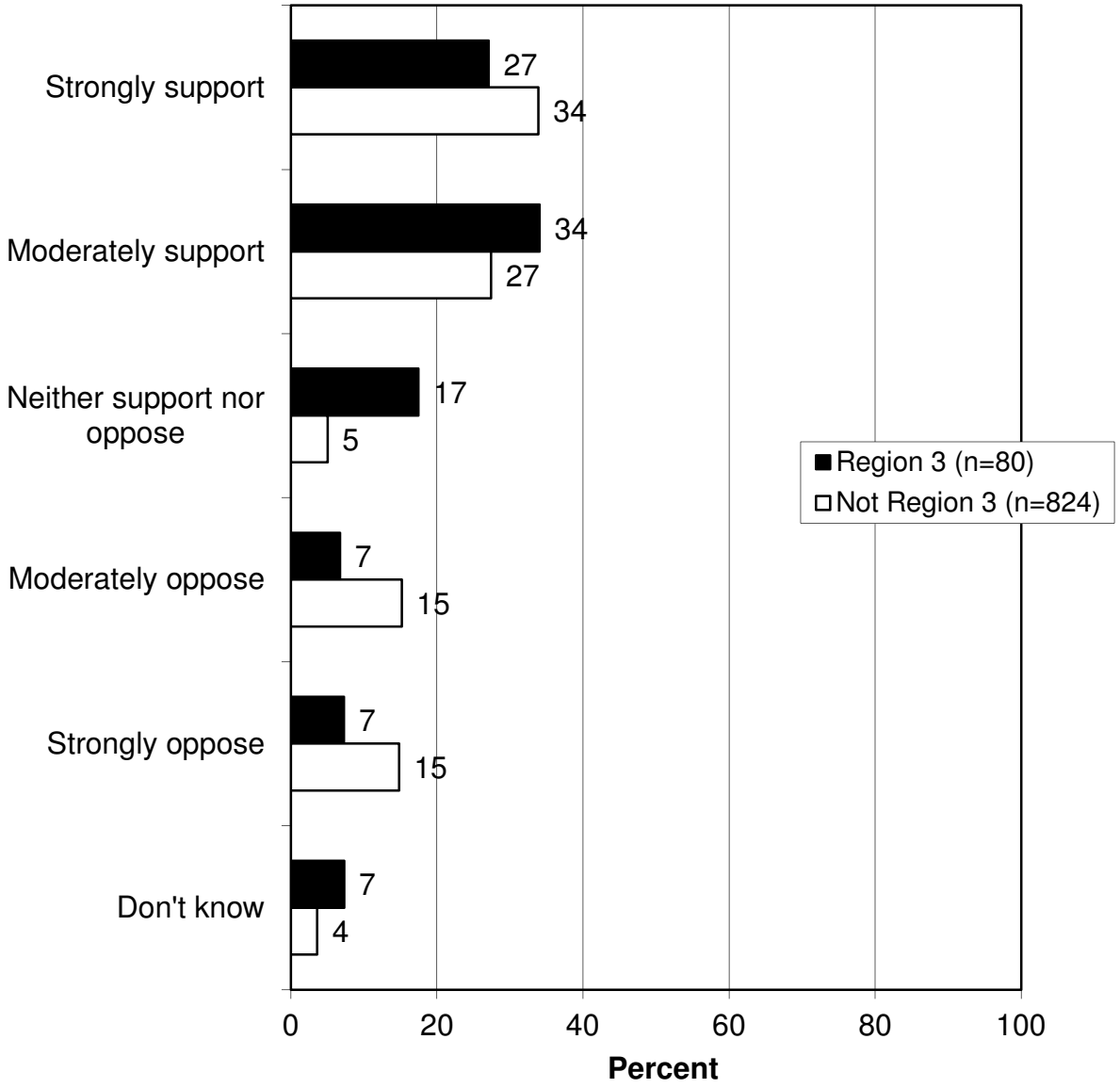

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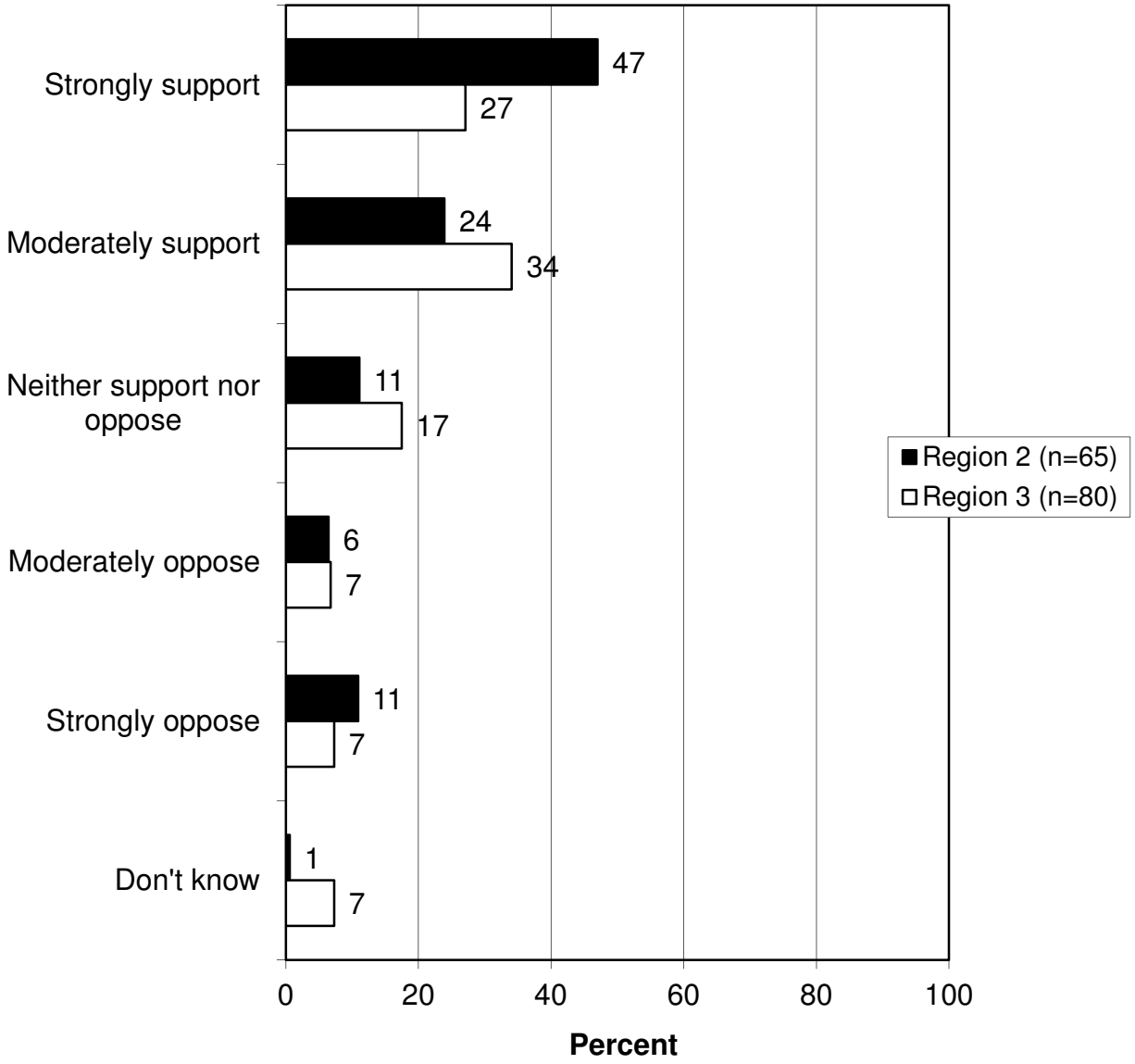

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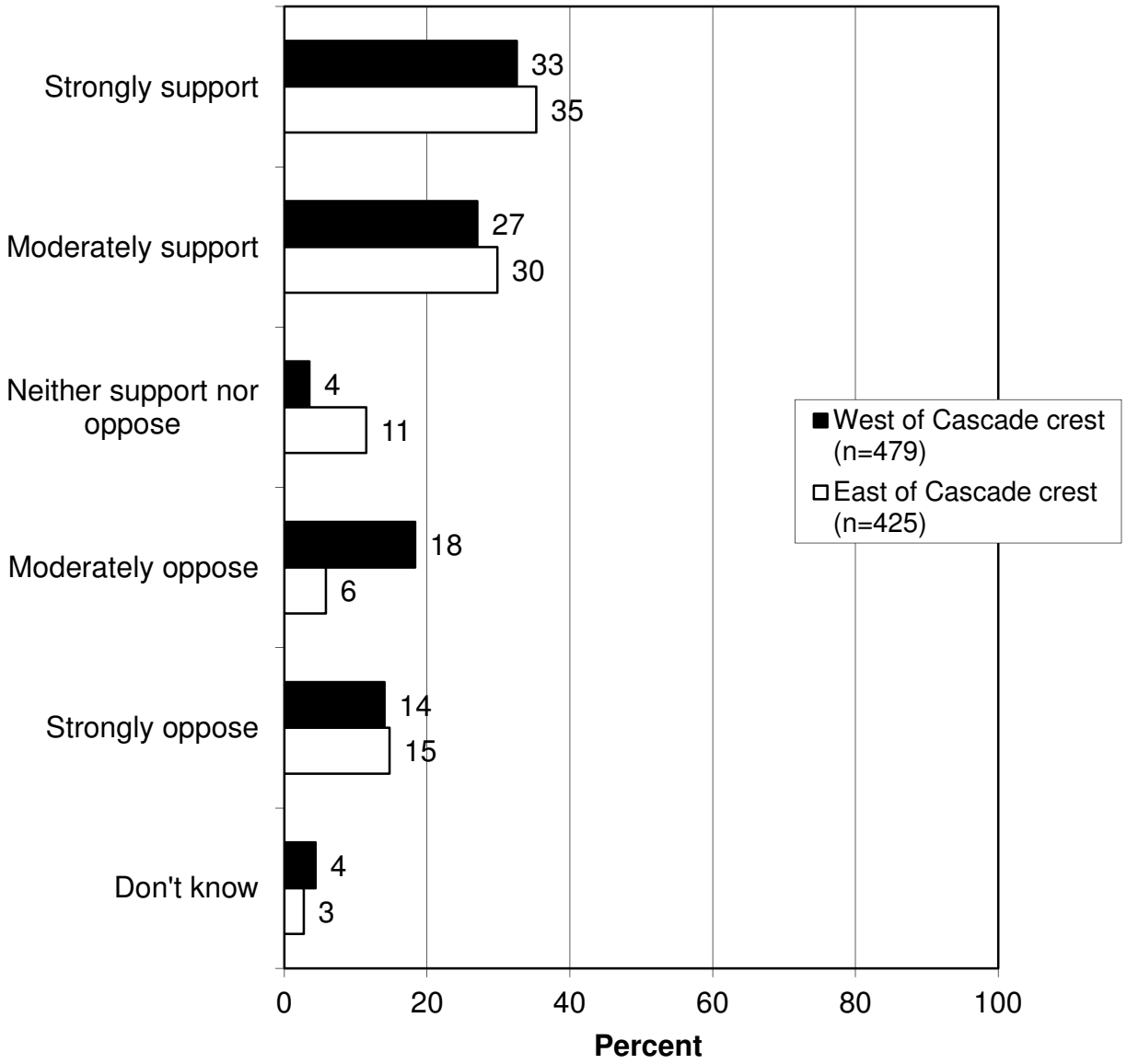


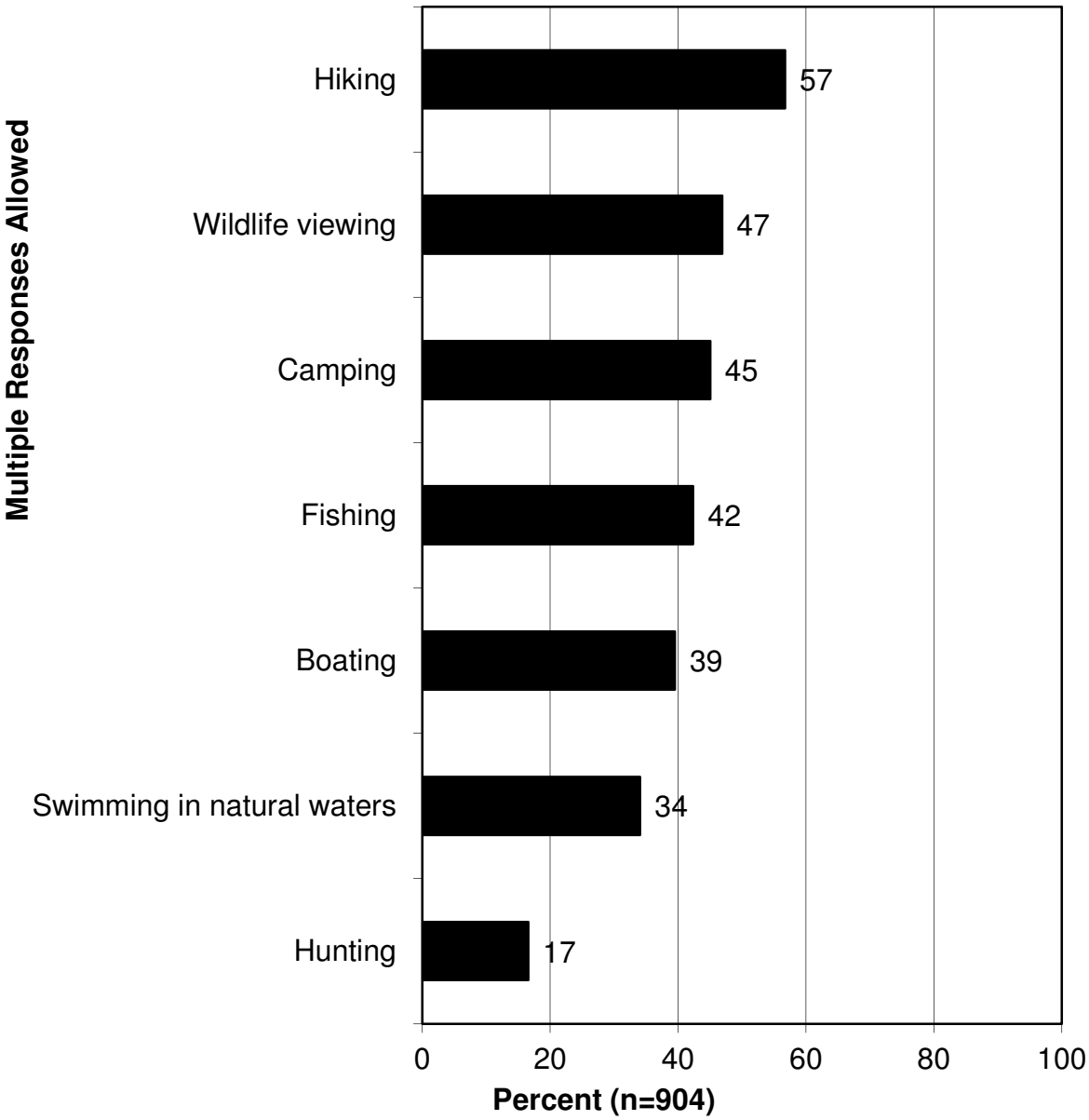
PARTICIPATION IN HUNTING AND OUTDOOR ACTIVITIES

- A little more than half of Washington residents have gone hiking in the past 2 years (57%), with wildlife viewing (47%), camping (45%), and fishing (42%) close behind in their participation rates. Rounding out the outdoor activities asked about are boating (39%), swimming in natural waters (34%), and hunting (17%).

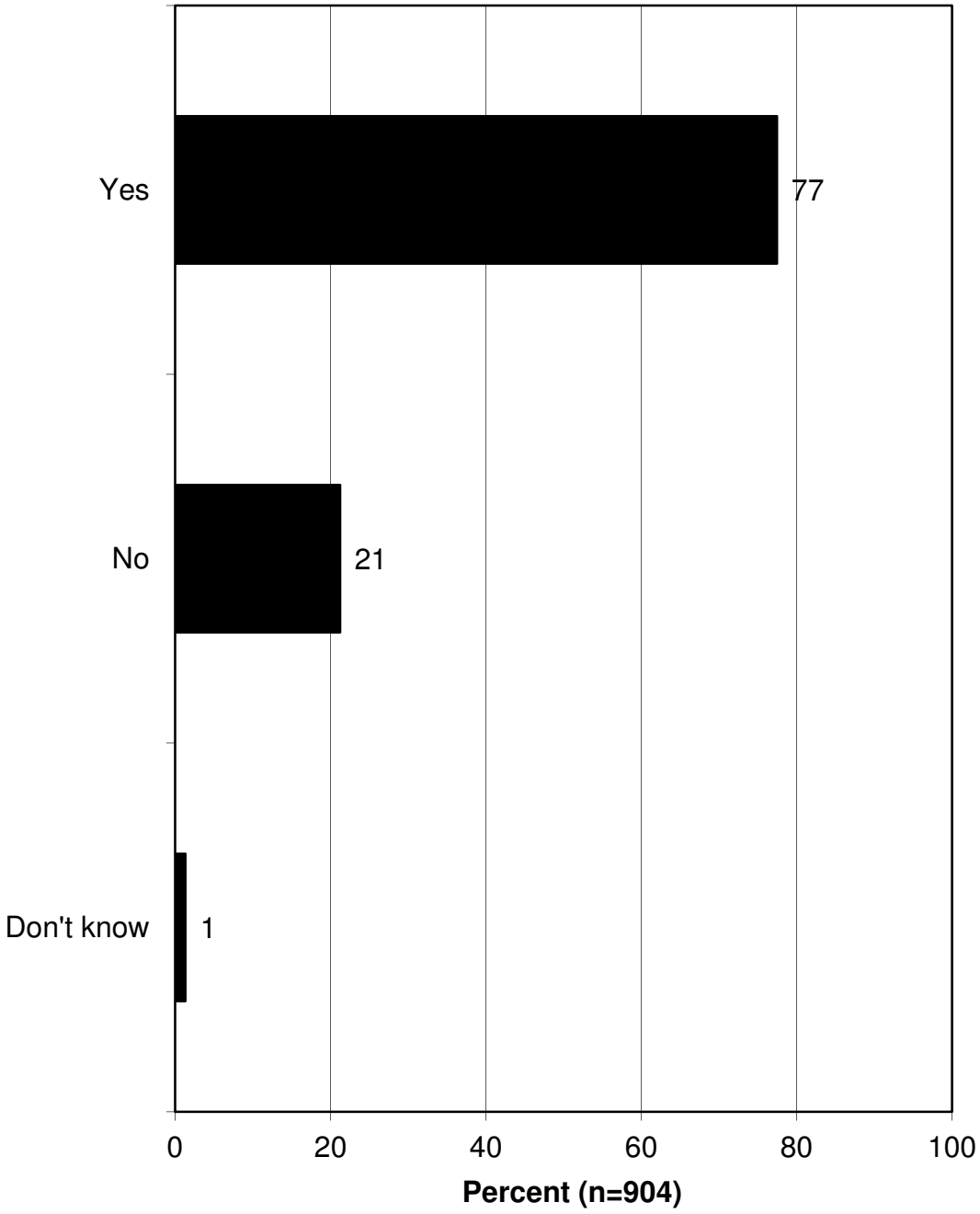
- About three quarters of Washington residents (77%) indicate having participated in outdoor recreation on state-owned land in the past 2 years.

- Some additional questions were asked about hunting.
  - About a third of Washington residents (35%) say that they have gone hunting at some time in their lives. (The question did not define hunting strictly as physically carrying a firearm or bow, so those who have accompanied others may have answered yes to this question. This could slightly raise the actual rate over a more restrictive definition of participation in hunting.)
  - Among those who had been hunting in Washington, 81% of them indicate having purchased a hunting license in Washington at some time.
  - The most popular species to hunt, by far, are white-tailed deer, elk, and mule deer. Nonetheless, substantial percentages hunt for black bear, waterfowl, and various game birds.
  - About a fifth of Washington residents have hunted outside of Washington at some time in their lives.
  - Those who have *never* hunted in Washington were asked to indicate why they had not done so. Obviously, many people are simply not interested, but other constraints named include a belief against killing animals, having nobody to go with, or lack of time. Some indicated having just recently moved to the state, as well.
  - A final question about hunting asked residents to indicate where they fell within hunting categories, with one category being a non-hunter. About half of residents indicate not being a hunter and being unlikely to ever be a hunter (48% said this best defined them). Another 13% indicate not being a hunter but say they might consider becoming one. At the other end, 20% consider themselves to be a current hunter, while 13% say that they hunted in the past but no longer do so.

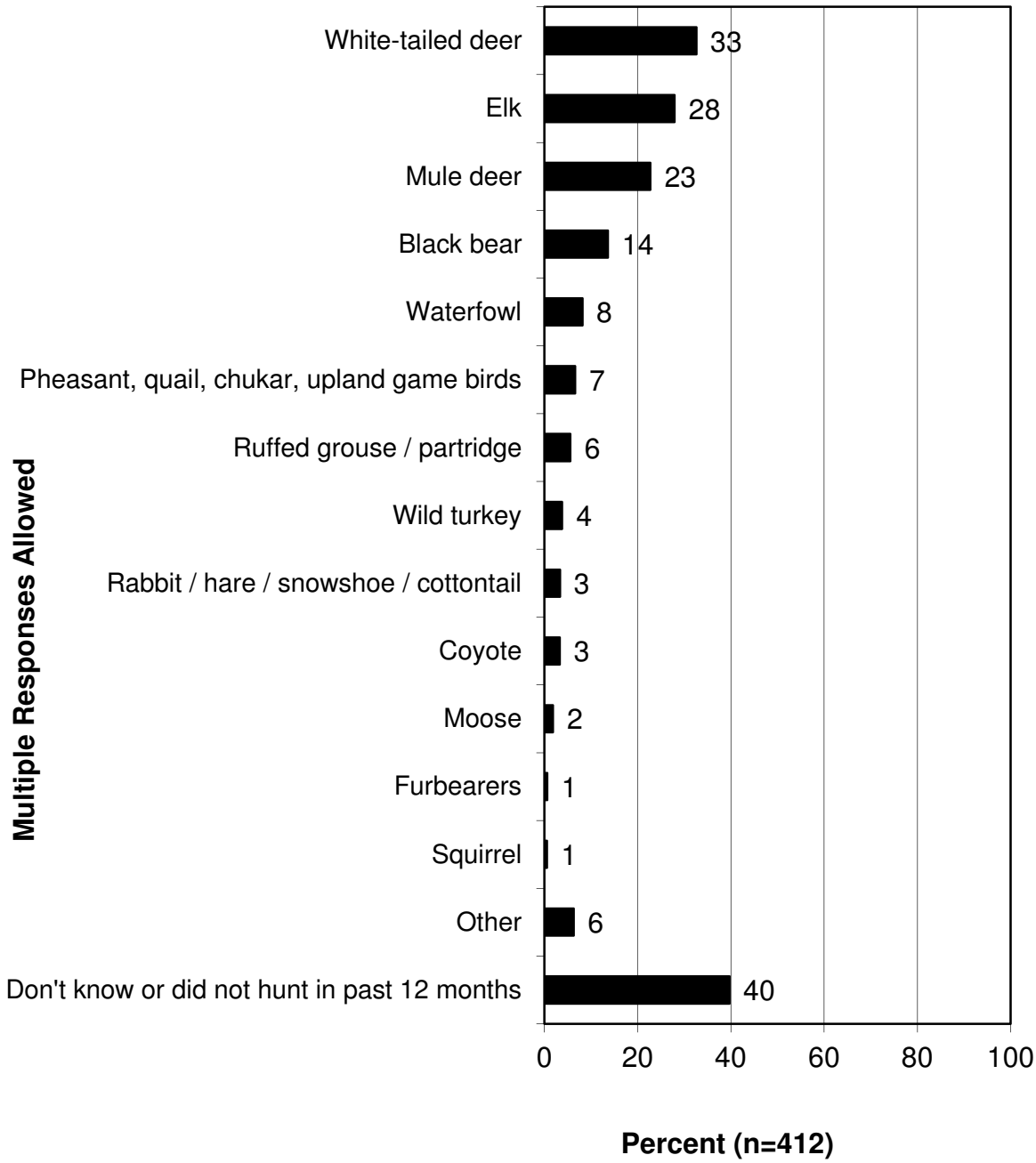
Q10. In the past 2 years in Washington, have you participated in any of these outdoor recreation activities?



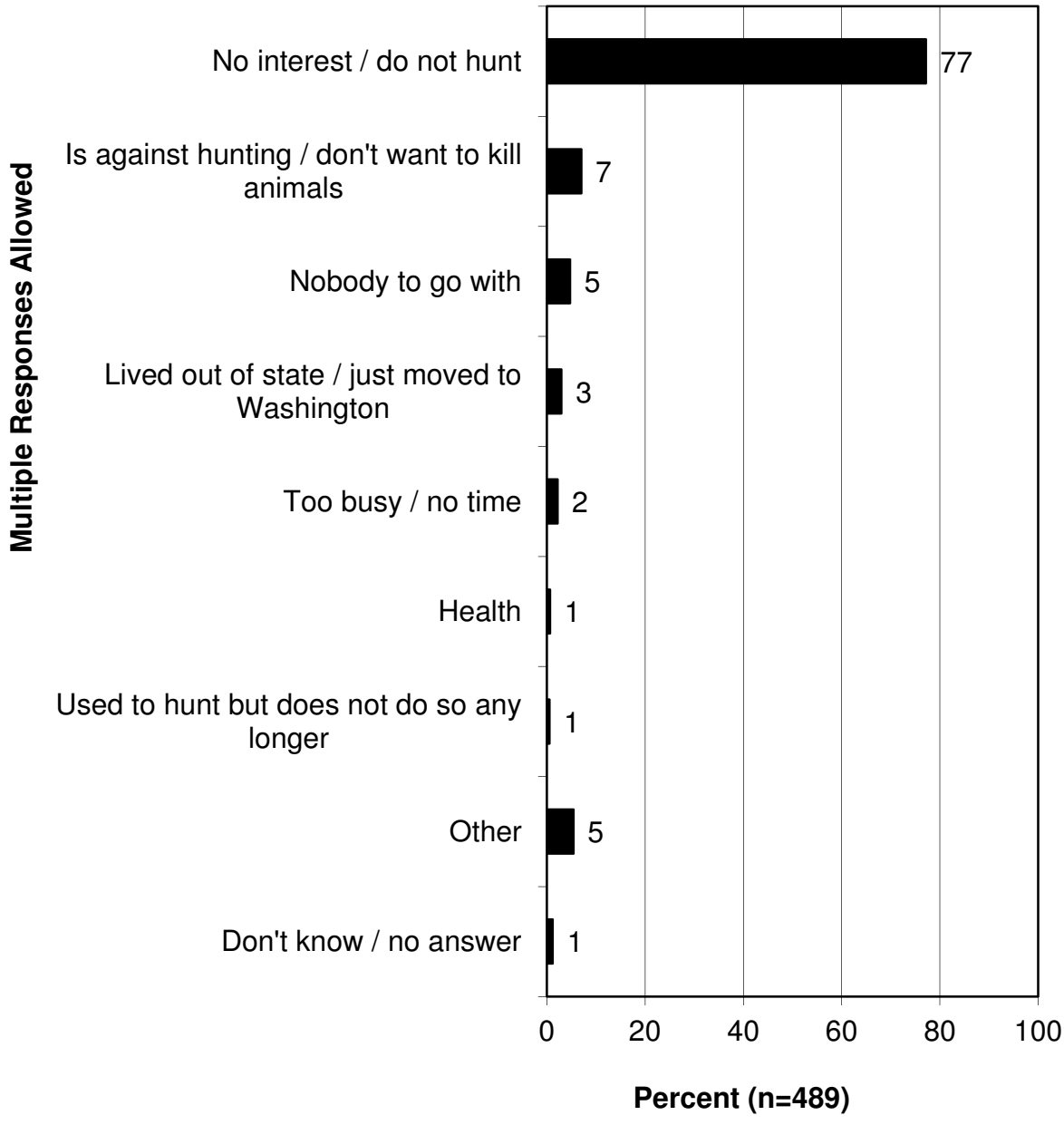
Q112. Have you participated in any outdoor recreation activities on state-owned land or property in Washington in the past 2 years?



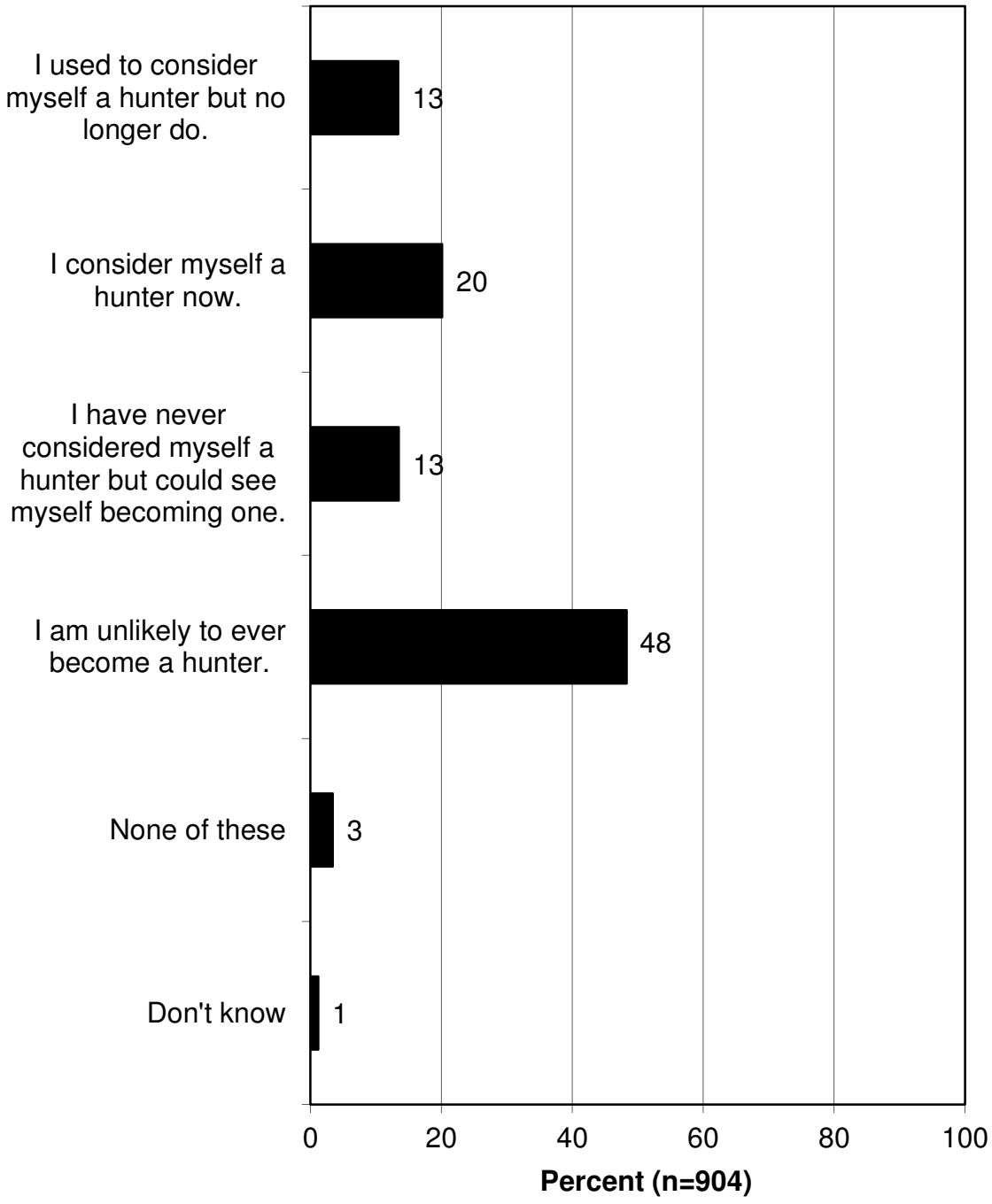
Q107. Which species did you hunt in Washington in the past 12 months? (Asked of those who have been hunting in Washington.)



Q108. Why haven't you ever hunted in Washington? (Asked of those who have never hunted in Washington.)



Q111. Overall, which of the following statements best describes you?

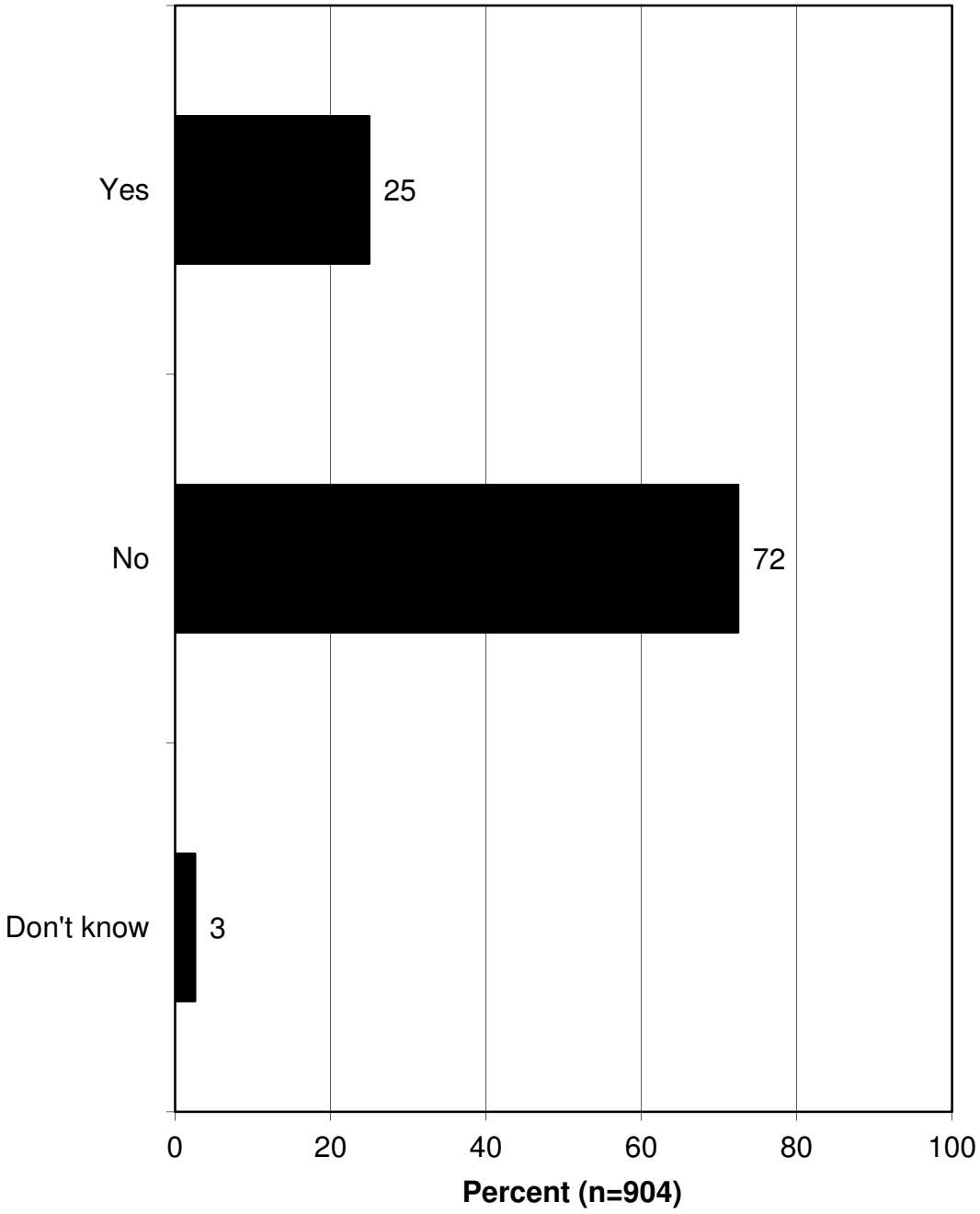


DEMOGRAPHIC DATA AND MEMBERSHIP IN CONSERVATION ORGANIZATIONS

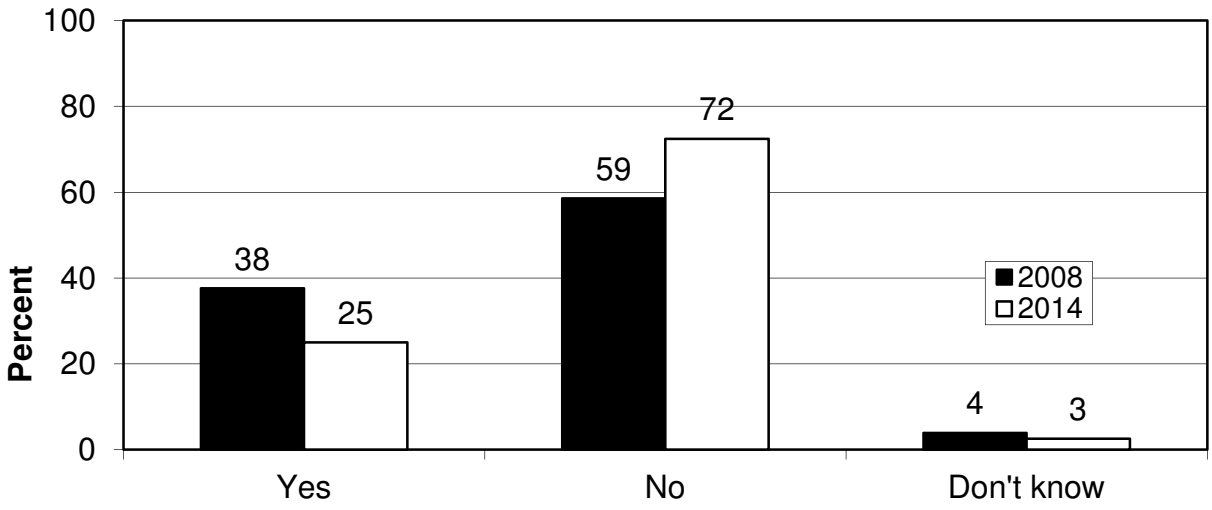
- A quarter of Washington residents (25%) say that they are members of or have donated to an organization that promotes wildlife conservation or habitat enhancement.
  - A trend graph shows that a lower percent of residents in 2014, compared to 2008, say that they are members of or have donated to an organization that promotes wildlife conservation or habitat enhancement.
  - The graph shows the listing of the most popular organizations. There were many organizations in the "other" category listed by only a single person.

- The survey also gathered data on gender and age.
  - Note that gender is not a question that is asked (it would be awkward for both interviewer and respondent); rather, the results are based on interviewer observation.
  - Age: Note that the ages show only adults; residents under 18 years of age were not interviewed. The mean age of adults is 47.6 years. A second age graph shows the ages compared to U.S. Census data, showing that the sample closely matches Census data.

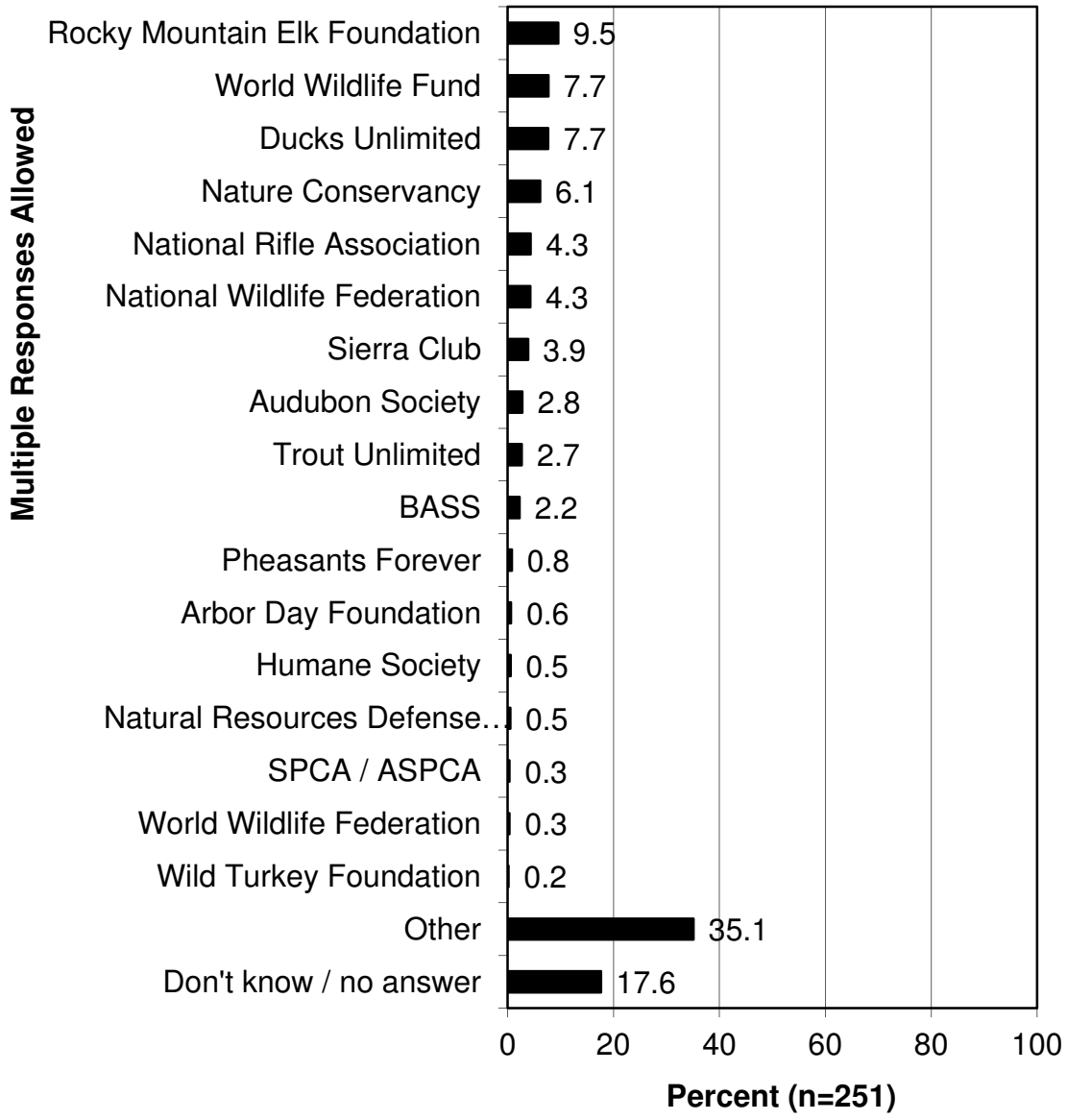
Q115. Are you a member of or have you donated to any organization that promotes wildlife conservation or habitat enhancement?



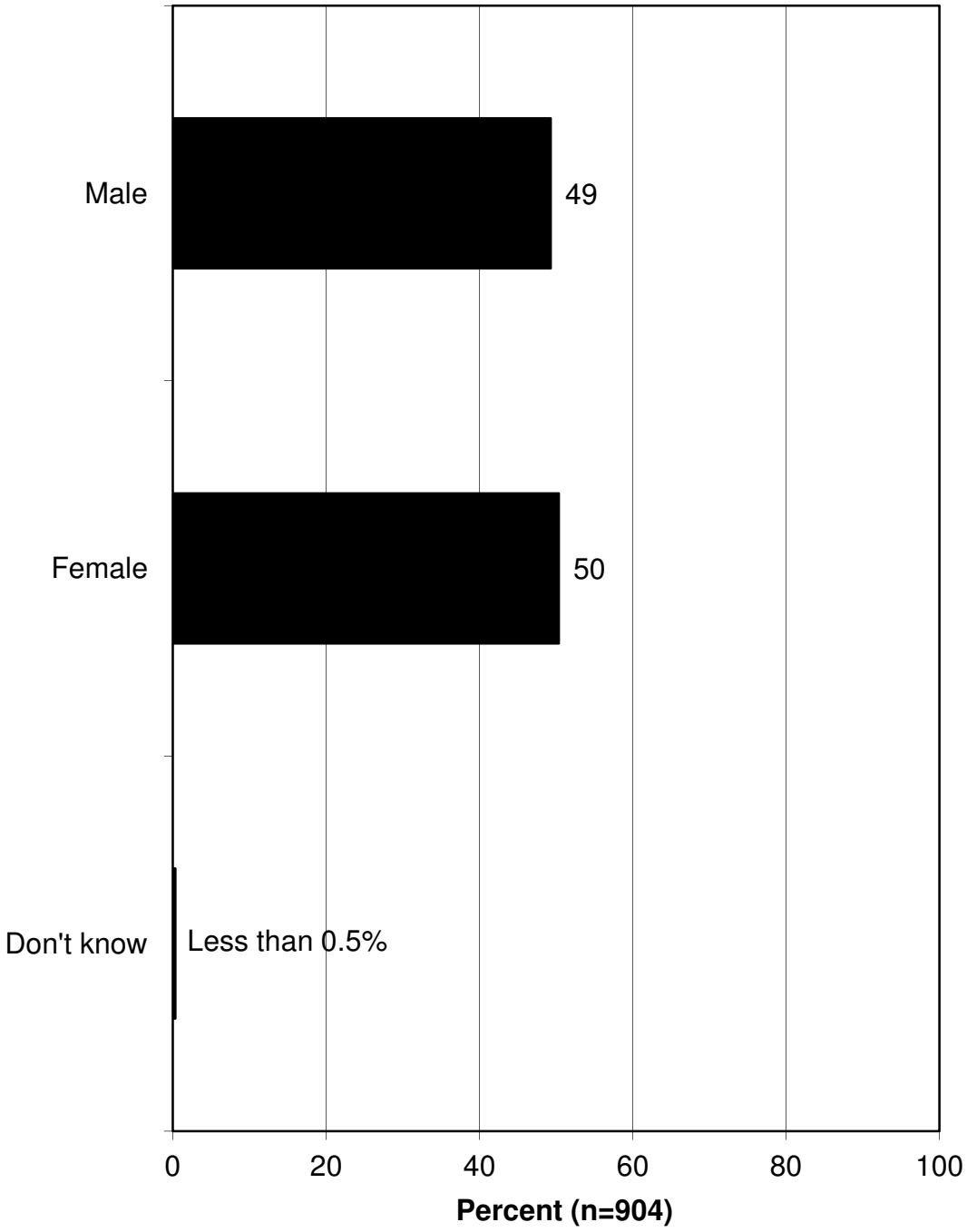
Q115. Are you a member of or have you donated to any organization that promotes wildlife conservation or habitat enhancement?



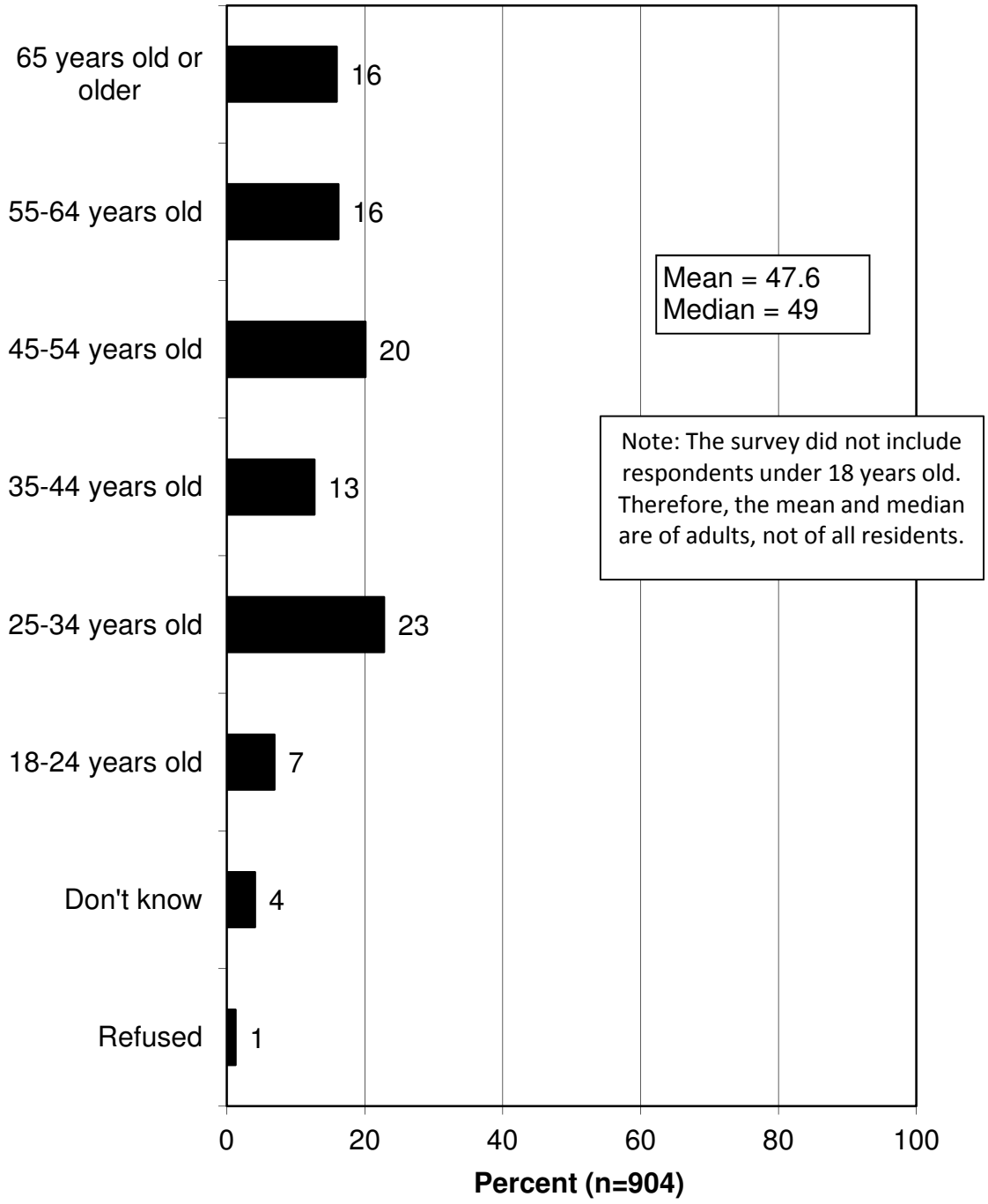
Q116. What conservation organization are you a member of or donated to? (Asked of those who were a member of or donated to any organization that promotes wildlife conservation or habitat enhancement.)



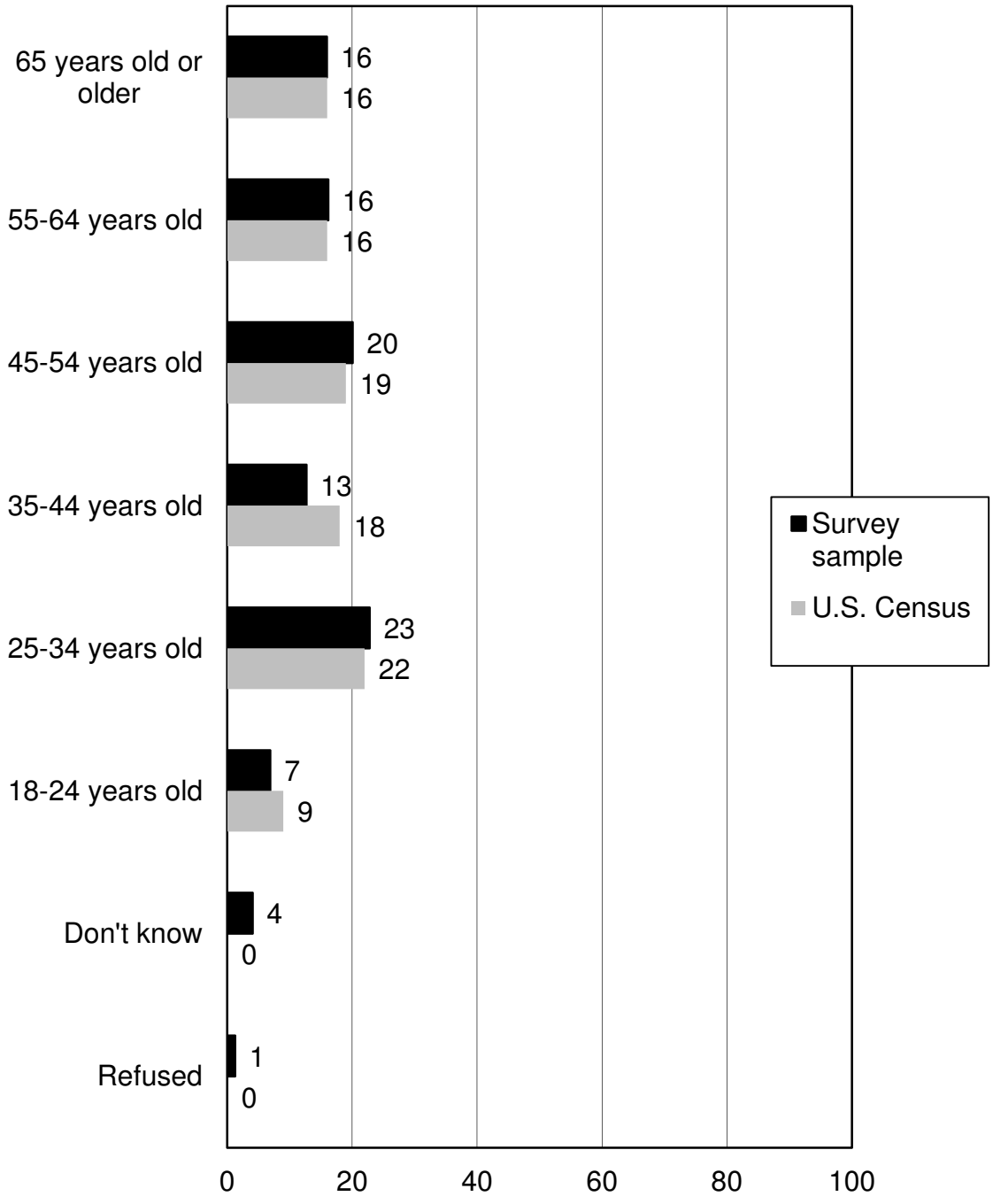
Q129. Respondent's gender (not asked; observed by interviewer).



Q123. Respondent's age.



Q123. Respondent's age (sample versus U.S. Census data).



ABOUT RESPONSIVE MANAGEMENT

Responsive Management is an internationally recognized public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues. Our mission is to help natural resource and outdoor recreation agencies and organizations better understand and work with their constituents, customers, and the public.

Utilizing our in-house, full-service telephone, mail, and web-based survey center with 50 professional interviewers, we have conducted more than 1,000 telephone surveys, mail surveys, personal interviews, and focus groups, as well as numerous marketing and communication plans, needs assessments, and program evaluations.

Clients include the federal natural resource and land management agencies, most state fish and wildlife agencies, state departments of natural resources, environmental protection agencies, state park agencies, tourism boards, most of the major conservation and sportsmen's organizations, and numerous private businesses. Responsive Management also collects attitude and opinion data for many of the nation's top universities.

Specializing in research on public attitudes toward natural resource and outdoor recreation issues, Responsive Management has completed a wide range of projects during the past 22 years, including dozens of studies of hunters, anglers, wildlife viewers, boaters, park visitors, historic site visitors, hikers, birdwatchers, campers, and rock climbers. Responsive Management has conducted studies on endangered species; waterfowl and wetlands; and the reintroduction of large predators such as wolves, brown bears, and the Florida panther.

Responsive Management has assisted with research on numerous natural resource ballot initiatives and referenda and has helped agencies and organizations find alternative funding and increase their membership and donations. Additionally, Responsive Management has conducted major organizational and programmatic needs assessments to assist natural resource agencies and organizations in developing more effective programs based on a solid foundation of fact.

Responsive Management has conducted research on public attitudes toward natural resources and outdoor recreation in almost every state in the United States, as well as in Canada, Australia, the United Kingdom, France, Germany, and Japan. Responsive Management has also conducted focus groups and personal interviews with residents of the African countries of Algeria, Cameroon, Mauritius, Namibia, South Africa, Tanzania, Zambia, and Zimbabwe.

Responsive Management routinely conducts surveys in Spanish and has conducted surveys in Chinese, Korean, Japanese and Vietnamese and has completed numerous studies with specific target audiences, including Hispanics; African-Americans; Asians; women; children; senior citizens; urban, suburban, and rural residents; large landowners; and farmers.

Responsive Management's research has been upheld in U.S. District Courts; used in peer-reviewed journals; and presented at major natural resource, fish and wildlife, and outdoor recreation conferences across the world. Company research has been featured in most of the nation's major media, including CNN, *The New York Times*, *The Wall Street Journal*, and on the front pages of *USA Today* and *The Washington Post*. Responsive Management's research has also been highlighted in *Newsweek* magazine.

Visit the Responsive Management website at:
www.responsivemanagement.com