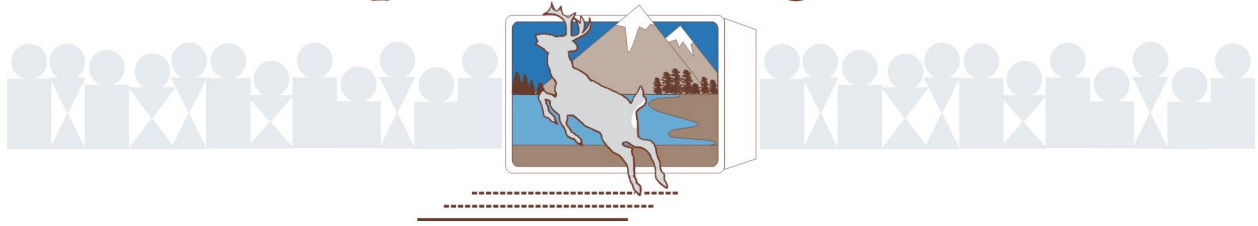


Responsive Management



EVALUATION OF GEORGIA KIDS' FISHING EVENTS

Conducted for the
Georgia Wildlife Resources Division

Responsive Management
May 2001

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We would like to thank Chris Martin of the Georgia Wildlife Resources Division for his gracious assistance during all phases of this study.

EXECUTIVE SUMMARY

This study was conducted on behalf of the Georgia Wildlife Resource Division (WRD) to determine Georgia children's attitudes and preferences regarding fishing and in particular to assess their opinions on Kids' Fishing Events throughout the state of Georgia.

- The majority of participants in the Kids' Fishing Events had fished prior to attending the fishing event (94%), and a majority of participants went fishing after attending the fishing event (81%).
- Seventy-six percent of Kids' Fishing Event participants reported that the fishing event made them more interested in going fishing.
- Significantly more males (86%) than females (72%) had fished since the event.
- Significantly more males (78%) than females (75%) indicated their desire to fish more because of the event.
- Males fished significantly more days than females before the event, but not after the event. This may be cautiously interpreted as a more positive motivational impact of the event on females than males.
- As grade level increased, the number of days fished prior to the event and after the event increased; however, the higher the grade level, the more likely a child's interest tended to decrease after the event. This may be due to age-related attrition throughout all sports which occurs at age eleven (Brustad, 1993).
- Seventy-seven percent of participants said they would fish more if they could. Twenty-three percent said that they already fished as much as they liked. Only one respondent in the entire study indicated that she/he fished too much.

- When asked what the reasons were why participants did not fish more often, the number one constraint was not enough time (31%) followed by school obligations (13%), they were already going as often as they want (12%) weather (9%) and other interests/hobbies (7%).
- Of those children who responded that they did not have enough time to go fishing 61% percent stated school obligations caused them to not have enough time to fish more often
- No one 16 years of age and older responded that the need to buy a fishing license kept him or her from going fishing.
- Most barriers to increased fishing are within the control of the child; they are either priority issues and attitudes or are easily changeable situations. The majority of constraints involved choices of hobbies, perception of weather, and time management. Very few barriers are outside the control of the child due to either physical or expense limitations.
- There was a lack of significant differences in the types of hindrances and constraints to fishing between WRD and General Events and between males and females, which is an important finding in itself. Children who attended these events, regardless of the type of event (WRD versus General), and regardless of gender, have similar constraints. The primary issue facing these children and their parents is lack of time (30% of all respondents).
- Most participants reported several family members fished. A male member taught most participants how to fish. The majority of participants had friends who went fishing.

- A majority of participants also were interested in joining a fishing club for kids (58% very interested and 27% somewhat interested).
- Overall interest in fishing was not significantly related to a) members of the family who fish, b) about where they learned how to fish and c) about who they wished they could fish with. Overall interest in fishing was not related to any of the familial factors about fishing initiation and participation.
- Significantly more WRD participants said their grandmothers and grandfathers (28% to 21%) fished. This may indicate a deeper “generational base” of active fishing families who attend WRD events.
- Females had a significantly lower overall interest in fishing than males and males have significantly larger percent of friends who fish.
- One of the more interesting findings, however, was that a significantly greater proportion of females fished with their mothers (30% versus 16%), and grandmothers (11% versus 3%). This may indicate that females learn better from females and would benefit from more female instructors or peer models (Bandura, 1986; Gould & Weiss, 1981; and McCullagh, 1987). Female children may benefit from encouraging adult female family members to participate in the sport.
- The main motivations for fishing among Kids' Fishing Event Participants were all social/psychological in nature. To have fun (92%), to be with family (77%), to learn about nature (75%), for relaxation (61%), for the sport or to learn a sport (59%) and to be with friends (58%) were all reported to be very important fishing motivations by a majority of respondents.

- Significantly more males indicated they found it very important to catch lots of fish, very important to learn a new sport, very important to catch big fish and to relax.
- There were no significant “impact” differences between WRD and General participants. That is, neither WRD nor General events had a more beneficial influence on fishing behaviors or attitudes that would show increased participation or avidity.
- WRD and General events had the same distributions of age, education, gender, race, and residential area and the same level of interest in the sport of fishing. There were no significant differences in how much WRD and General participants liked the event they attended.
- There were no statistically significant demographic differences in the people attending the two types of events. There were also no significant motivational differences in the people attending the two types of events. There were no significant differences between participants of either type of fishing event after the events.
- Ninety-eight percent of respondents liked the fishing event they attended. Only one percent of respondents reported they did not like the fishing event at all.
- A significant overall trend in both types of events was a general decline in liking the clinic with increase in grade level. This may be a symptom of a widespread “dropout” phenomenon that occurs in many sports after the age of 11 (Brustad, 1993).
- Children in lower grades (1-4) were significantly fonder of catching fish, whereas those in higher grades enjoyed the act of fishing.
- Males were significantly different from females in how much they liked catching fish during the event (45% versus female 32%).

- Most participants heard about the event from their parents (28%), but significantly more General participants (27% versus 9% for WRD events) heard about the event through school.
- Most of the reasons given for disliking the fishing event had nothing to do with the physical aspects of planning and coordination of the fishing event, but were due to personal fishing problems or natural and or environmental factors.
- Significantly more WRD participants (10% WRD versus 4% General) disliked the event because it was too crowded.
- There were no significant differences between participants attending WRD Kids' Fishing Events and General Kids' Fishing Events in ratings of what the respondents liked *best* about each type of fishing event.
- Significantly more General participants (6% WRD versus 3% General) disliked the event because of the weather, or because of disgust about some aspect of fishing (6% WRD versus 3% General).
- More females than males (10% versus 3%) reported disliking issues involving "disgusting or displeasurable experiences" encountered while fishing. Children in lower grades (1-4) were significantly more likely to dislike nothing about the event. Children in grades 9-12 were significantly more likely to dislike the crowd at the fishing event
- Seventy-six percent of participants were unable to identify the type of fish they caught at the fishing event.

- There were no significant “performance” differences between WRD and General events in the number of fish caught, although significantly more trout were caught by WRD participants and significantly more bream were caught by General participants.
- The activities that taught ethical or social/emotional reasons for fishing were rated higher than the activities that taught technical/mechanical aspects about fishing. For instance, three quarters of participants said they learned a lot about respecting the environment while fishing (76%). However, the item ranked highest among the things that children learned little about was how to identify fish with 23% responding they learned nothing at all.
- There were no significant differences (see section below) in what children learned between WRD and General events.
- A significantly larger number of males indicated that they “learned a lot” about how to remove a hook (50% male versus 39%), and how to identify fish (45% male versus 35% female). It is not certain why there were gender-based differences in learning how to remove a hook, but it may be an issue of modeling or motivation. It has been found that children model and learn best from skilled instructors who are similar to the participants in age, race, gender and other demographic factors.
- A significant relationship emerged showing that as grade level decreased, the amount that children learned about how to catch a fish increased.
- Of the top nine possible improvements receiving the highest percentage of respondents saying it would have made the event better, five of the nine were related to material products the participant could have received.

- There was a significant difference between General (38%) and WRD (26%) in their rating of whether or not handling bait would have made the event better.
- Males and females differed significantly in rating what would have improved the event. Significantly more males favored catching more fish, getting to eat the fish, and getting to keep the equipment. Significantly more females indicated that not having to handle live bait would have made the event better.
- As grade level decreased (younger children) interest in all of the following significantly increased - keep the fish, to fish longer, to have better equipment, to not have to touch bait, to have a prize, to get a certificate, to get a patch or other memento, and to get free equipment.
- The age-based differences of possible activities for improvement are evidence that children have different sensitivities that are caused by different stages of psychological readiness.

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INTRODUCTION AND METHODOLOGY

This study was conducted on behalf of the Georgia Wildlife Resources Division (WRD) to determine Kids' Fishing Event participant's attitudes and preferences regarding fishing and in particular to assess their opinions on the events throughout the State. In regards to Georgia children's attitudes and preferences toward fishing, participants were questioned on their motivation for fishing, constraints to fishing and with whom they fished. In regards to Georgia children's opinions toward Kids' Fishing Events, surveyed participants were questioned on particular aspects of the fishing events including what they liked, disliked, improvements toward and learning potential of the Kids' Fishing Event. Quantitative comparisons were made between WRD Kids' Fishing Events and Kids' Fishing Events offered by other constituent groups.

The survey questionnaire was developed cooperatively between the Georgia Wildlife Resources Division and Responsive Management (RM). The survey instrument was administered by telephone to known participants of Georgia Kids' Fishing Events. Telephones were the preferred medium to conduct this survey since nearly all potential respondents had access to a phone. The sample was obtained from the records of the Georgia WRD. A central telephone-polling site at Responsive Management headquarters allowed for rigorous quality control over interviewers and over data collection in general. Facilities were staffed by interviewers with experience conducting computer-assisted telephone interviews on the subjects of natural resources and outdoor recreation for state fish and wildlife agencies and natural resource organizations. In addition, interviewers were trained according to standards established by the Council of American Survey Research Organizations. Professional staff randomly monitored interviewers to evaluate each interviewer's performance and maintain quality checks.

Professional staff members conducted project briefings with each interviewer prior to his or her beginning work on this project. Interviewers were briefed and instructed on study goals and objectives, type of study, handling of survey questions, interview length, termination points, qualifiers for participation, reading of interviewer instructions, reading of survey, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey instrument. Professional staff edited each survey to check for clarity, understanding, completeness, and form.

Interviews were conducted Monday through Friday from 4:00 p.m. to 9:00 p.m. and on Saturday from 12:00 a.m. to 6:00 p.m. Eastern Standard Time. A multiple callback design was used to maintain the representativeness of the sample, avoid bias toward people easy to reach by telephone, and provide an equal opportunity for all to participate. Subsequent calls were placed at different times of the day and on different days of the week.

The software used for data collection was Questionnaire Programming Language (QPL) version 4.1 (National Technical Information Services, 1999). QPL is a comprehensive system for computer-assisted telephone interviewing. The survey data was entered into the computer as the interviews were conducted, eliminating possible errors associated with manual data entry after the completion of the interviews.

Weighting

There were 900 respondents to this telephone survey regarding attitudes towards participation in the Georgia Wildlife Resources Division Kids' Fishing Events and General Kids' Fishing Events. There was a 75.95% response rate. Most of the respondents had attended a Georgia Wildlife Resources Division Kids' Fishing Event (77.3%) as opposed to a "General Kids' Fishing Event" (22.7%). The Georgia Wildlife Resources Division (WRD) indicated that the actual proportion of WRD to General attendees was 42% to 58%. Therefore, the data was weighted to adjust the number of participants to reflect the actual distribution between the

different event participants. This was accomplished by adjusting all values attained from WRD events so that each case counted as .54 cases. Each case from a General event was adjusted so that it counted as 2.56 cases. These adjustments make observations about and inferences drawn from the sample more valid as they more accurately represent the attitudes and opinions of the population being sampled.

OVERALL GEORGIA KIDS' FISHING EVENT EVALUATION

Demographics

The average age of children who had attended the Kids' Fishing Event was 10.8 years old (SD = 2.95). The median grade of the children was 6th grade. Most participants were from a small city/town (42%) or a rural area (35%). Smaller percentages lived in a suburb of a large metropolitan area (10%) or a big city or urban area (6%). Seventy percent of those who attended the fishing events were male. The participants were preponderantly white (81%) with 13% indicating their race as Black or African American, and 2% indicating Hispanic ethnicity.

There were no significant demographic differences between WRD and General participants. Age, grade, residence, gender, race and ethnicity were distributed evenly between the two types of fishing events (WRD and General events). In addition to the even distribution of demographic characteristics between the two events, participants' of both WRD and General events shared an overall positive attitude about fishing (73% very interested in fishing, 23% somewhat, and only 5% not at all interested). Participants in both WRD and General events indicated the same [$\chi^2 (1) = 1.92, p = 0.17$] rating of "very interested" in fishing.

This means that WRD and General event participants were initially quite similar, and therefore any significant differences found between the two types of events are likely results of different experiences at the events themselves. Any distinction found between WRD Events and General Kids' Fishing Events cannot be attributed to differences in participants' motivations, attitudes, or experiences; rather, they can be more strongly correlated to variations between the events themselves. In short, children came into these events with similar backgrounds and attitudes, any differences in attitudes toward the sport after the events are likely due to the fishing event and time.

Marketing Publicity Issues

Kids' Fishing Event participants heard about the fishing event in a variety of ways. The most common way participants heard about the event was from their parents (28%). Twenty percent of the participants heard about the event at school. Smaller percentages heard about the event through the newspaper (10%) and from a friend (7%).

Publicity By Event Type

A significantly greater proportion of General participants (27% General versus 9% for WRD events) heard about the event through school [$\chi^2 (1) = 46.55, p < 0.001$]. A significantly greater proportion of WRD participants (5% WRD versus 1% General) heard about the event through posters [$\chi^2 (1) = 7.15, p < 0.001$].

Publicity by Gender

While a greater proportion of females (30%) than males (26%) heard about the event through parents, and a greater proportion of males (8%) than females (6%) heard about the event through a friend, neither of these were significant differences. The only statistically significant difference between where males and females heard about the event came from those who had heard about the event through the Boy Scouts (1% of males versus 0% of females) which despite its statistical significance [$\chi^2 (1) = 5.64, p < 0.05$] lacks utility (i.e., clinical significance). It lacks clinical significance because the Boy Scouts are a male organization. It also lacks clinical significance since the application of this knowledge is unlikely to yield much influence as only an extremely low number of individuals indicated that they had heard about the fishing event through the Boy Scouts.

Publicity by Grade Level

A disproportionately higher number of children in the upper grade levels (9-12) had heard about the fishing event they attended through a friend [$\chi^2 (2) = 6.60, p < 0.05$]. A

disproportionately higher number of children in the middle grade levels (5-8) had heard about the event at school [$\chi^2 (2) = 10.31, p < 0.01$], and through posters [$\chi^2 (2) = 16.37, p < 0.001$].

Types of Fish Caught

Participants in the Kids' Fishing Event were asked what kind of fish they caught while at the fishing event; multiple responses were encouraged. Participants at Kids' Fishing Events caught mostly Sunfish (99%) followed by Bass (86%), Trout (85%), Bream (84%) and Catfish (51%). However, it should be noted that 76% of participants were unable to identify the type of fish they caught at the fishing event. On average, participants to Kids' Fishing Events caught 6 fish with a low of zero fish caught and a high of 34 fish caught. Outlying data had been screened and indicated a small group of children between the ages of 7 and 11 who indicated catching between 35 and 100 fish. That data was considered an age and recall error and was removed only from analyses having to do with the assessment of the total number of fish caught at the event.

Types of Fish Caught by Event Type

There were no significant "performance" differences [$t (693) = -.92, p = 0.36$] between the two types of events in the number of fish caught. WRD participants caught slightly more ($M = 6.13, SD = 5.19$) fish than General participants ($M = 5.67, SD = 6.47$). The types of fish that the participants indicated that they had caught differed significantly however with significantly [$\chi^2 (1) = 12.32, p < 0.001$] more WRD participants (22% WRD versus 10% General) catching trout, and significantly [$\chi^2 (1) = 5.76, p = 0.05$] more General participants (19% WRD versus 12% General) catching bream. These differences are likely a result of different fishing locations used for the two types of events.

ACTIVITIES LIKED BEST

Activities Liked Best by Kids' Fishing Event Participants

Overall, Georgia Kids' Fishing Events were well-liked activities for most participants. Ninety-eight percent of respondents liked the fishing event they attended. The overwhelming majority of participants liked the fishing event they attended a lot (83%). Fifteen percent responded they liked the fishing event a little. Only one percent of respondents reported they did not like the fishing event at all. When asked what specifically participants liked best about the Kids' Fishing Event they attended, the majority of respondents said they either liked catching fish (41%) or simply liked fishing (32%). The percentages of all other responses to this question were much lower. They liked prizes awarded for contests (5%), learning how to fish (4%) and "free stuff" (4%) participants received such as fishing gear, tackle, or bait. Three percent liked the fact that they could spend time with family and enjoyed the people who ran the fishing event. Two percent liked the fact that the event was fun, enjoyable and relaxing; allowed them to be with friends and other kids their age; and allowed them to enjoy nature.

Activities Liked Best by Participants of WRD Fishing Events versus General Fishing Events

Overall, there were no significant differences [$\chi^2(2) = 2.838, p = 0.242$] between WRD and General participants' ratings of how much they liked the event they attended. Participants in both types of fishing events reported at the same percentage level (83%) that they liked the fishing event a lot.

There were no significant differences between participants attending WRD Kids' Fishing Events and General Kids' Fishing Events in ratings of what the respondents liked *best* about each type of fishing event.

Activities Liked Best By Gender

While there were no statistical differences between males (98%) and females (99%) in how much they liked the event, there were two significant differences between males and females in what they liked best about the fishing event. A significantly larger proportion of males (45% of males versus 32% of females) reported they liked actually catching the fish as the best part of the event. $[\chi^2(1) = 7.39, p < 0.01]$ A significantly greater proportion of females (5% of females versus 3% of males) indicated they liked best being with family $[\chi^2(1) = 4.15, p < 0.05]$. This last finding involving being with family, although significant, had a very small total number of male or female responses.

Activities Liked Best by Grade

School grade level was analyzed by breaking it into three grade groupings in a similar manner performed by Kellert & Westervelt (1983). Children in first through fourth grades formed one grade grouping, those in fifth through eighth grades formed another grade grouping, and those in ninth through twelfth grades the final grade grouping.

There was a significant ($r_s = -0.97, p < 0.01$) negative relationship between grade level and overall rating of the clinic. The general, although curvilinear, trend was that the ranking of liking the clinic decreased as grade level increased. There were also significant differences between grade groups in what children liked best about the event. As grade increased, the percentage of responses indicating that they liked catching a fish decreased (grade 1-4, 51%; grade 5-8, 38%; 9-12, 35%). In contrast, while grade increased the percentage of responses indicating that they liked to fish increased (grade 1-4, 25%; grade 5-8, 38%; grade 9-12, 34%). Children in the lowest grade group (grade 1-4) more strongly preferred catching fish than other grade groups but disliked the process of fishing at a higher level than other age groups. This corresponds with the conclusions of Kellert & Westervelt that, "Young children manifest ... very

narrow interest in animals, primarily domestic animals and those yielding direct material benefits and satisfactions.” (Kellert & Westervelt, 1983, p. 188). The social aspect of fishing was the best part of the fishing event for the middle age group. A disproportionately higher number of children in the middle grade group (grade 5-8) liked being with friends [$\chi^2(4, n = 855) = 4.15, p < 0.05$]. However, the frequency of the children indicating that they liked best being with friends was relatively low making their practical application less useful.

ACTIVITIES DISLIKED

Activities Disliked Most by Kids' Fishing Event Participants

When asked what participants *disliked* about the Kids' Fishing Event they attended, the largest percentage 45%, said they disliked nothing about the fishing event. A much lower percentage (10%) reported that they disliked the fact that they thought they did not catch enough fish; 6% reported that the event was too crowded; 5% reported that they disliked the fishing event due to fishing related problems; “disgusting or displeasurable” activities; and the weather (too hot, too sunny, too cold, etc). It should be noted that of the 8 most given reasons for disliking the fishing event, 6 of these reasons had no direct connection with the physical aspects of planning and coordination of the fishing event. Most of the reasons given for disliking the fishing event were social/psychological in nature related to personal fishing problems or natural and or environmental factors.

Activities Disliked Most by Participants of WRD Fishing Events versus General Fishing Events

The largest percentage of participants of both types of fishing events reported there was nothing they disliked about the event. A larger, but not significantly larger [$\chi^2(1) = 2.64, p = 0.104$], percentage of WRD participants (48%) reported disliking nothing about the fishing event

compared to General participants (42%). Significantly [$\chi^2(1) = 6.45, p < 0.05$] more WRD participants (10% WRD versus 4% General) disliked the event because it was too crowded. Significantly more General participants (6% WRD versus 3% General) disliked the event because of the weather [$\chi^2(1) = 4.39, p < 0.05$], or because of disgust about some aspect of fishing (6% WRD versus 3% General) [$\chi^2(1) = 3.87, p < 0.05$].

Activities Disliked Most By Gender

There was only one significant difference between males and females regarding what they disliked most about the fishing event. More females than males (10% of females versus 3% of males) reported disliking “disgusting or displeasurable experiences” involved with fishing [$\chi^2(1) = 8.61, p < 0.01$].

Activities Disliked Most by Grade Level

There were only two significant differences in ratings of the activities participants disliked most when analyzed by grade level. First, a disproportionately higher percentage of children in grades 1-4 disliked nothing about the event, and a disproportionately lower percentage of children in the grades 9-12 disliked nothing about the event [$\chi^2(2) = 6.08, p < 0.05$]. Second, a disproportionately higher percentage of children in grades 9-12 disliked the crowd at the fishing event, and a disproportionately lower percentage of children in grades 1-4 disliked the crowd at the fishing event [$\chi^2(2) = 55.11, p < 0.001$].

LEARNING POTENTIAL OF KIDS’ FISHING EVENT ACTIVITIES

Participants were asked to rate how much they had learned from nine activities that may have been included in the Kids’ Fishing Event they attended. The activities evaluated for learning were:

- (1) fishing is a way to have fun,
- (2) where you could go fishing after the event,
- (3) how to fish safely,
- (4) how to follow rules about fishing
- (5) how to respect the environment while fishing,
- (6) how to catch a fish,
- (7) how to remove a hook,
- (8) how to identify fish, and
- (9) how to properly handle a fish.

Participants were asked to rate each activity on whether they had learned a lot, a little, or nothing at all about each of the above activities. The response “learned a lot” was given by the largest percentage of participants for each of the nine activities. In most cases the overwhelming majority of participants gave the response, “learned a lot.” Six of the nine activities presented to participants had over 50% of participants responding that they learned a lot from that particular activity. Six of the nine activities also had a split of 30 or more percentage points between the response learned a lot and the next closest response, learned a little.

The activities that taught ethical or social/emotional reasons for fishing were rated higher than activities that taught technical/mechanical aspects about fishing. The top four activities rated highest for learning a lot were: respecting the environment while fishing (76%); following rules about fishing (75%); fishing is a way to have fun (74%); and how to fish safely (70%).

The relatively higher number of responses regarding having learned a lot about fishing on issues of ethical or social/emotional reasons (as opposed to the mechanics of fishing) may be indicative of several phenomena. One, it may be possible that those attending the events already

know how to perform the mechanical acts of fishing and so do not respond that they have learned a lot (ceiling effect). Second, children attending these events may be psychologically ready to learn about ethical or emotional issues at this stage of their development (psychological readiness). Third, it may be that the fishing events are simply teaching more about ethical or social/emotional issues (training agenda). A fourth possibility is that the nature of what the fishing events can teach is somehow limited to the more general aspects of fishing (perhaps due to time or manpower limitations). The fact that there were no significant differences (see section below) in what children learned between both WRD and General events, events that are likely taught and run differently, may mean that what children learn at these events is more a product of what the children already know (ceiling effect) and what they are ready to learn (psychological readiness).

Technical/mechanical activities associated with fishing followed with the responses learning how to catch fish; how to handle fish; where to fish; how to remove a hook and how to identify fish. Sixty-six percent learned a lot about how to catch a fish and 57% learned a lot about how to handle a fish. Smaller percentages learned a lot about where to fish after the fishing event (48%), how to remove a hook (46%) and how to identify fish (42%). The highest percentage responding that they learned only a little was 34% who reported learning only a little about how to identify fish. How to identify fish also had the highest percentage of participants (23%) responding they learned nothing at all.

Learning Potential of Kids' Fishing Event Activities By Event, Gender, and Grade

There were no significant differences between WRD participants and General participants on any of the learning questions in which participants responded "learned a lot."

There were however, significant gender differences on these learning questions. Gender based

differences indicate that significantly more males than females learned a lot about removing a hook from a fish [50% male versus 39% female; ($\chi^2(1) = 4.04, p < 0.05$)] and how to identify fish [45% male versus 35% female ($\chi^2(1) = 7.48, p < 0.01$)].

It is not certain why there were gender-based differences in learning how to remove a hook, but it may be an issue of modeling or motivation. In modeling (Bandura, 1986; Gould & Weiss, 1981; McCullagh, 1987), it has been found that children learn the most material from skilled instructors who are similar to the participants in age, race, gender and other demographic factors. Some research would tend to indicate that even learning models that are less skilled peers, are still superior models to highly skilled non-peer models. Although this male versus female difference is just a singular difference, the act of being taught to remove a hook involves close interaction between teacher and student and may be a more sensitive topic to gender differences. The difference may also be one of motivation with more males ready and/or interested in learning how to remove a hook. If motivation is the reason for this difference, it is uncertain why this finding of differences between males and females is not more widespread affecting other learning issues.

There was a significant relationship between grade level and how much children learned about fishing, with children learning significantly more about how to catch a fish the lower their grade level ($r_s = -0.163, p < 0.001$).

POSSIBLE ACTIVITIES FOR IMPROVEMENT OF KIDS' FISHING EVENTS

Participants were asked to rate twelve possible improvements to Kids' Fishing Events based on whether or not they felt each potential improvement would make the event better,

worse, or would not have made a difference. The possible improvements suggested were if you had:

- (1) caught more fish,
- (2) caught a big fish,
- (3) been able to keep more fish you caught,
- (4) been able to fish longer,
- (5) had better equipment,
- (6) had not had to touch the live bait,
- (7) had been in a contest to see who could catch the most fish or the biggest fish,
- (8) had been awarded prizes,
- (9) had been given a certificate,
- (10) had been given a patch, hat, video or poster,
- (11) had been able to eat more fish participants caught,
- (12) and had been able to keep the fishing equipment.

Over half of participants said eleven of the twelve possible improvements would have made the event better. The only suggested improvement that would not have made the event better for a majority of participants was the suggestion that they would not have to touch live bait. Of the top nine possible improvements receiving the highest percentage of respondents saying it would have made the event better, five of the nine were related to material products the participant could have received:

- (1) “free stuff” (made event better for 77%),
- (2) prizes (better for 74%),
- (3) a certificate (better for 69%),

- (4) a contest (better for 60%),
- (5) or keeping fishing equipment (better for 60%).

The remaining four highest percentage improvements dealt more with the act of fishing:

- (1) catching a big fish (made the event better for 77%),
- (2) being able to fish longer (better for 69%),
- (3) catching more fish (better for 66%),
- (4) and being able to keep more of the fish participants caught (better for 60%).

Possible Activities for Improvement by Event Type

WRD and General event participants differed significantly [$\chi^2(1) = 8.40, p < 0.01$] in their assessments of whether it would improve the event if they did not have to handle live bait. Thirty-eight percent of the General participants versus 27% of the WRD participants rated this as an issue that would have made the event better. There were also small, non-significant differences between WRD and General responses about getting to keep the fish (58% WRD versus 63% General), having better equipment (54% WRD versus 60% General), having a contest (63% WRD versus 60% General) getting to keep equipment (62% WRD versus 59% General), getting prizes (72% WRD versus 75% General), getting a certificate (68% WRD versus 71% General), getting a patch (75% WRD versus 80% General), and getting to eat the fish (52% WRD versus 56% General).

Possible Activities for Improvement By Gender

Males and females differed significantly in rating what would have improved the event with significantly more males favoring catching more fish [(80% of males versus 72% of females); $\chi^2(1) = 9.11, p < 0.01$], getting to eat the fish [(57% of males versus 47% of females); $\chi^2(1) = 11.99, p < 0.001$], and getting to keep the equipment [(63% of males versus 52% of

females); $\chi^2(1) = 4.65, p < 0.05$]. Significantly more females [(47% of females versus 28% of males); $\chi^2(1) = 24.74, p < 0.001$] indicated that not having to handle live bait would have made the event better.

Possible Activities for Improvement By Grade Level

There were several significant relationships between grade level and ratings of items that would have improved the event. As age increased, all of the following possible activities for improvement decreased (i.e. the younger children thought these items were very important and the older children thought they were not important):

- (1) being able to keep more of the fish you caught ($r_s = -0.12, p < 0.001$),
- (2) being able to fish longer ($r_s = -0.08, p < 0.05$),
- (3) having better equipment ($r_s = -0.145, p < 0.001$),
- (4) not having to touch live bait ($r_s = -0.109, p < 0.01$),
- (5) to receive a prize ($r_s = -0.092, p < 0.01$),
- (6) to receive a certificate ($r_s = -0.207, p < 0.001$),
- (7) to receive a patch or other memento ($r_s = -0.155, p < 0.001$),
- (8) and being able to keep the fishing equipment ($r_s = -0.211, p < 0.001$).

These findings seem to lend credence to earlier research by Jean Piaget (1932) on his theory of moral development that indicated children under six years old are more egocentric and limited in their ability to separate objective and subjective reality. The age-based differences of possible activities for improvement are evidence that children have different sensitivities that are caused by different stages of psychological readiness.

IMPACT OF KIDS' FISHING EVENTS

The impact of the Kids' Fishing Events was positive. Ninety-five percent of participants said they would attend another Kids' Fishing Event if they could. Ninety-seven percent said they would invite a friend to the next Kids' Fishing Event they attended.

The majority of participants in the Kids' Fishing Events had fished prior to attending the fishing event (94%), and a majority of participants went fishing after attending the fishing event (81%). Participants had fished an average of 22.74 (SD = 39.75) days before, and 12.35 (SD = 29.31) after the event. Although this difference appears to be a dramatic reduction in the number of days fished per year, it is indicative of the time periods assessed. The time period assessed prior to the event included an entire year, whereas the time period occurring after the event is dependent upon the timing of the event and the interview.

Seventy-six percent of Kids' Fishing Event participants reported that the fishing event made them more interested in going fishing. Twenty-two percent reported the fishing event made no difference at all in the level of interest they possessed about fishing and only 2% reported that the fishing event made them less interested in fishing. There were no significant differences in impact on fishing behaviors or motivation between WRD fishing events and General fishing events.

Impact of Kids' Fishing Events by Gender

There were four impacts of the event based on gender, three statistically significant and one clinically significant. Significantly [$\chi^2(1) = 12.02, p < 0.01$] more males (86%) than females (72%) had fished since the event; significantly [$\chi^2(1) = 4.12, p < 0.05$] more males (78%) than females (75%) indicated their desire to fish increased because of the event; and males fished significantly [$t(520) = -2.58, p < 0.05$] more days ($M = 27.23, SD = 45.27$) than females ($M =$

16.38, SD = 35.00) before the event. Of clinical significance is that the difference in the number of days between males and females was no longer significant [$t(520) = -1.28, p = 0.37$] after the event (Males; $M = 13.13, SD = 25.26$; Females, $M = 9.73, SD = 31.67$). As mentioned earlier, the apparent decline in fishing days is a vestige of time periods assessed in relation to when the survey was administered. Before the fishing event, males fished significantly more than females but after the event the number of days fished by males and females were comparable. The different *rate* of decline in the number of days fished before and after the event between males and females would seem to indicate that females' fishing behaviors were more acutely influenced by the events than the males' fishing behaviors as they had a slower rate of "decline." This may be cautiously interpreted as a more positive motivational impact of the event on females than males. It is also possible that the growing similarities between males and females may be the product of males losing interest in fishing and thus, becoming more like females. This is a tentative conclusion as it is also possible that the reduction in the differences between males and females is a result of things that are initially different can sometimes grow more similar over time (regression to the mean).

Impact of Kids' Fishing Events by Event Type

More WRD participants indicated that they fished before (95% WRD versus 93% General) and after (19% WRD versus 18% General) the event than General participants. Those participants attending WRD events indicated that they fished 25.17 days before ($SD = 44.76$) and 12.16 days after ($SD = 25.60$) the event as compared to General participants who fished 20.64 days before ($SD = 34.79$) and 12.49 days after ($SD = 31.74$). General participants rated as marginally higher compared to WRD participants their desire to fish more after the event (77% General versus 77% WRD) and their interest in fishing due to the event (78% General versus

76% WRD). WRD participants rated their interest in attending another fishing event as 95% which was the same for General participants. Ninety-six percent of WRD participants indicated that they would invite a friend comparable to 98% of General participants who said they would invite a friend to a Kids' Fishing Event.

Impact of Kids' Fishing Events by Grade

There were several significant relationships between grade level and the impact of the fishing event. As grade level increased, the number of days fished prior to the event ($r_s = -0.291$, $p < 0.01$) and after the event ($r_s = -0.220$, $p < 0.01$) increased. Oddly, however, the greater the grade level, the more likely his/her interest in fishing decreased after the event ($r_s = -0.208$, $p < 0.01$). Older children losing interest in fishing may be a result of age related attrition throughout all sports which occurs at age eleven (Brustad, 1993).

CONSTRAINTS AND BARRIERS TO FISHING

Seventy-seven percent of participants said they would fish more if they could. Twenty-three percent said that they already fished as much as they liked. Only one respondent in the entire study indicated that she/he fished too much. When asked what the reasons were why participants did not fish more often, the number one constraint was not enough time (31%) followed by school obligations (13%), already going as often as they want (12%) weather (9%) and other interests/hobbies (7%). Of those children who responded that they did not have enough time to go fishing, 61% percent stated school obligations caused them to not have enough time to go fishing more often. Twenty-one percent stated work obligations caused them to not have enough time to fish more often. Nineteen percent indicated that family obligations caused them to not have enough time to fish more often. Eighteen percent said that obligations associated with other sports or hobbies caused them to not have enough time to fish more often. No one

responded that the need to buy a fishing license caused him or her to not have enough time to fish. Most barriers to increased fishing are within the control of the child; they are either priority issues and attitudes or are easily changeable situations such as the lack of time, other obligations, or other interests or hobbies. Very few barriers are outside the control of the child due to either physical or expense limitations such as the lack of transportation, parental approval or fishing equipment. The following list represents the barriers to increased fishing that are outside the control of the child:

- (1) not knowing where to go to fish (5%),
- (2) no transportation (4%),
- (3) having no one to go fishing with (4%),
- (4) parents not being able to attend (3%),
- (5) parents not letting them go fishing (3%),
- (6) or simply not wanting to go more often (3%),
- (7) not having equipment (1%),
- (8) not catching enough fish (1%),
- (9) fishing being too boring (1%),
- (10) complex fishing regulations (0%),
- (11) church obligations (0%),
- (12) not knowing how to fish (0%),
- (13) and expenses (0%).

Interestingly, the majority of restraints to increased fishing are within the control of the child. The majority of barriers involved priority issues and attitudes such as choices of hobbies,

perception of weather, and time management. Very few concrete physical barriers outside the control of the child actually prevented fishing.

Forty-five percent of respondents had purchased a fishing license and 42% had not. Even though only close to half of respondents had purchased a fishing license only 14% of respondents said the fact that fishing licenses are required hindered them from going fishing.

When these same issues of constraints and barriers to fishing were reanalyzed for possible differences between WRD and General events and between males and females, only one significant difference emerged. Significantly more males (2%) than females (0%) rated the event as boring [$\chi^2(1, n = 898) = 4.71, p < 0.05$]. Such a small number of overall respondents indicated that the event was boring, (only 1%), that this finding should be used to show that the programs themselves are *not viewed as boring*, and that the few children who actually do find the programs boring are more likely to be males than females.

The lack of significant differences in the types of hindrances and constraints to fishing between WRD and General Events and between males and females is an important finding in itself. It proves now that children who attended these events, regardless of the type of event (WRD versus General), and regardless of gender, have similar constraints. The primary issue facing these children and their parents is lack of time (30% of all respondents).

FISHING INITIATION AND PARTICIPATION

For a majority of participants at the Kids' Fishing Event, fishing was a family affair. Most participants reported several family members fished. Eighty-two percent of participants reported their father fished. Forty-five percent of participants reported their mothers fished. Forty-one percent of participants reported their brothers fished. Twenty-six percent of participants reported their grandfathers, and 24% of participants reported their sisters fished.

Nearly three-quarters of Kids' Fishing Event Participants were taught how to fish by a family member and in a majority of cases by their father (73%). The next largest percentage with only 13% of participants reported their grandfather had taught them how to fish. Ten percent were taught how to fish by their mother followed by 4% by their uncle and 2% by people at the Kids' Fishing Event.

In a multiple response question, most Kids' Fishing Event Participants reported they fished with a parent followed by their brother and grandfather. The overwhelming majority (70%) fished with their father; 20% reported fishing with their mother; 15% fished with a brother, and 14% fished with a grandfather. Only seven percent reported fishing with someone other than a family member. Children, given a choice of whom they would *rather* fish with, indicated their parents (66%), a grandparent (11%), friends (10%), or a brother (8%).

The majority of participants had friends who went fishing (81%). Forty-eight percent of participants reported having a lot of friends who went fishing and another 47% reported they had a few friends who went fishing. A majority of participants also were interested in joining a fishing club for kids (58% very interested, 27% somewhat).

Issues regarding previous fishing experiences appear to be linked closely with future motivations toward fishing. There was a significant linear relationship between the amount of interest participants had coming into the event and the amount of interest participants had after the event ($r_s = 0.185$, $p < 0.001$).

On the assumption that the amount of interest participants had prior to the event would be related to familial involvement in the sport of fishing, a series of analyses were performed relating the initial interest in fishing that participants brought to the event with responses about a) members of the family who fish, b) where participants learned how to fish and c) who

participants wished they could fish with. Overall interest in fishing was not related to any of these familial factors about fishing initiation and participation.

Fishing Initiation and Participation by Event Type

Significantly more WRD participants said their grandmothers (18% WRD versus 11% General) [$\chi^2 (1) = 6.15, p < 0.05$], and grandfathers (28% WRD to 21% General) [$\chi^2 (1) = 4.49, p < 0.05$] fished. A significantly greater proportion of General participants (18%) fished with their brother [$\chi^2 (1) = 6.32, p < 0.05$] than WRD participants (11%). There were no significant differences between the two types of events in the number of participants who had friends who fished, who taught them how to fish and with whom they would prefer to go fishing.

Fishing Initiation and Participation by Gender

Females had a significantly lower overall interest in fishing than males [$\chi^2 (2) = 17.66, p < 0.001$] with 63% saying they were very interested compared to 77% for males, and 33% saying they were somewhat interested compared to 18% for males. There were no significant differences between males and females in who in the family fished, but a *significantly* larger percentage of males have friends who fish [$\chi^2 (2) = 25.85, p < 0.001$]. Fifty-one percent of males say a lot of their friends fish versus 40% of females. Forty-five percent of males said a few of their friends fished compared to 52% of females. Four percent of males said none of their friends fished as opposed to 8% of females. There were no significant differences between males and females in interest in joining a fishing club, or who taught them how to fish. One of the more interesting findings, however, was that a significantly greater proportion of females than males fished with their mothers (30% of females versus 16% of males) [$\chi^2 (1) = 14.97, p < 0.001$] and grandmothers (11% of females versus 3% of males) [$\chi^2 (1) = 7.99, p < 0.01$]. This

corresponds to the earlier mentioned modeling effect in which similar models by age, race or gender (Bandura, 1986; Gould & Weiss, 1981; and McCullagh, 1987).

FISHING MOTIVATIONS

Nine possible fishing motivations for why some people like to fish were presented to participants. The fishing motivations were:

- (1) to catch fish to eat,
- (2) to catch a lot of fish,
- (3) to catch a big fish,
- (4) for the sport or to learn a sport,
- (5) to be with family,
- (6) to be with friends,
- (7) to learn about nature,
- (8) for relaxation,
- (9) and to have fun.

Participants were asked if the fishing motivation was a very important reason, somewhat important reason, or not a reason at all why they fish. The main motivations for fishing among Kids' Fishing Event Participants were all social/psychological in nature. To have fun (92%), to be with family (77%), to learn about nature (75%), for relaxation (61%), for the sport or to learn a sport (59%) and to be with friends (58%) were all reported to be very important fishing motivations by a majority of respondents. All of these reasons have to do with the emotional effect of fishing or the social aspect of fishing. All responses that related directly to the process or product of fishing were of less importance.

Fishing Motivation by Gender

In relation to gender and fishing motivations, a disproportionately higher percent of males indicated they found it VERY important to catch lots of fish [$\chi^2(1) = 15.80, p < 0.001$], very important to learn a new sport [$\chi^2(1) = 6.14, p < 0.05$], very important to catch big fish [$\chi^2(1) = 26.68, p < 0.001$], and to relax [$\chi^2(1) = 5.06, p < 0.05$].

Fishing Motivation by Age

There were several significant relationships between grade level and the items children found most important in the sport of fishing. As grade level increased, children became significantly *less* interested in being with family ($r_s = -0.097, p < 0.05$), significantly *less* interested in catching lots of fish ($r_s = -0.125, p < 0.01$), significantly *less* interested in learning about nature ($r_s = -0.182, p < 0.01$), significantly *more* interested in relaxing ($r_s = -0.106, p < 0.01$), significantly *more* interested in having fun ($r_s = -0.097, p < 0.01$) and significantly *more* interested in being with friends ($r_s = 0.069, p < 0.05$). Having fun and improving skills have been shown to be the most important motives of children in sports between the ages of 11 and 18 (Sapp & Haubenstricker, 1978).

CONCLUSIONS

The Georgia Wildlife Resources Division's Kids' Fishing Events are well liked and rated highly by participants. Ninety-eight percent of participants liked the Kids' Fishing Event (KFE) they attended. Participants feel they learn a lot from the Kids' Fishing Events, and the Fishing Events are increasing interest in going fishing. Seventy-six percent of participants reported that the Kids' Fishing Event made them more interested in going fishing.

Of important clinical significance is the lack of statistical significance between the two types of events in the rankings of any of the questions measuring the impact of the fishing event.

Just as there were no statistically significant demographic differences in the people attending the two types of events, there were also no significant motivational differences in the people attending the two types of events. People attending the two events were similar in gender, race, place of residence, and attitudes toward the sport of fishing. Furthermore, there were no significant differences between participants of either type of fishing event after the events. One small, but perhaps important, difference between participants is that General Event participants were more likely than WRD Event participants to rate the weather as a dissatisfaction. One interpretation of this finding is that perhaps the Georgia Wildlife Resources Division is more likely to cancel fishing events due to inclement weather. The Division should consider evaluating the policies of General Events in terms of cancellation policies and conducting events during inclement weather, for both safety and participant satisfaction.

Overall, the events are having a positive impact on the children who attended the events, and may be having an even more important impact on females than males in terms of encouraging fishing participation. This finding is of no small consequence, since overall girls fish less than boys and have a higher likelihood of fishing desertion (Responsive Management 1999).

Event participants reported they are learning more about the intangible benefits of fishing than topics related to the fundamentals of fishing. The Division should attempt to increase the time and resources dedicated to dealing with the fundamentals of fishing such as how to identify fish, how to remove a hook and where you can go fishing.

The results of this study clearly indicate that the Kid's Fishing Events could be made even more effective if the events and topics were tailored for gender and age-related differences among participants. One size does not fit all. The findings of this study show definitively that

there are important gender and age-related differences among males and females, as well as different age groups that attend the events. Overall, the data collected in this study on young children's attitudes toward fishing and the fishing events supports Kellert & Westervelt's (1983) proposition that children go through stages of learning and cognitive development and that programs that are tailored to these stages will be much more effective. One possibility of increasing the effectiveness of the events is to separate girls and boys, even if it is only for those portions of the event where there is close physical interaction between participants and instructors. For example, when teaching participants how to remove a hook from a fish, young female participants could be paired with a female instructor. At a minimum, the Division should evaluate the male/female ratio of its instructors.

Kids' Fishing Events should also be structured to meet the learning stages of participants. Younger event participants, those in Grades 1 - 4, need to catch fish, and the events should be structured to insure these children experience the thrill of catching a fish. Younger event participants were also more interested in receiving tangible items from the event, such as certificates, a patch, equipment or some other type of memento. This type of tangible "memento" does not have to be much, but it is clearly important to younger children. Such "mementos" could also increase the impact of the event and encourage fishing participation. Not only would certificates, small prizes and tackle such as a bobber fulfill this desire for young children to take something home, but another consideration is to photograph the child with the fish he/she has caught and send it home with the child. This could greatly enhance the "shelf life" or memory of the event, and also encourage the act of fishing. Also, the information obtained in this study -- that the children attending these events, especially the younger children, want some type of take home "memento" -- could be used to increase the donation of fishing

equipment and/or other items from corporate/NGO sponsors with a vested interest in the recruitment and retention of young anglers. The younger participants were more interested in keeping the fish they caught and the Division should consider ways to meet this desire in a way that is satisfactory to the child, the Division and the parent. One possibility is that the child be allowed to keep the fish for a limited time next to him or her and then as the child is leaving the event, return it to the water or to a central location for the Division to release after the event.

Kids' Fishing Event participants in 5th to 8th grade are interested in enhancing their fishing skills and learning facts. High school students expressed some concern over other children at the event. This finding, combined with the finding that as grade level increased satisfaction decreased, may indicate that the events are geared too low for high school students. Although this finding might also be due to an overall desertion from sports after the age of 11 and not due directly to the events themselves, it seems highly worthwhile for the Division to evaluate whether the events meet the learning and social needs of high school students. If events are geared too low, the events could be improved by making them more challenging and perhaps separating high school students from younger children. Older youth, especially high school students, do not want to be seen participating in events that some might think of as "childish" or be seen interacting with children much younger than themselves.

The main thrust of Kids' Fishing Events for high school students must be centered in enticing participants to stay active in fishing. High school participants in this study fished fewer days and had a lower overall interest in the sport of fishing than younger participants, possibly a sign of age-related attrition. High school participants in this study were more likely to be interested in the social aspects of fishing such as fishing with friends rather than family. So, events that tie fishing with social elements are suggested as a way to bring groups of teenagers

together to fish. Additionally, promoting fishing events through existing social structures like school, church groups, and clubs could be an effective way of pairing teenagers' desire for social activities with fishing. To target high school participants, the focus of fishing should be on fishing as a social activity.

Overall, most of the children attending the events indicated that they would most like to fish with their parents. This is a powerful finding that could be used in the marketing of the Kids' Fishing Events. Marketing should be targeted at making an appeal to the parents of prospective participants to increase overall parental participation and to encourage parents to accompany their child to the event, thus resulting in increased satisfaction for participants.

WORKS CITED

Bandura, A. (1986). Social foundation of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.

Brustad, R. J. (1993). Youth in sport: Psychological considerations. In R. N. Singer, M. Murphey, & L. K. Tennant (Eds.), Handbook of research in sport psychology (pp. 695-728). New York: MacMillan.

Gould, D., & Weiss, M. R. (1981). The effects of model similarity and model talk on self-efficacy and muscular endurance. Journal of sport psychology, 3, 17-29.

Kellert, S. R., & Westervelt, M.O. (1983). Children's attitudes, knowledge and behaviors toward animals (U.S. Government Printing Office: 0-405-522/1101). Washington, D.C.: U.S. Fish and Wildlife Service.

McCullagh, P. (1987). Model similarity effects on motor performance. Journal of sport psychology, 9, 249-260.

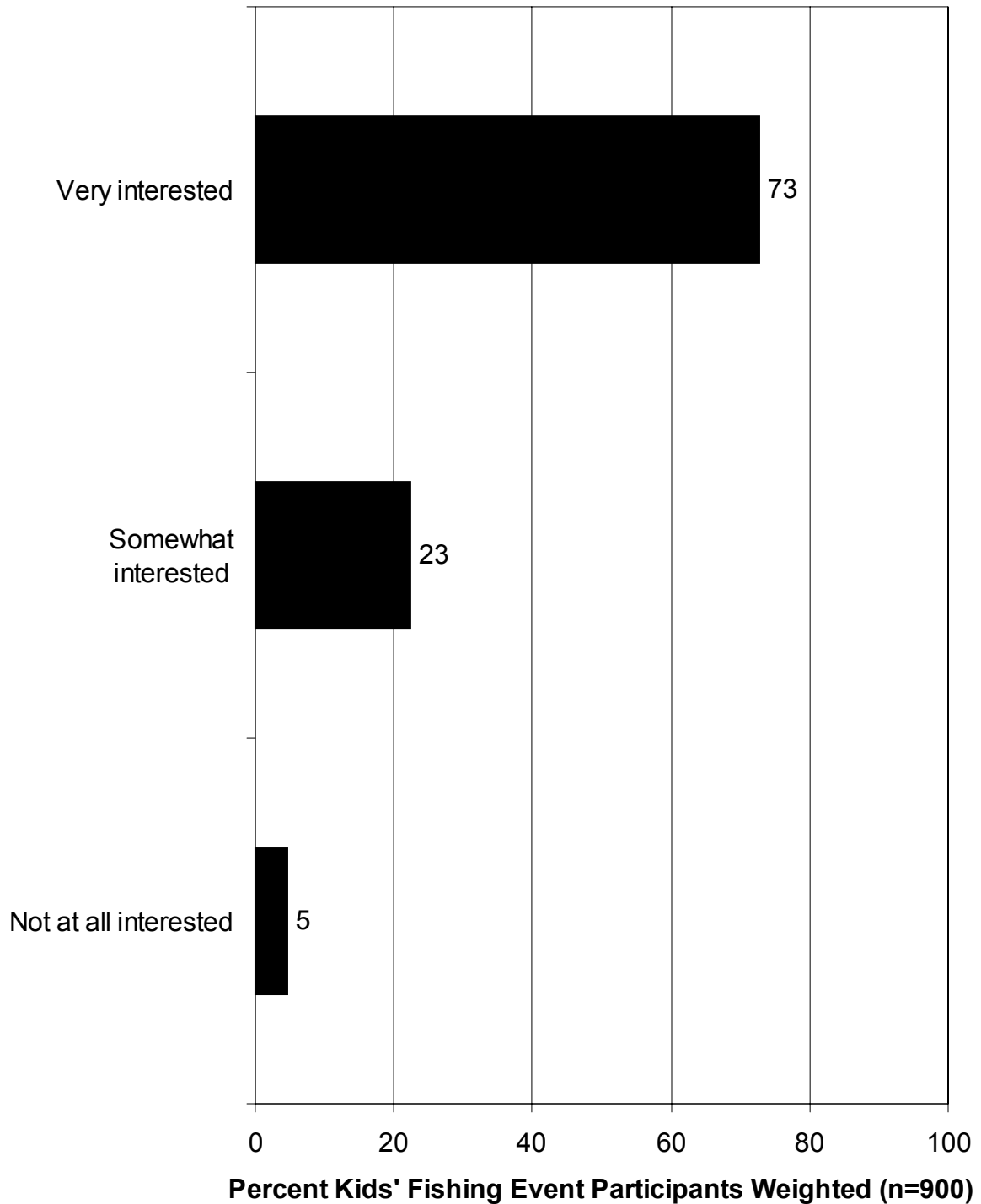
Piaget, J. (1965). Moral judgment of the child. New York: Free Press. (Original work published 1932).

Responsive Management (1998). The future of fishing in the United States: Assessment of needs to increase sport fishing participation. Phase V: Final report recommendations and strategies (International Association of Fish and Wildlife Agencies Federal Aid in Sport Fishing Restoration Grant Agreement 1448-98210-98-G048). Harrisonburg, VA.

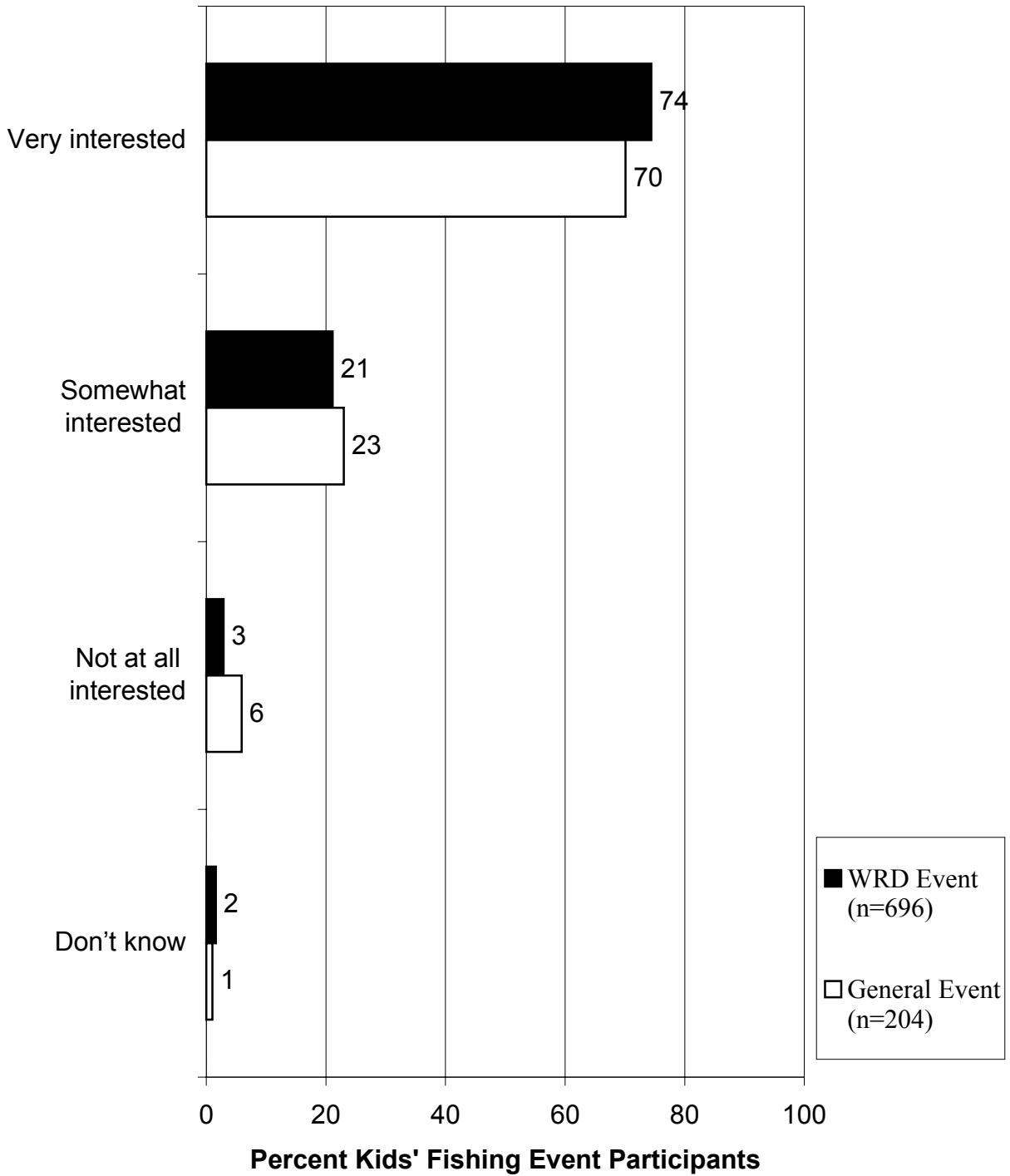
Sapp, M., & Haubenstricker, J. (1978, April). Motivation for joining and reasons for not continuing in youth sport programs in Michigan. Paper presented at the annual meeting of the American Alliance for Health, Physical Education, Recreation, and Dance, Kansas City, MO.

GRAPHS

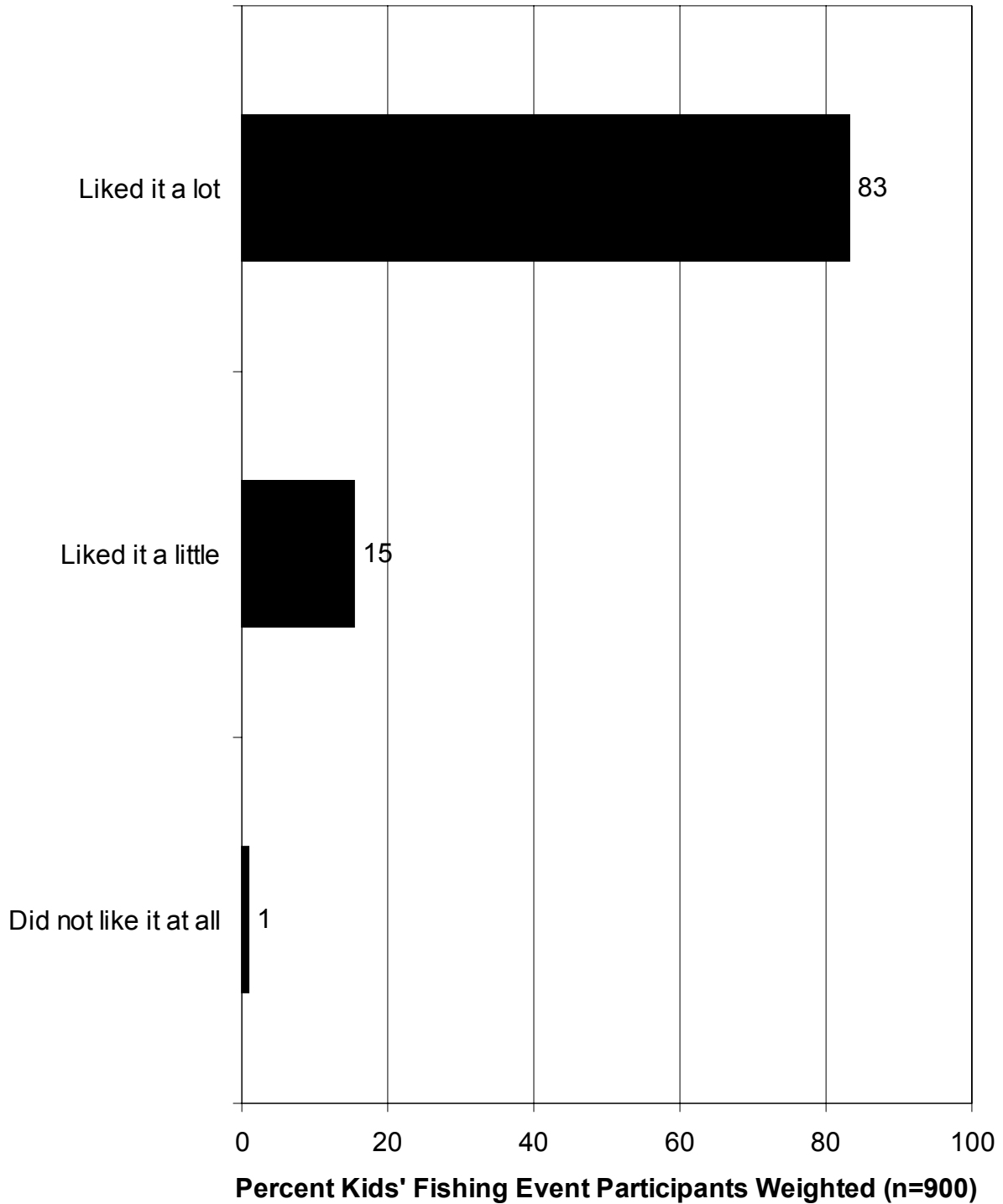
Q7. Would you say you are very interested, somewhat interested, or not at all interested in going fishing?



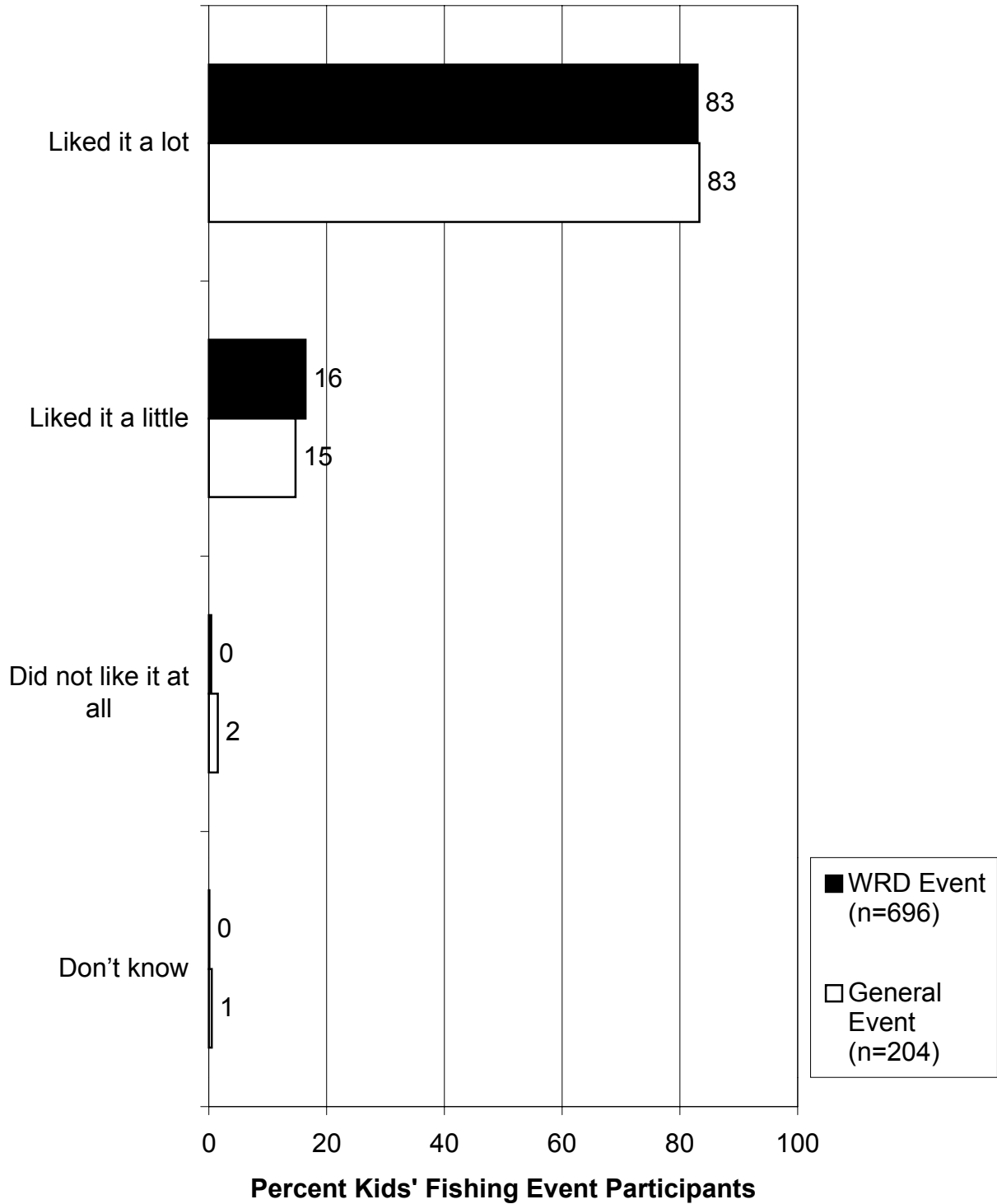
Q7. Would you say you are very interested, somewhat interested, or not at all interested in going fishing?



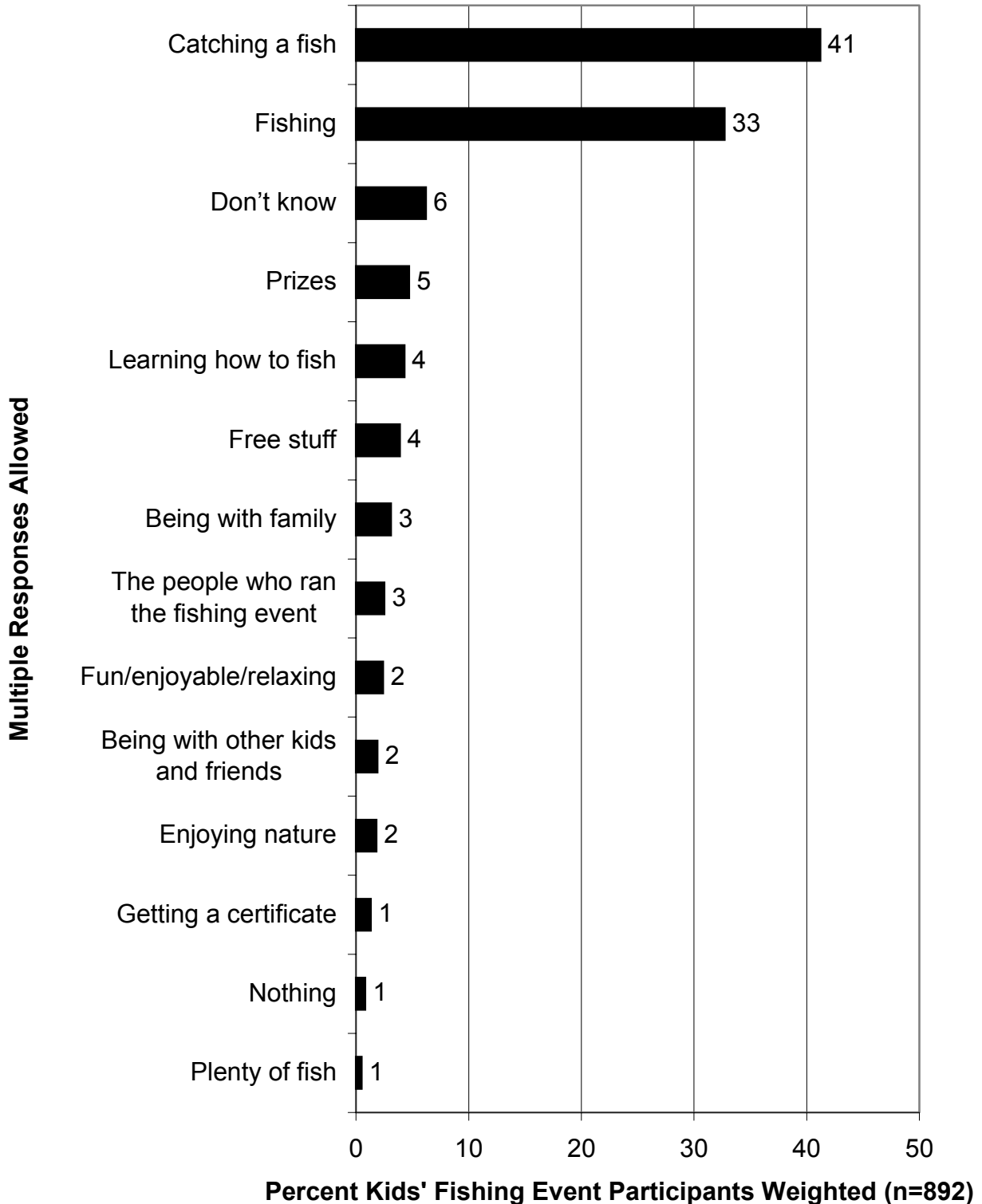
Q8. Overall, did you like [the Kids' Fishing Event] a lot, a little, or did not like it at all?



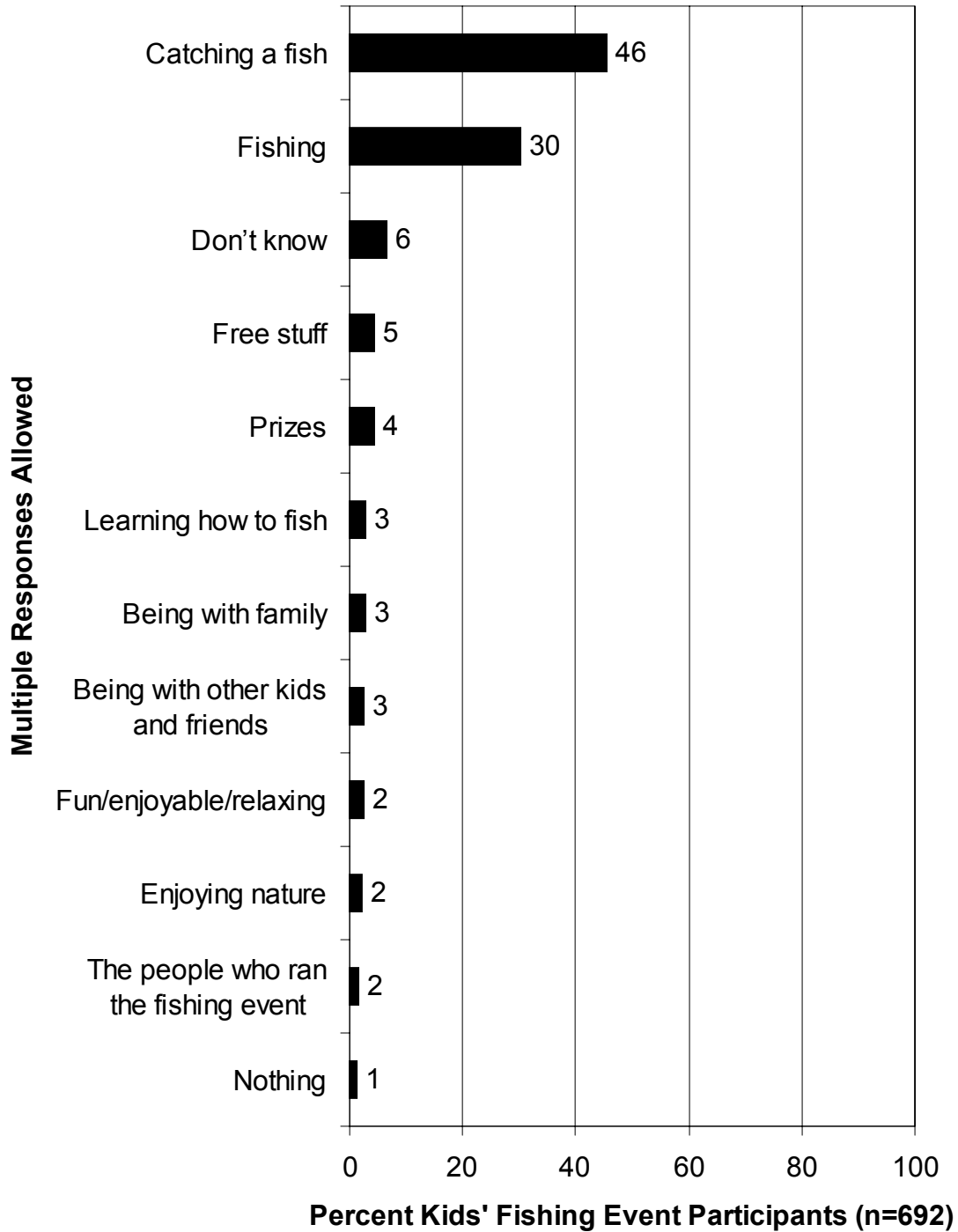
Q8. Overall, did you like [the Kids' Fishing Event] a lot, a little, or did not like it at all?



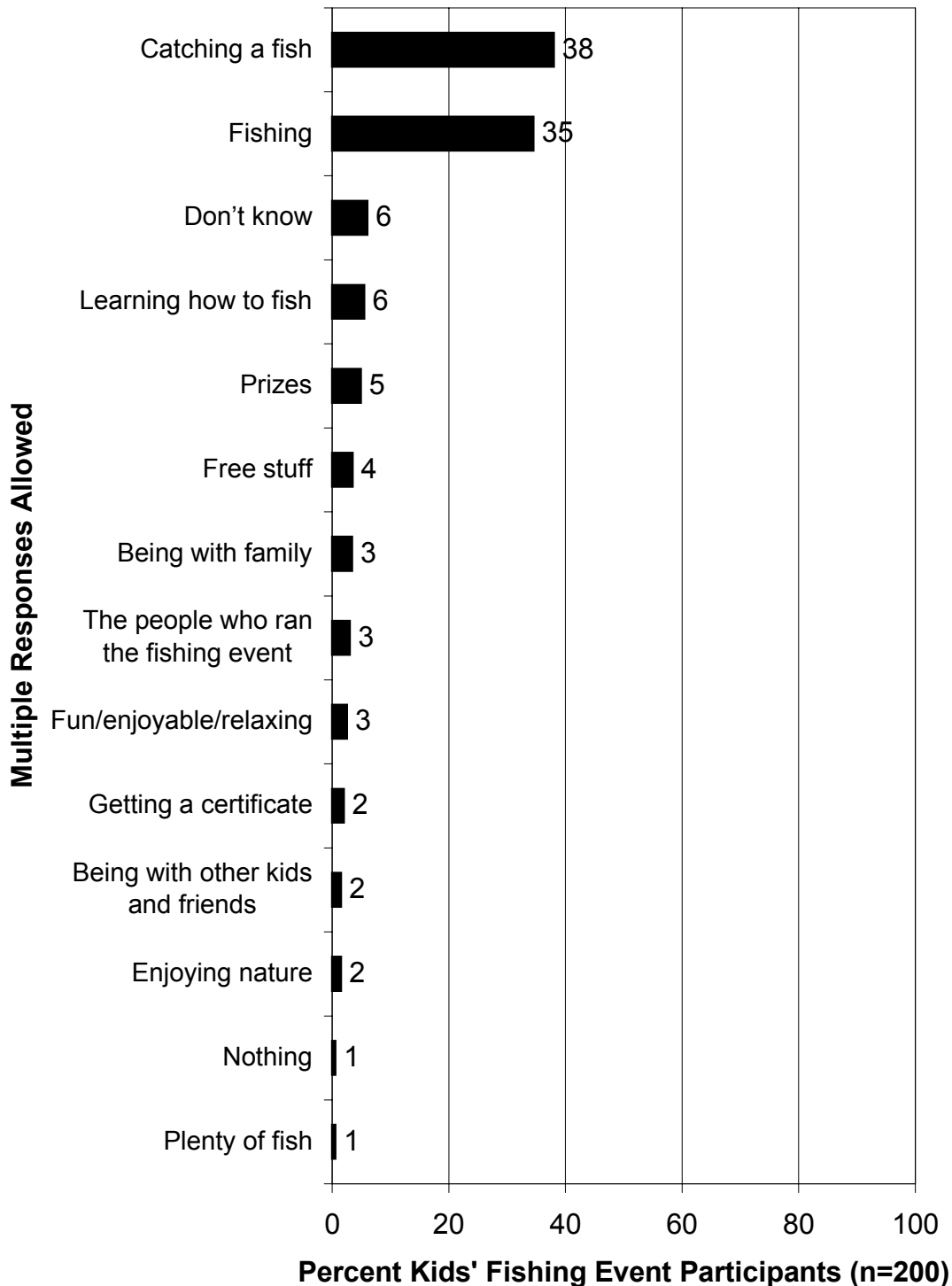
Q10. What did you like best about the Kids' Fishing Event? (Asked of those who reported liking the event.)



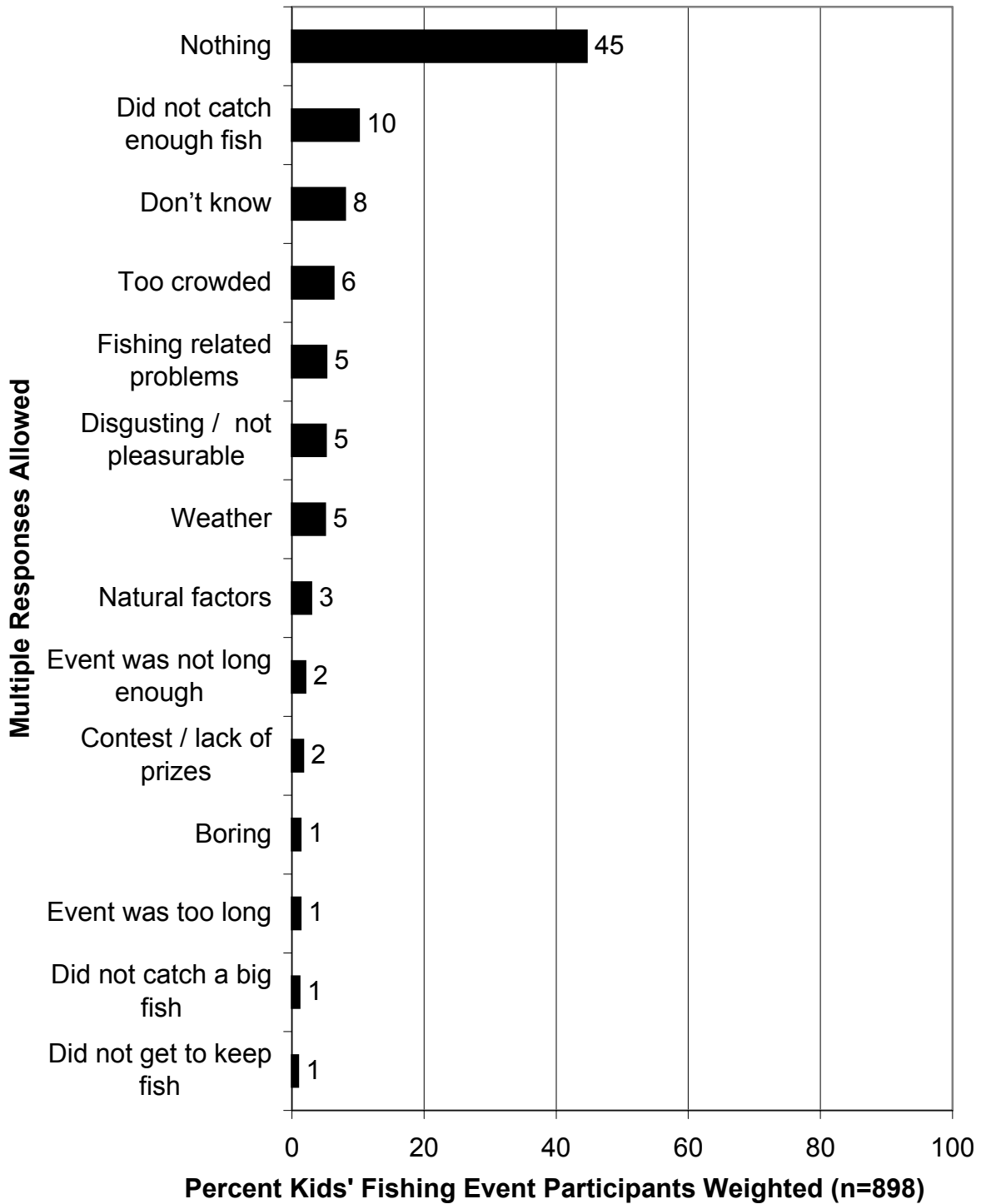
Q10. What did you like best about the Kids' Fishing Event? (Asked of those who reported liking the event.) (WRD Event)



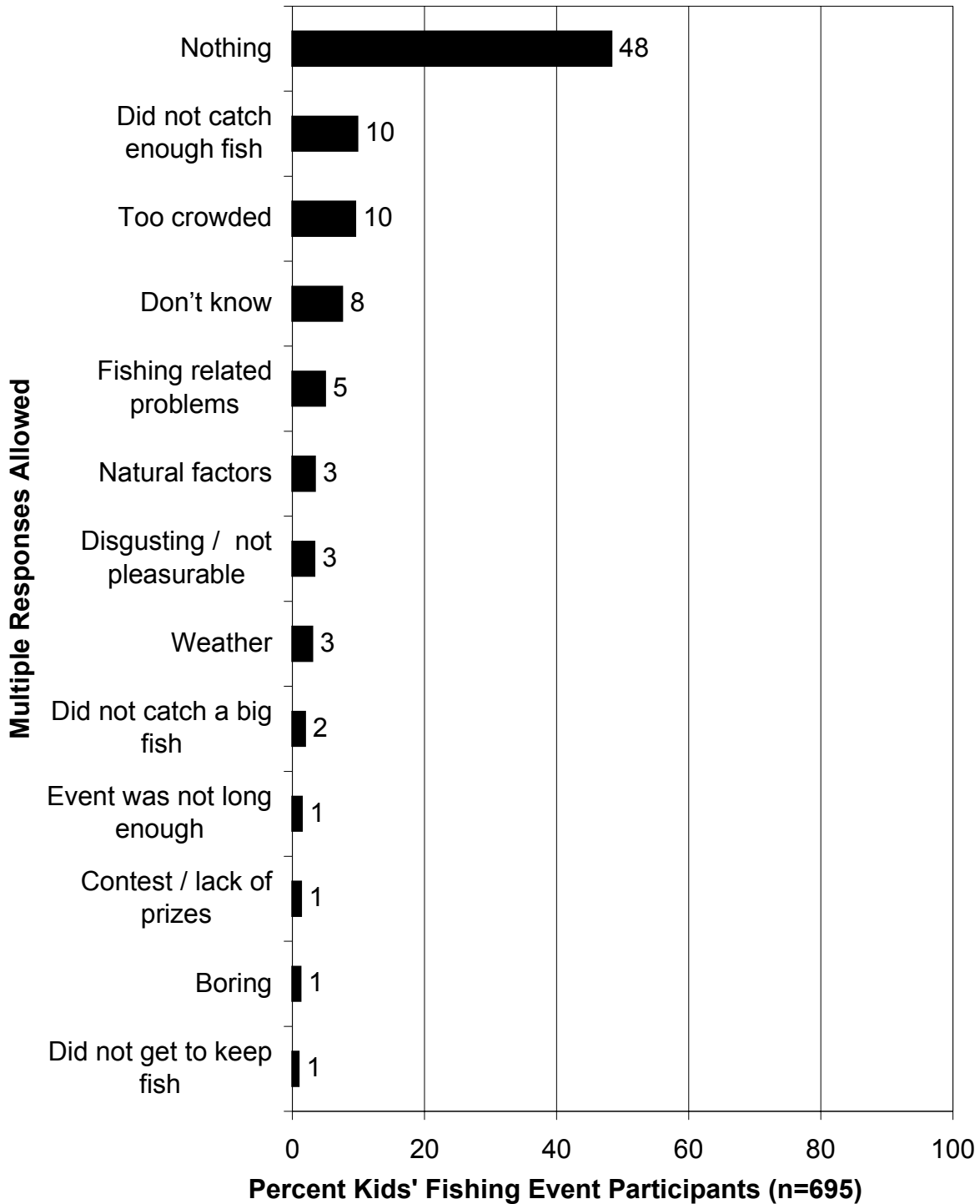
Q10. What did you like best about the Kids' Fishing Event? (Asked of those who reported liking the event.) (General Event)



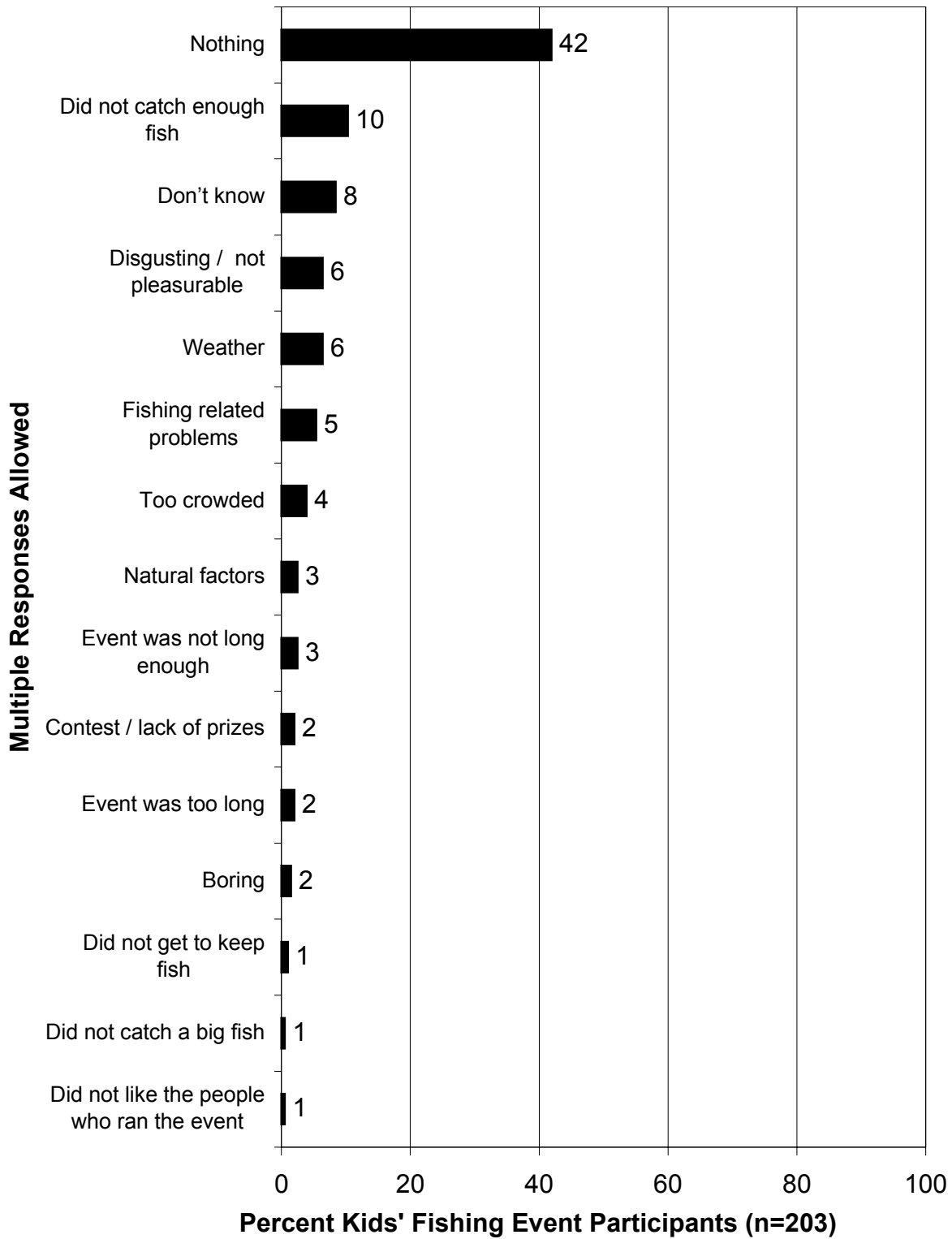
Q13. What did you like least about the Kids' Fishing Event?



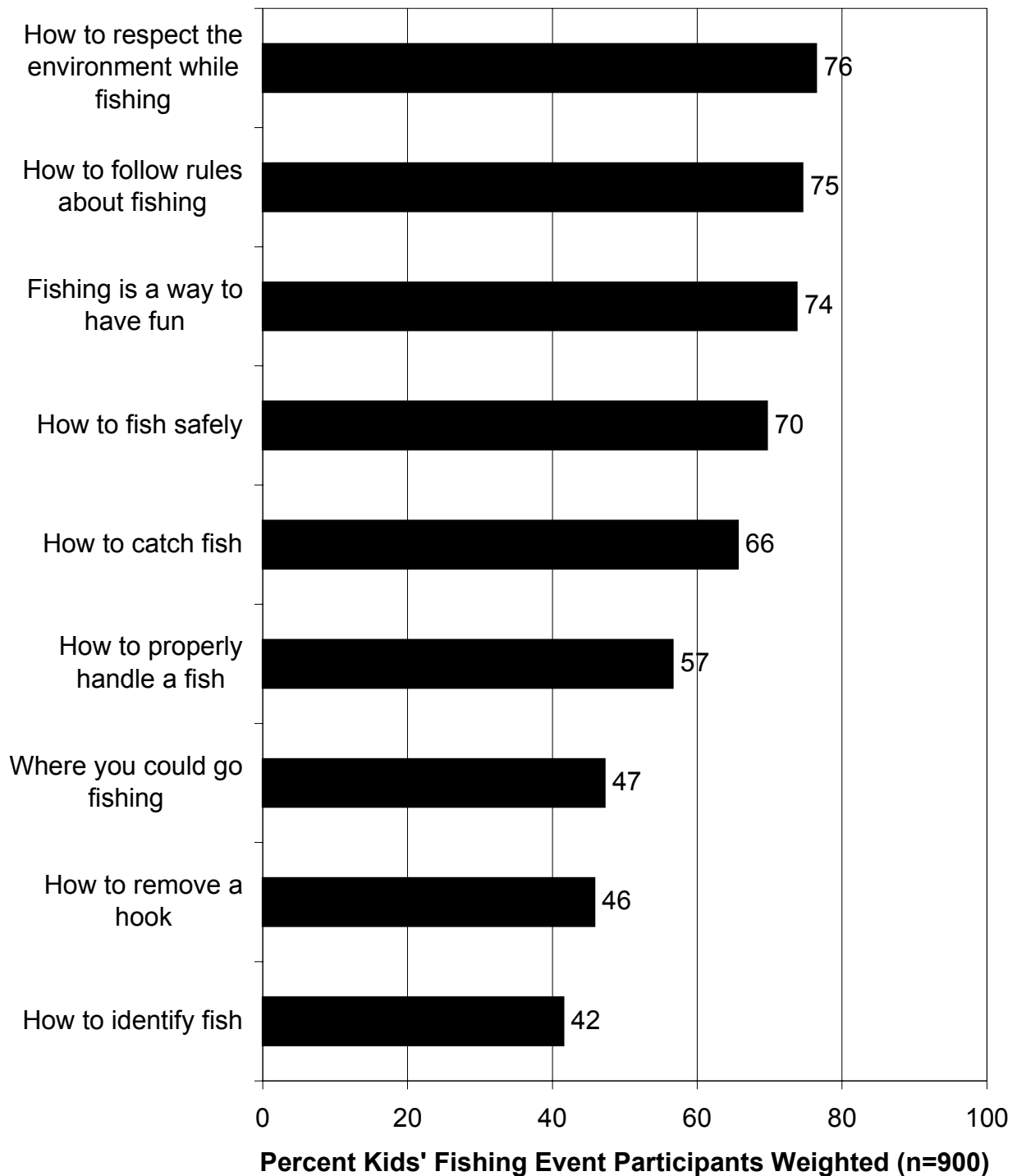
Q13. What did you like least about the Kids' Fishing Event? (WRD Event)



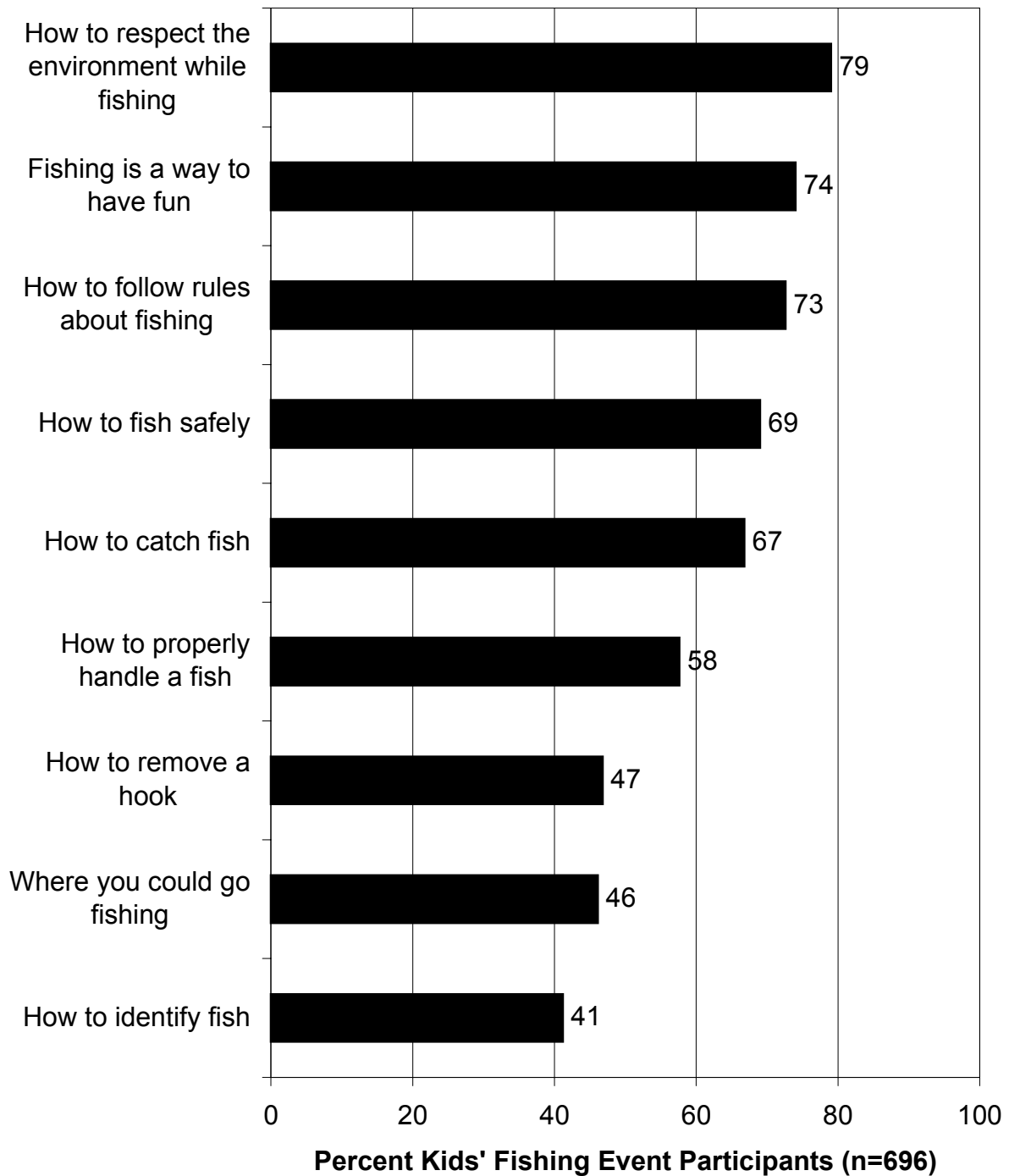
Q13. What did you like least... (General Event)



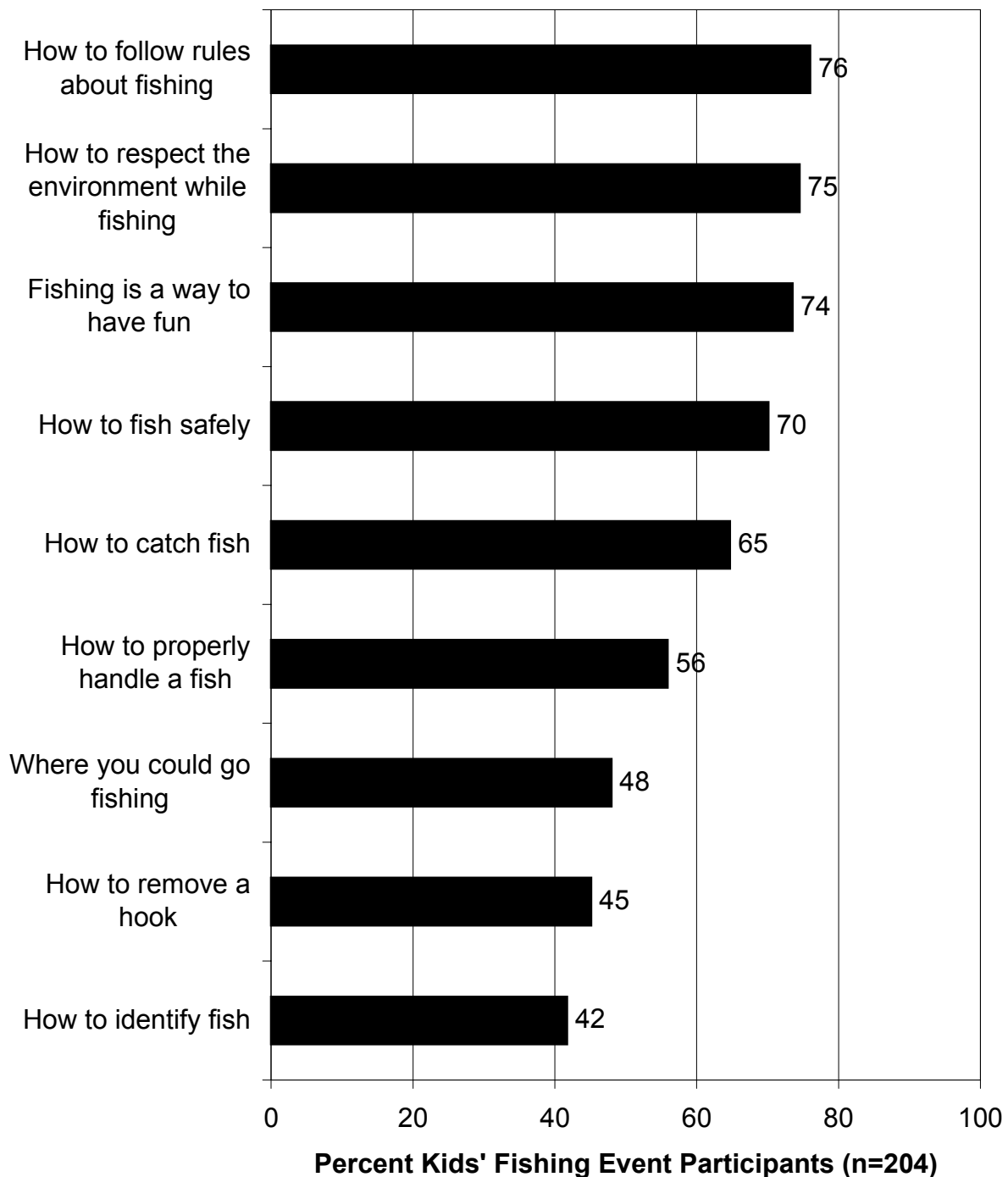
Q15-23. Percent who reported learning a lot about each of the following activities while attending the Kids' Fishing Event.



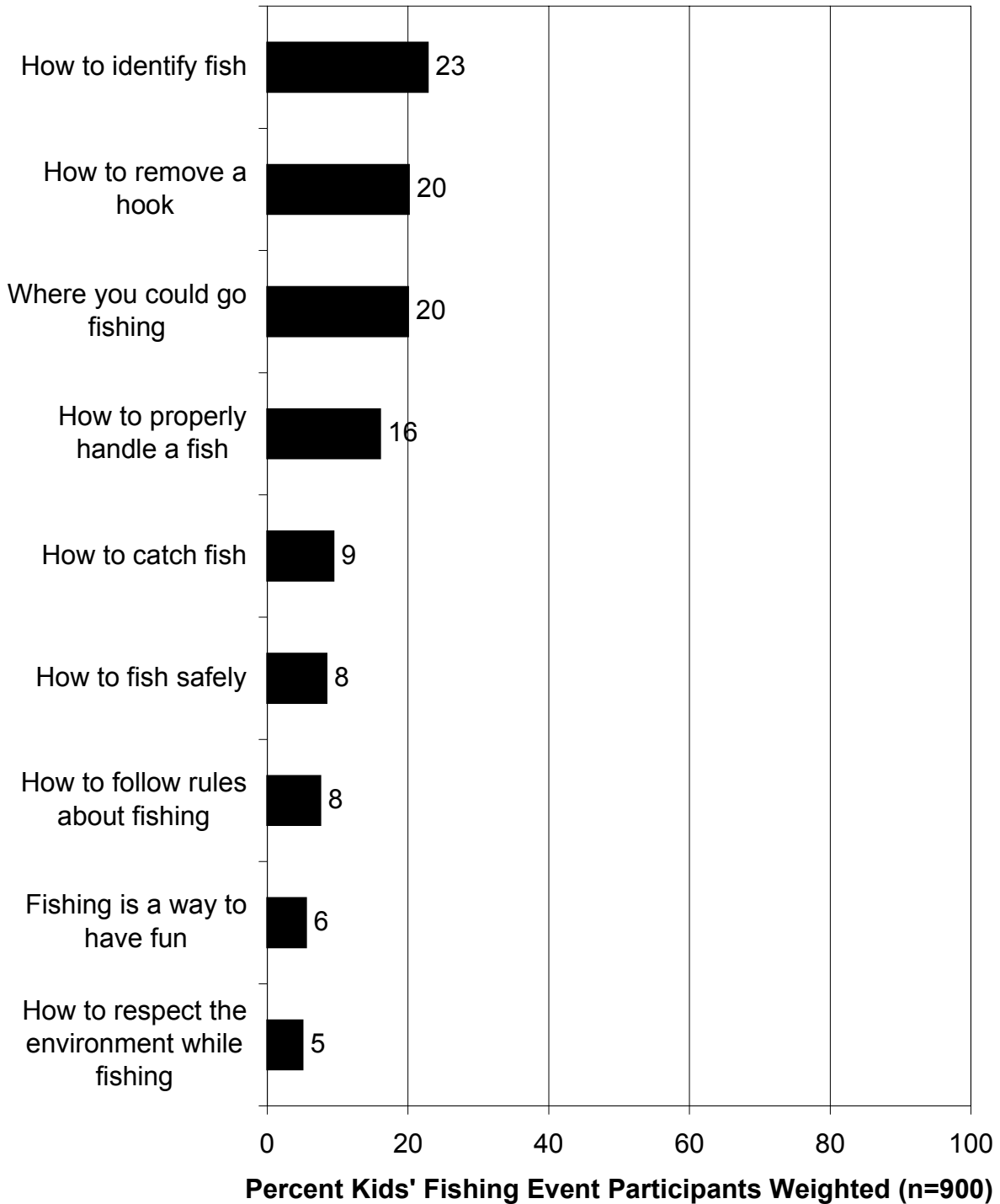
**Q15-23. Percent who reported learning a lot about each of the following activities while attending the Kids' Fishing Event.
(WRD Event)**



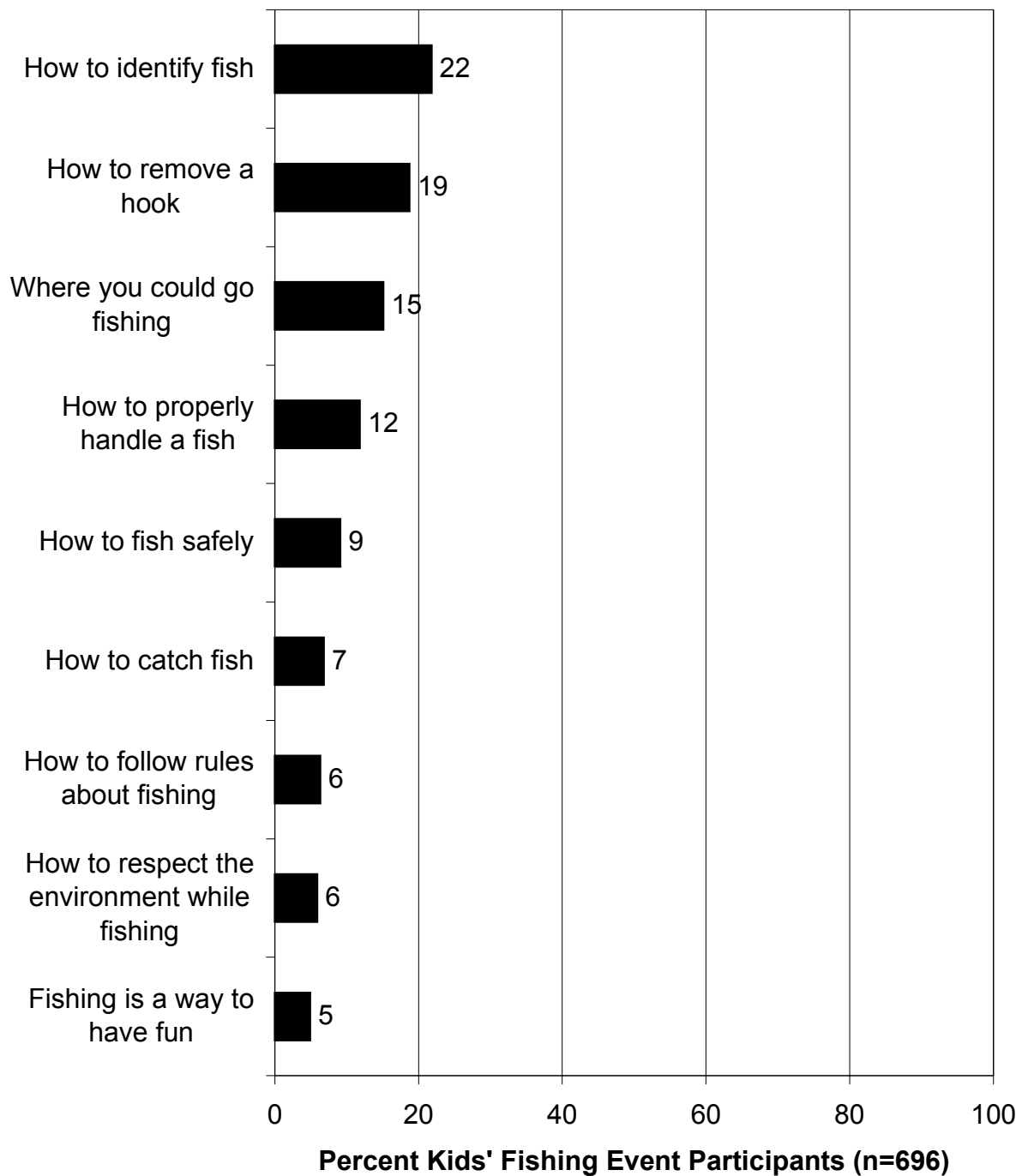
**Q15-23. Percent who reported learning a lot about each of the following activities while attending the Kids' Fishing Event.
(General Event)**



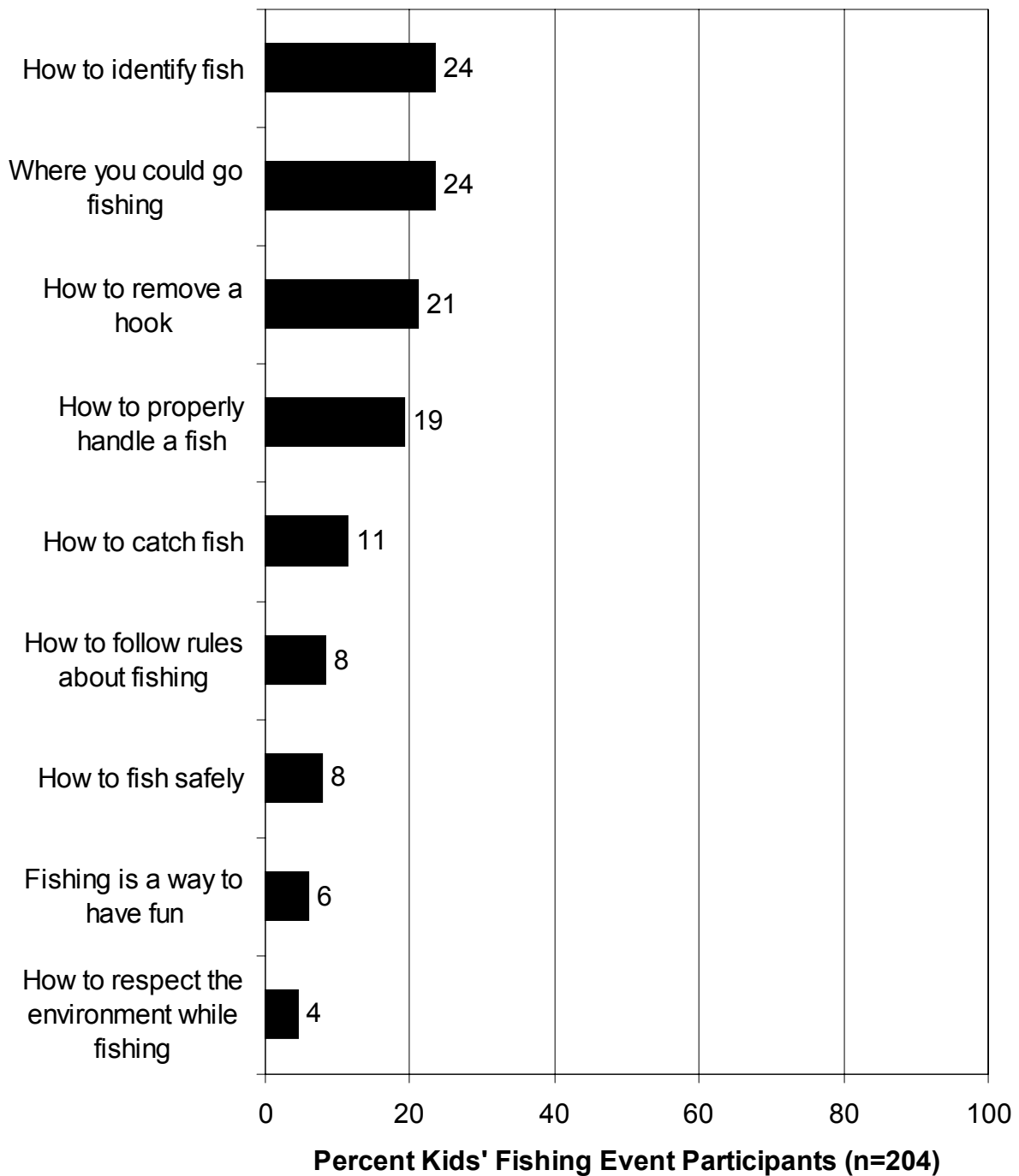
Q15-23. Percent who reported learning nothing at all about each of the following activities while attending the Kids' Fishing Event.



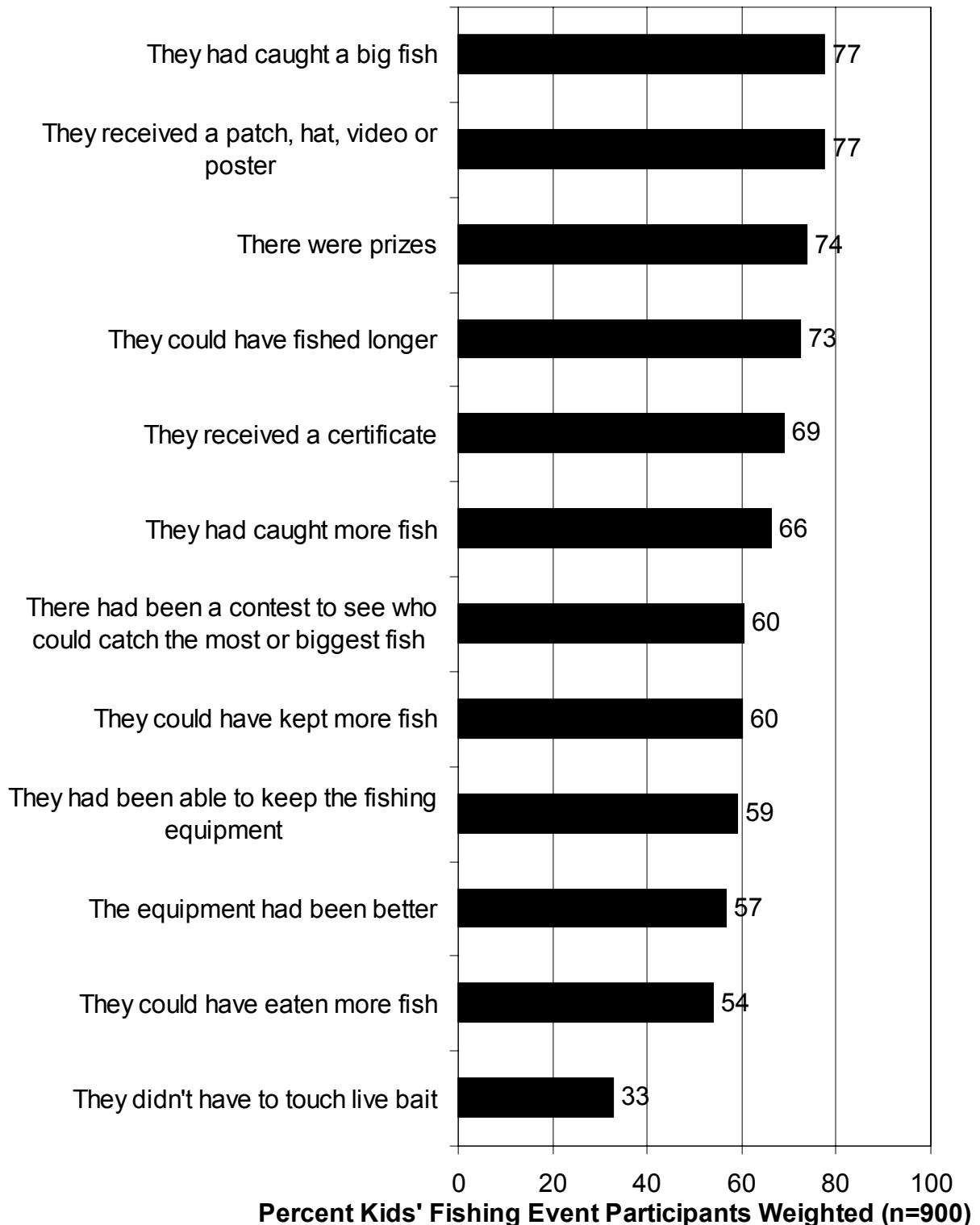
Q15-23. Percent who reported learning nothing at all about each of the following activities while attending the Kids' Fishing Event. (WRD Event)



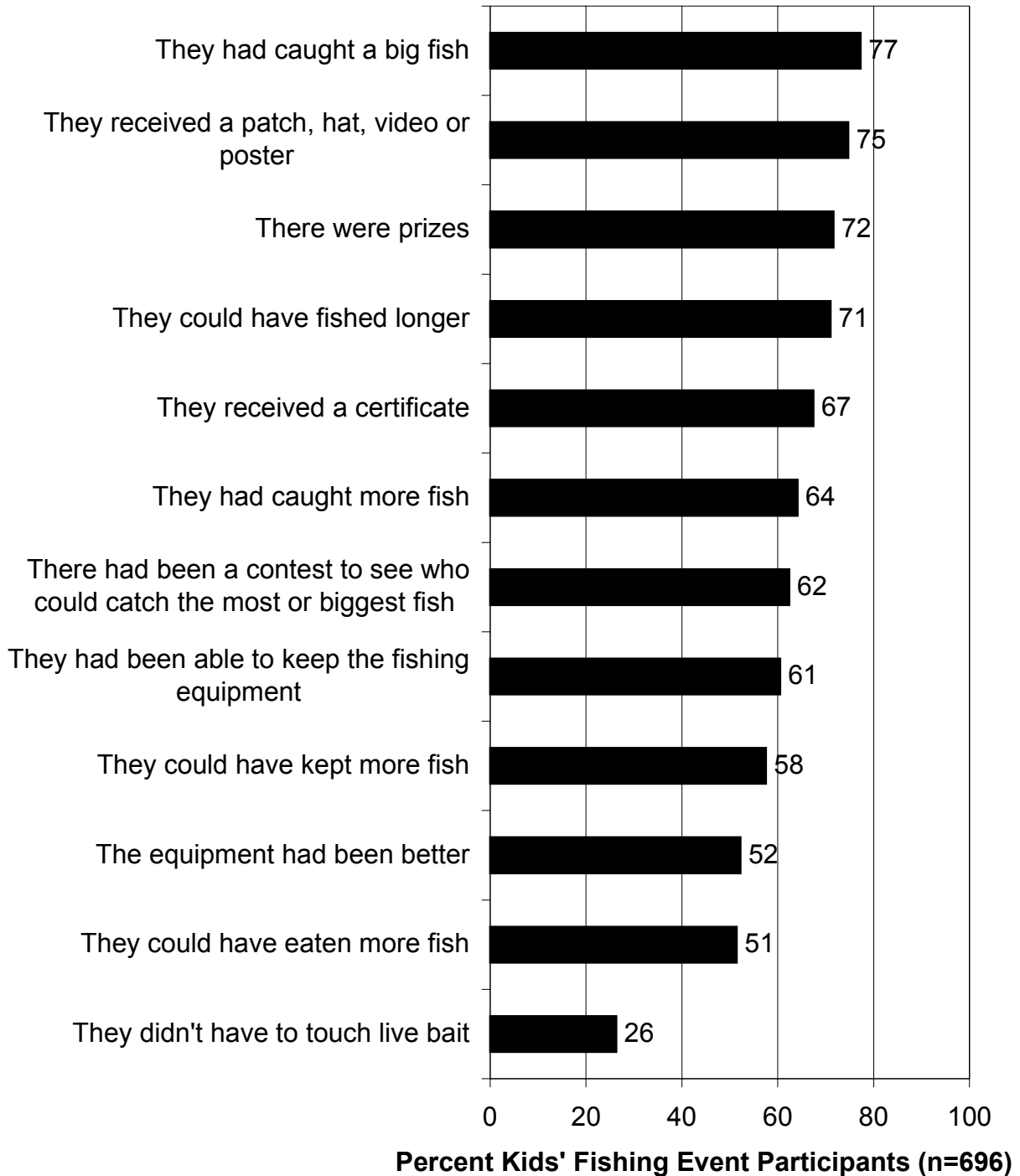
Q15-23. Percent who reported learning nothing at all about each of the following activities while attending the Kids' Fishing Event. (General Event)



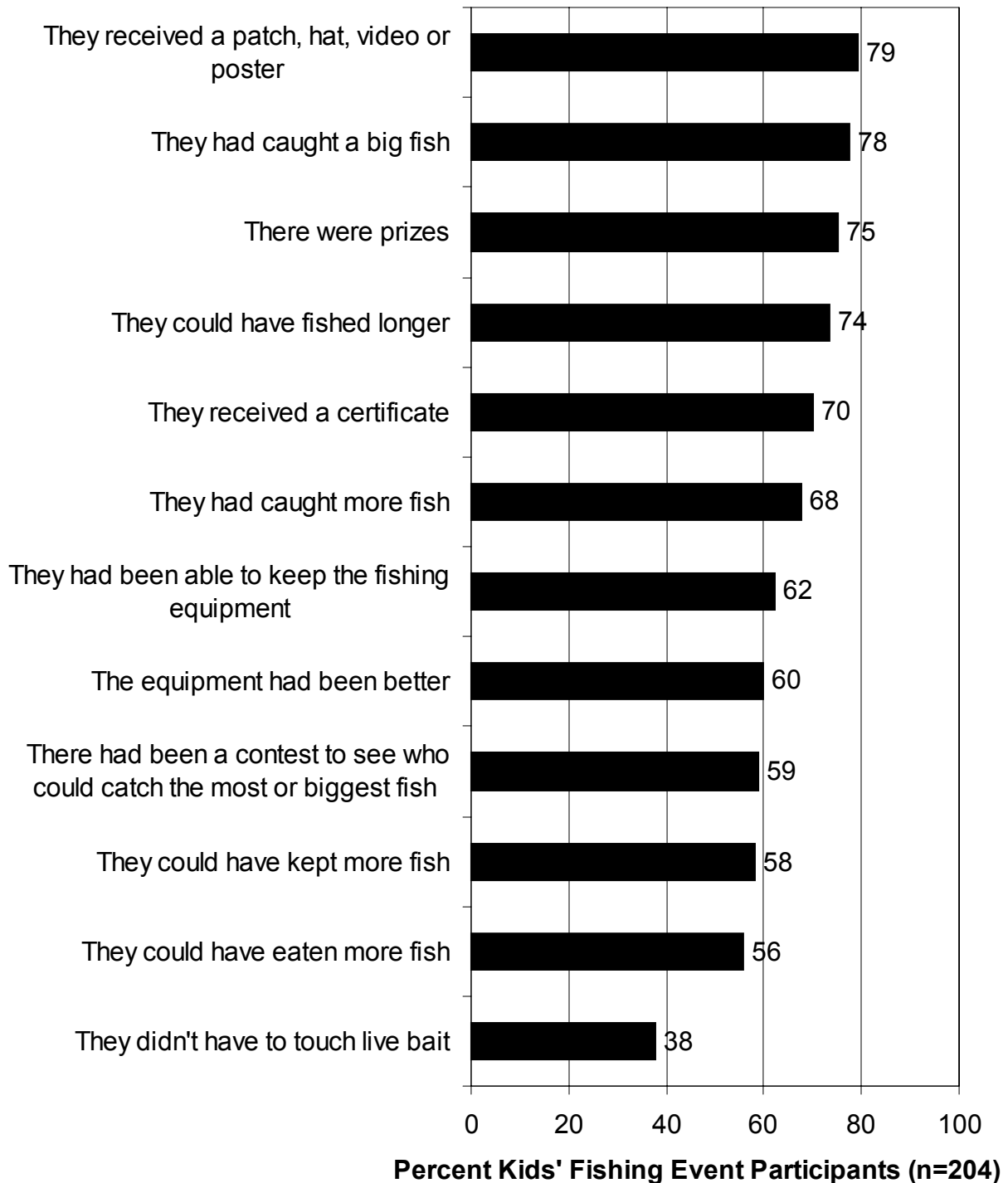
Q24-35. Percent who reported that the Kids' Fishing Event would have been better if...



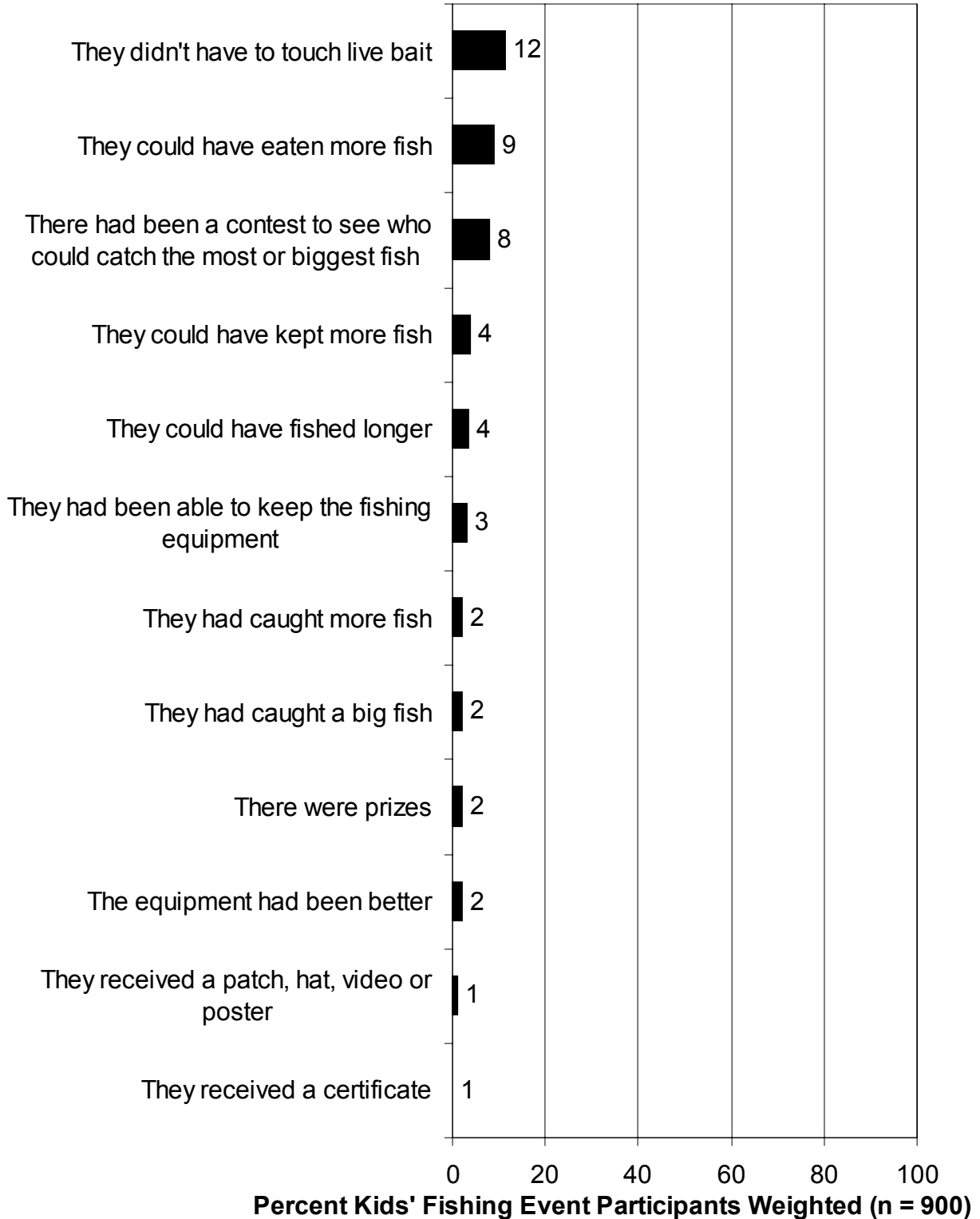
Q24-35. Percent who reported that the Kids' Fishing Event would have been better if... (WRD Event)



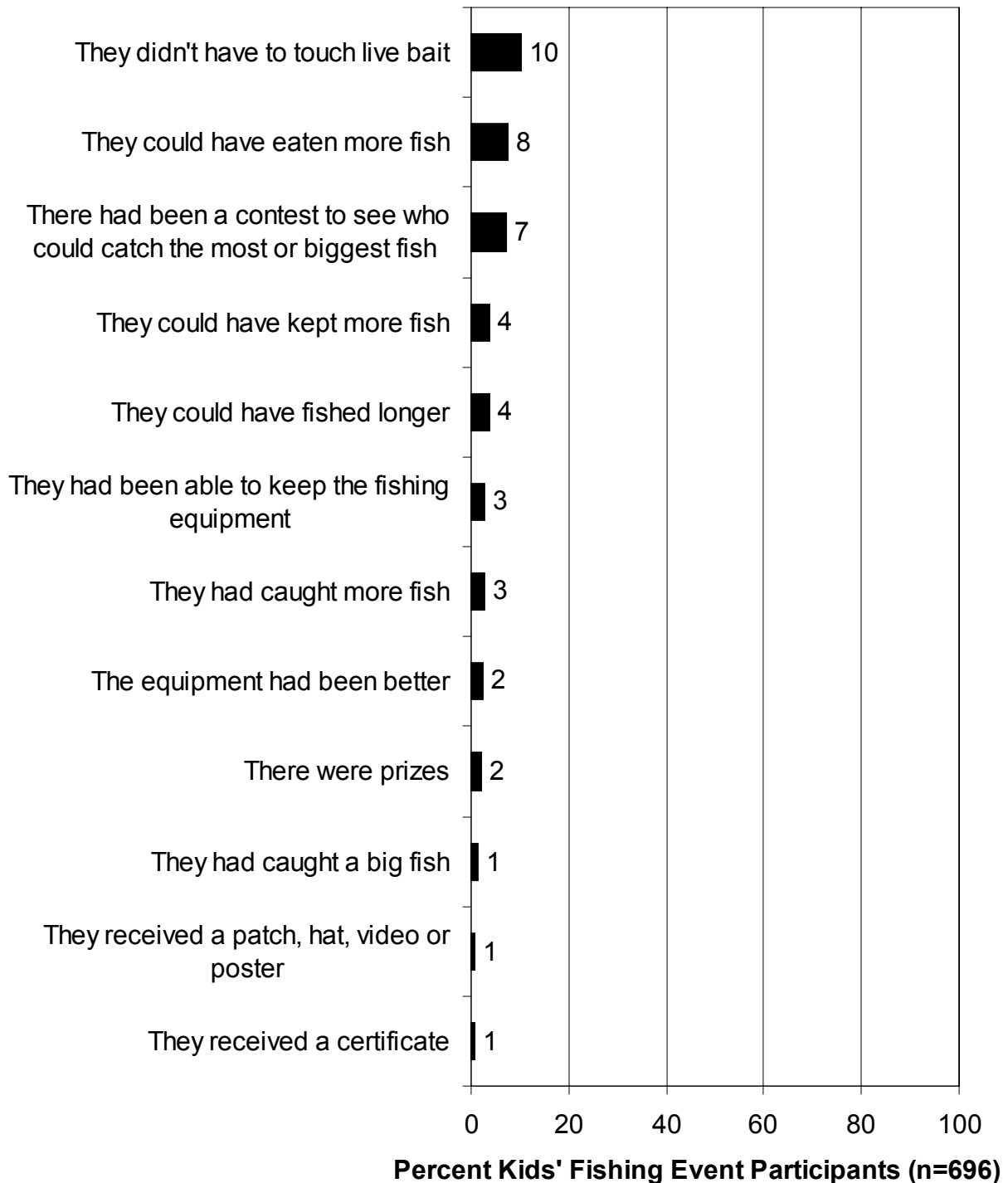
**Q24-35. Percent who reported that the Kids' Fishing Event would have been better if...
(General Event)**



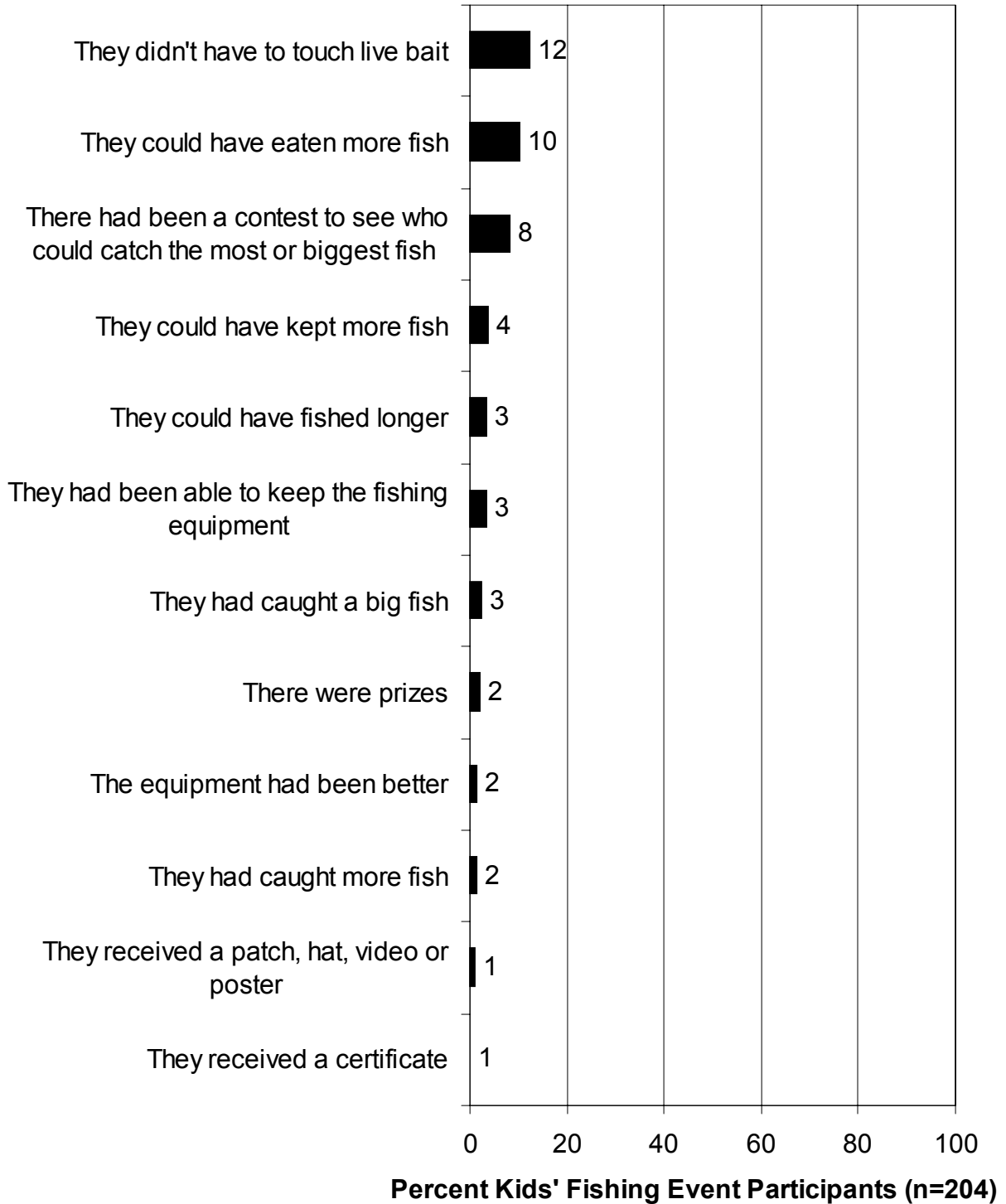
Q24-35. Percent who reported that the Kids' Fishing Event would have been worse if...



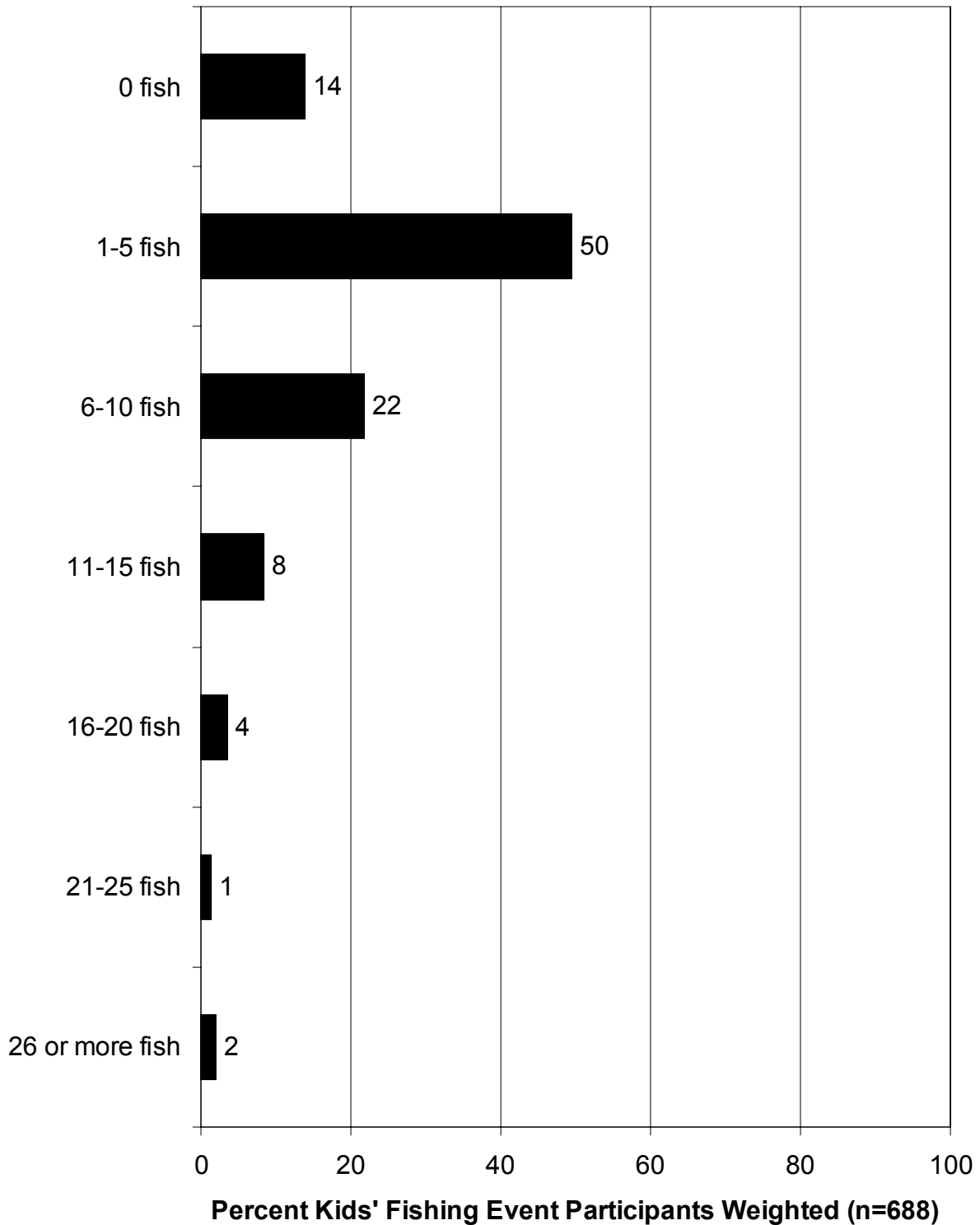
Q24-35. Percent who reported that the Kids' Fishing Event would have been worse if... (WRD Event)



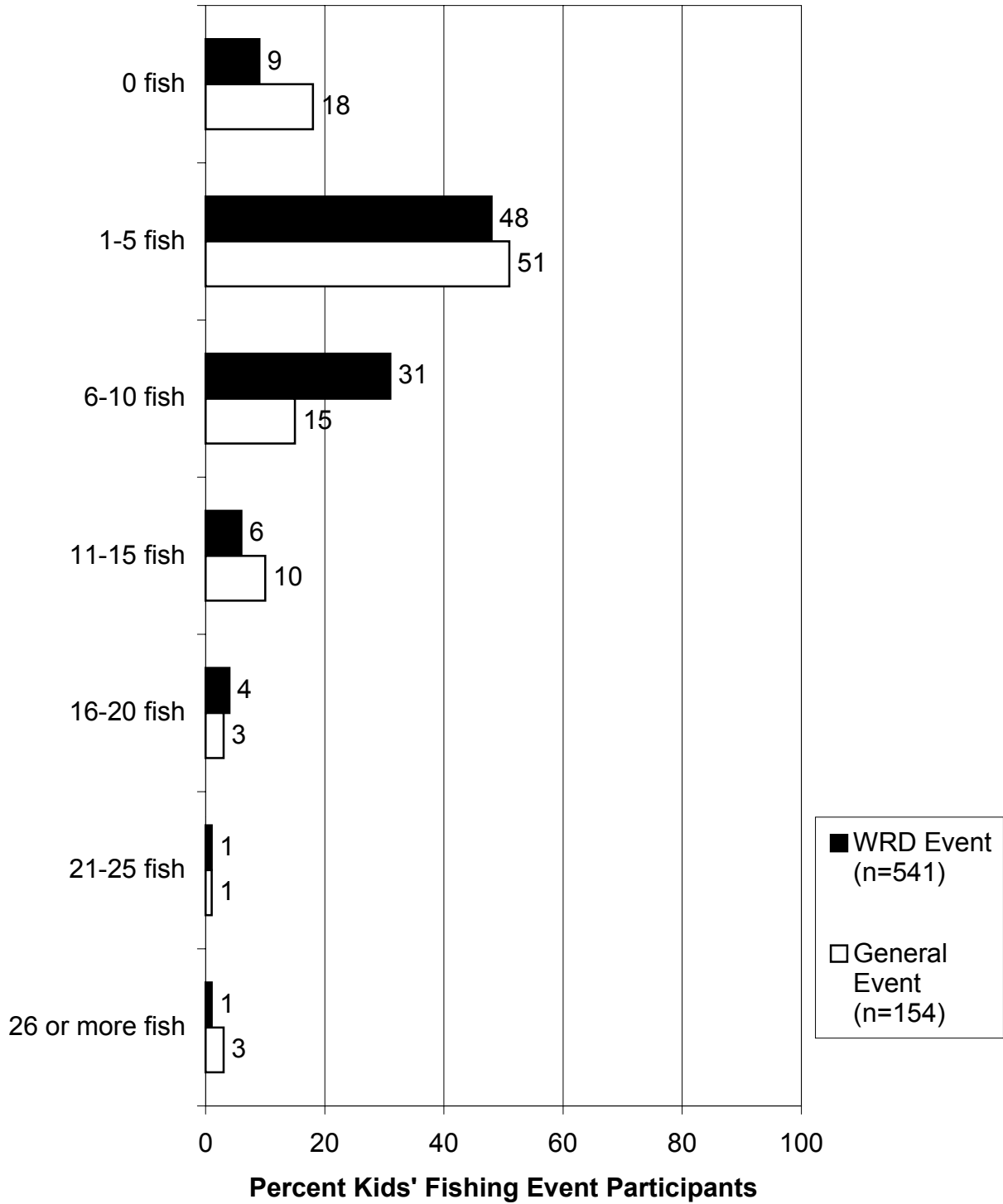
Q24-35. Percent who reported that the Kids' Fishing Event would have been worse if... (General Event)



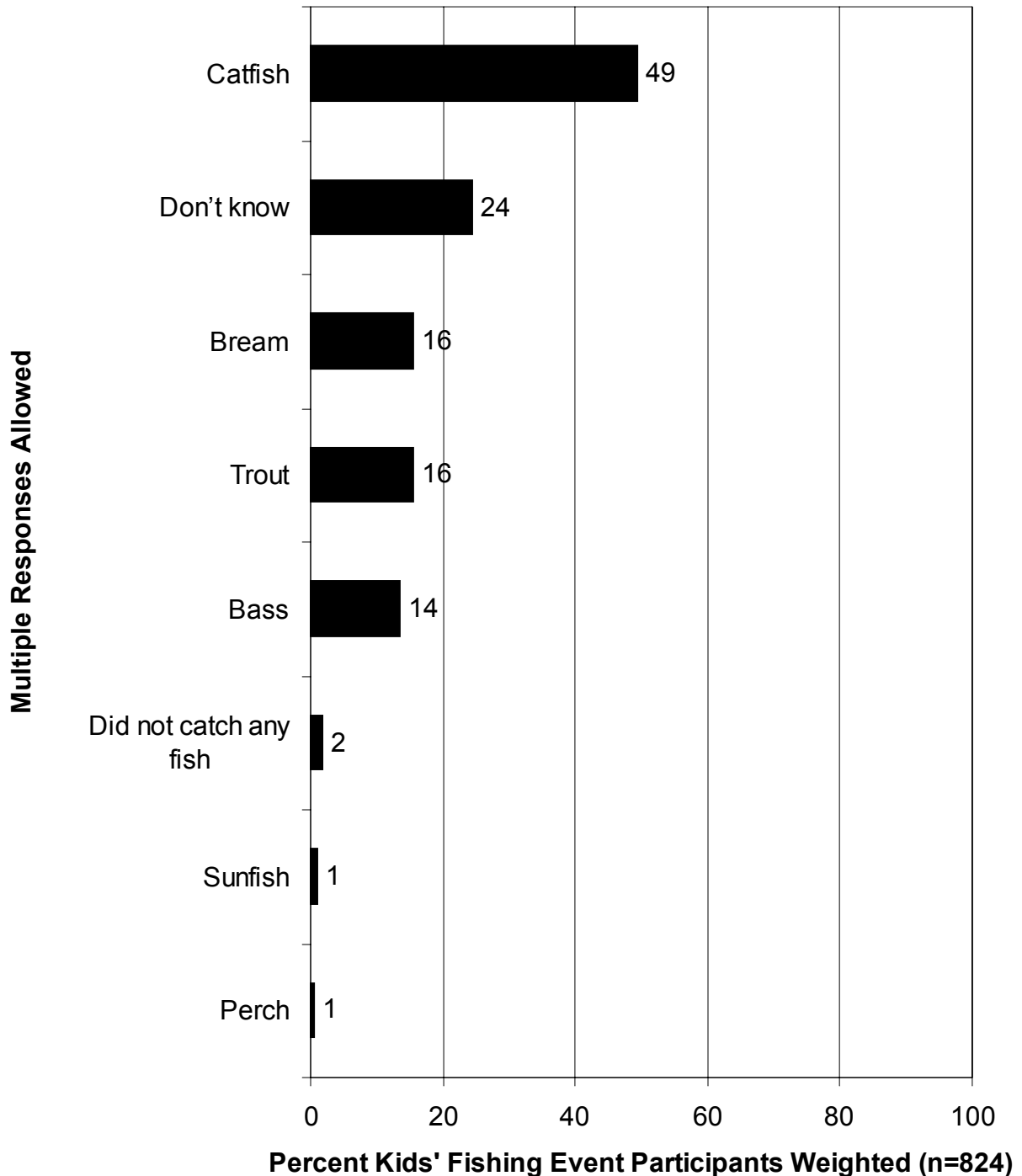
Q36. How many fish did you catch at the Kids' Fishing Event?



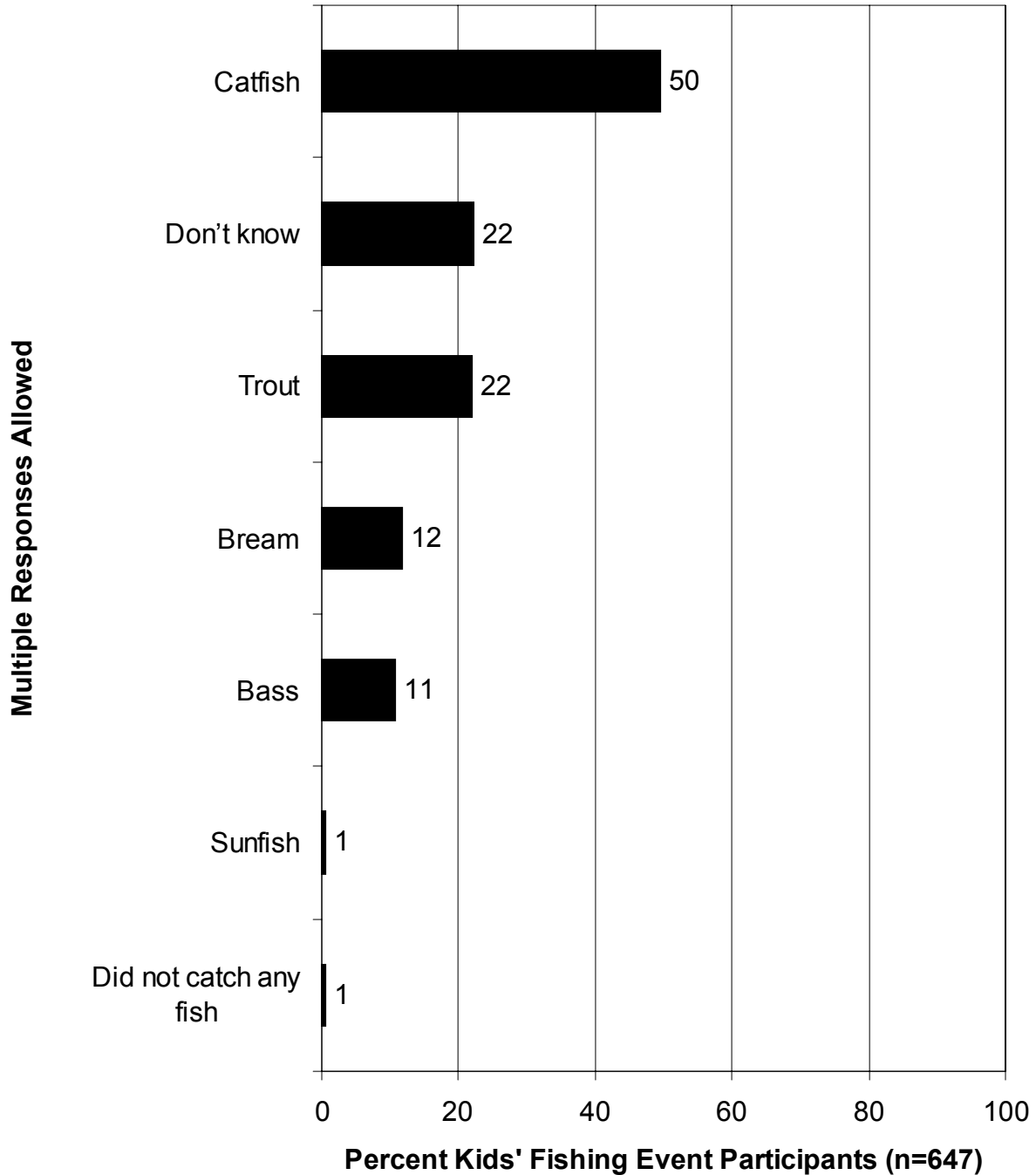
Q36. How many fish did you catch at the Kids' Fishing Event?



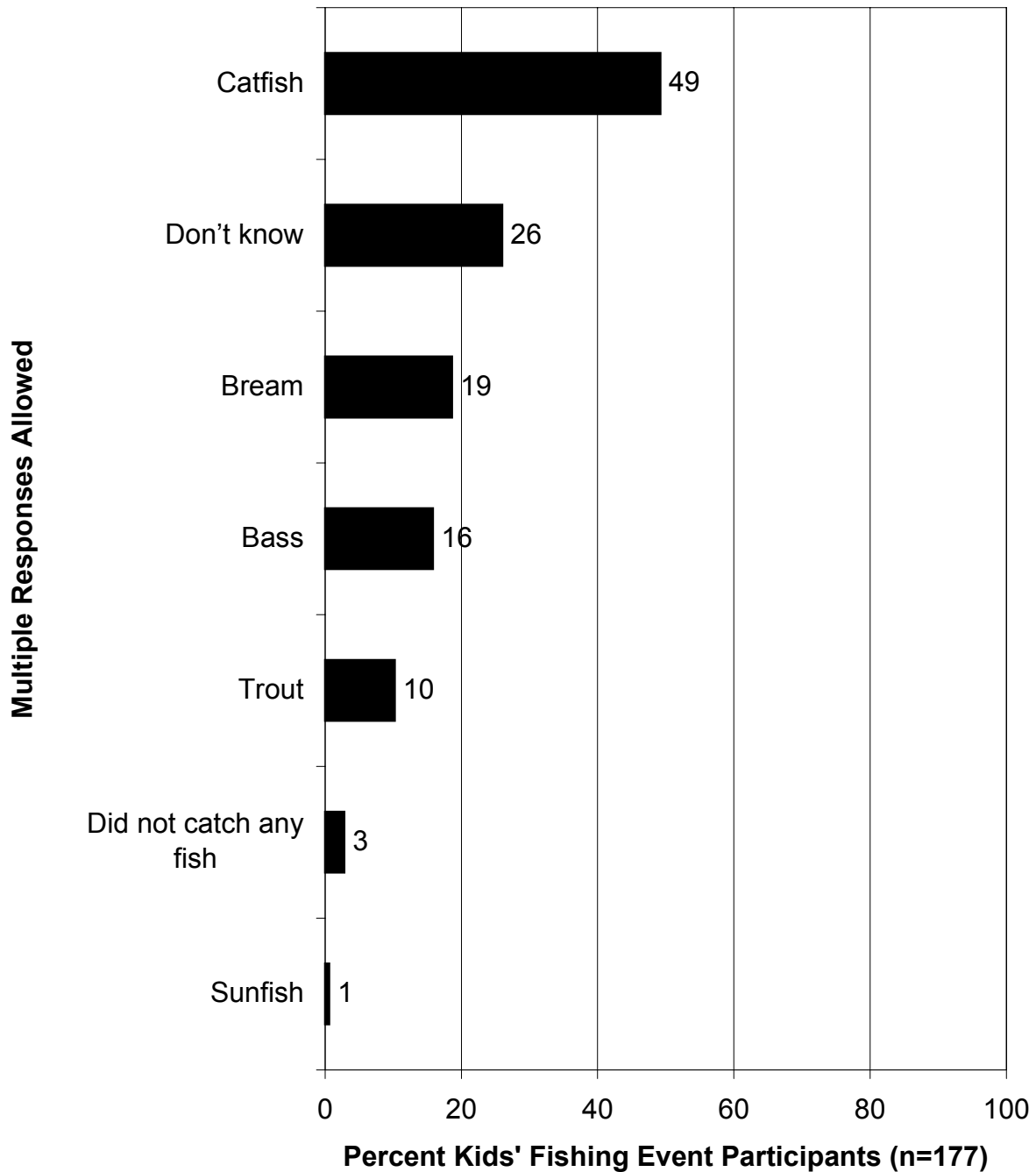
Q38. What kind of fish did you catch at the Kids' Fishing Event?
(Asked of those who reported catching at least one fish.)



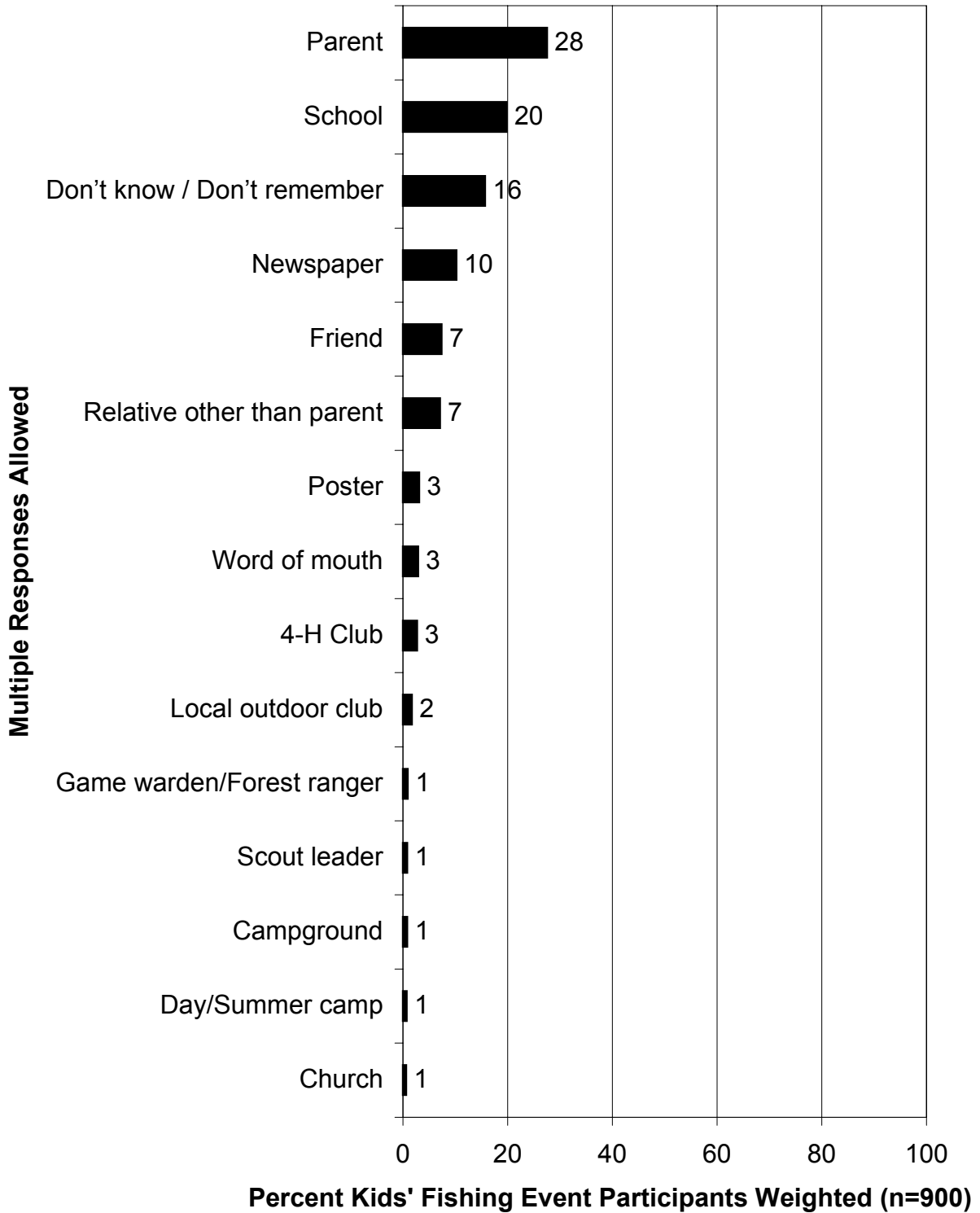
Q38. What kind of fish did you catch at the Kids' Fishing Event?
(Asked of those who reported catching at least one fish.)
(WRD Event)



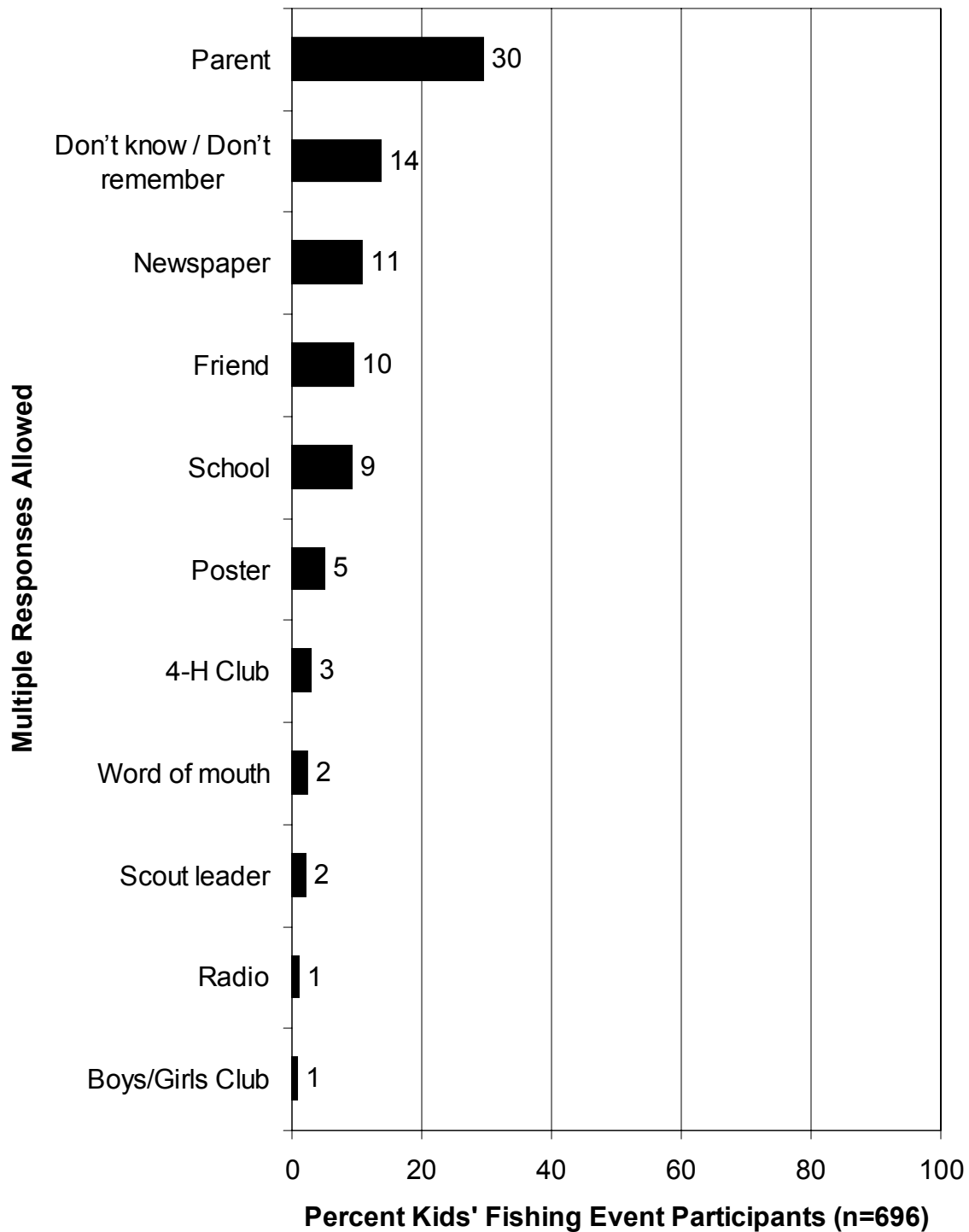
Q38. What kind of fish did you catch at the Kids' Fishing Event?
(Asked of those who reported catching at least one fish.)
(General Event)



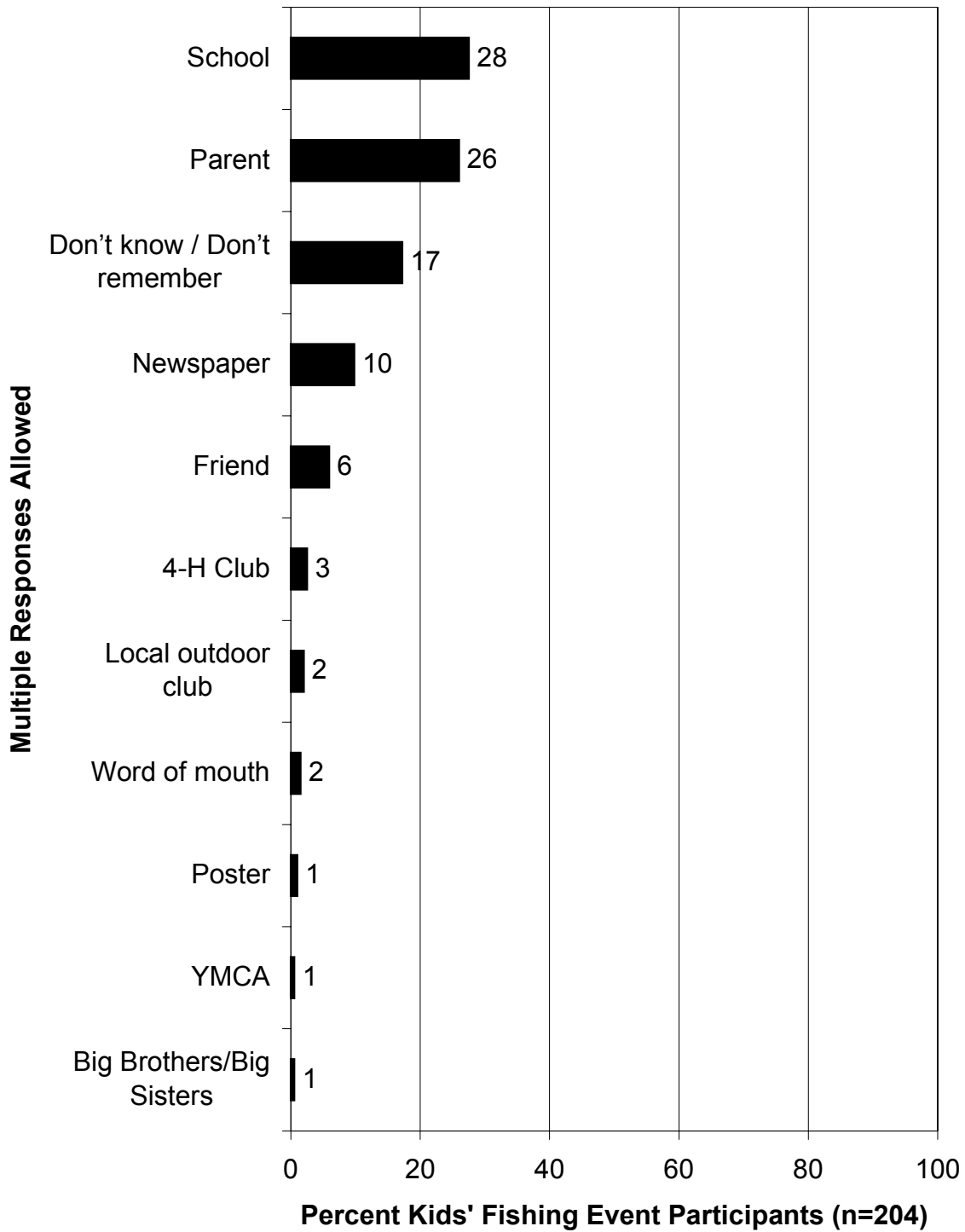
Q41. Where did you hear about the Kids' Fishing Event that you went to?



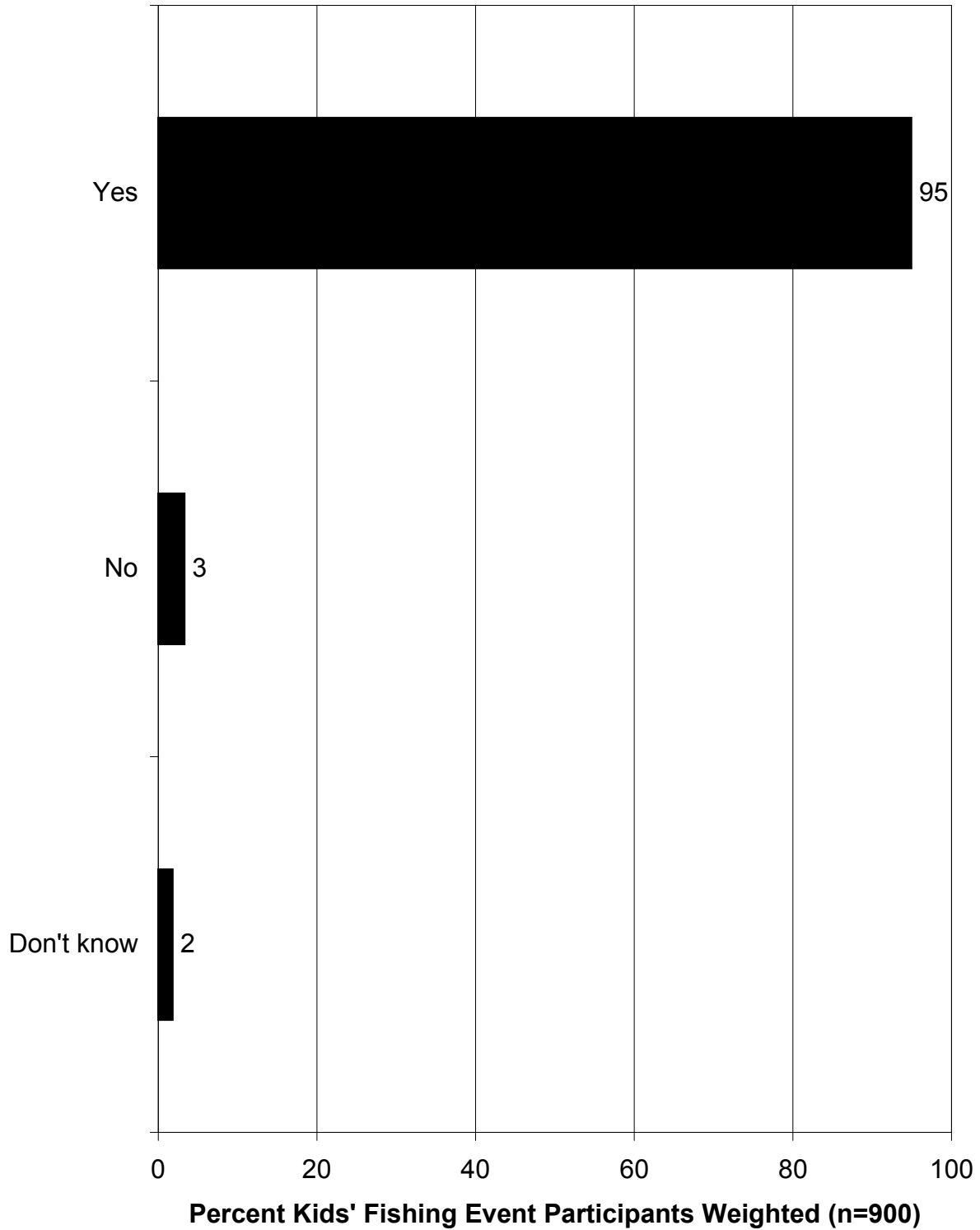
**Q41. Where did you hear about the Kids'
Fishing Event that you went to?
(WRD Event)**



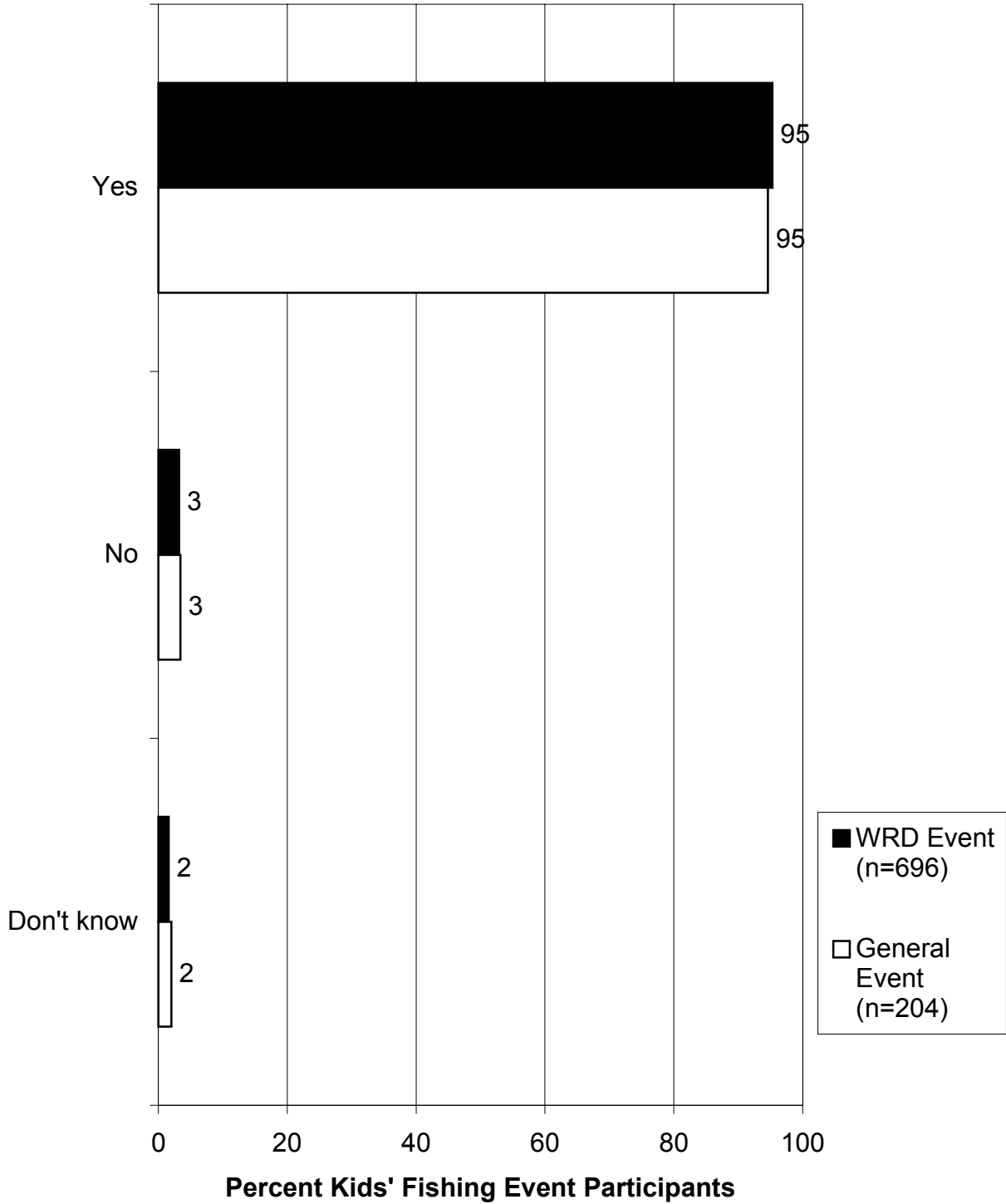
Q41. Where did you hear about the Kids' Fishing Event that you went to? (General Event)



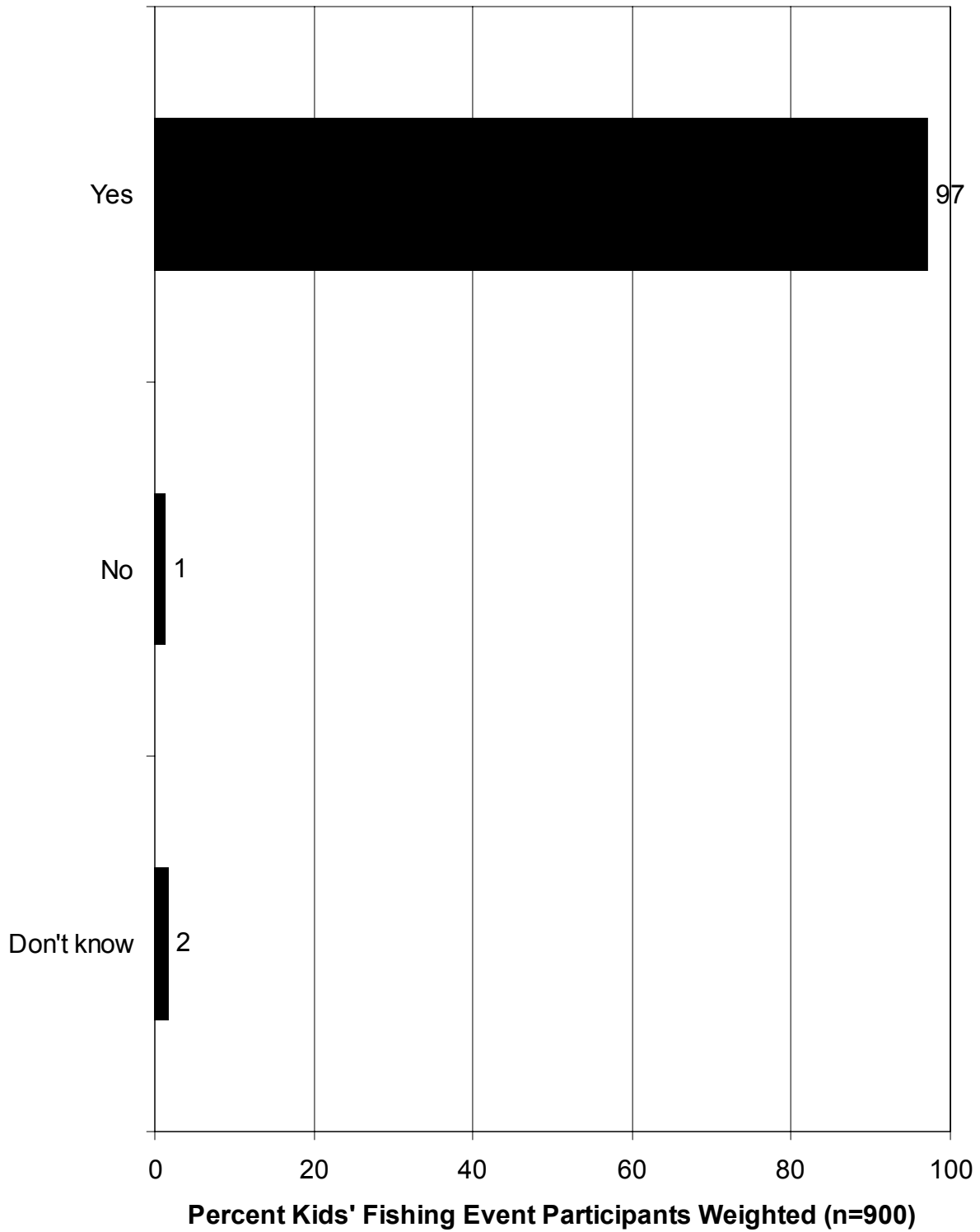
Q43. Would you want to go to another Kids' Fishing Event if you could?



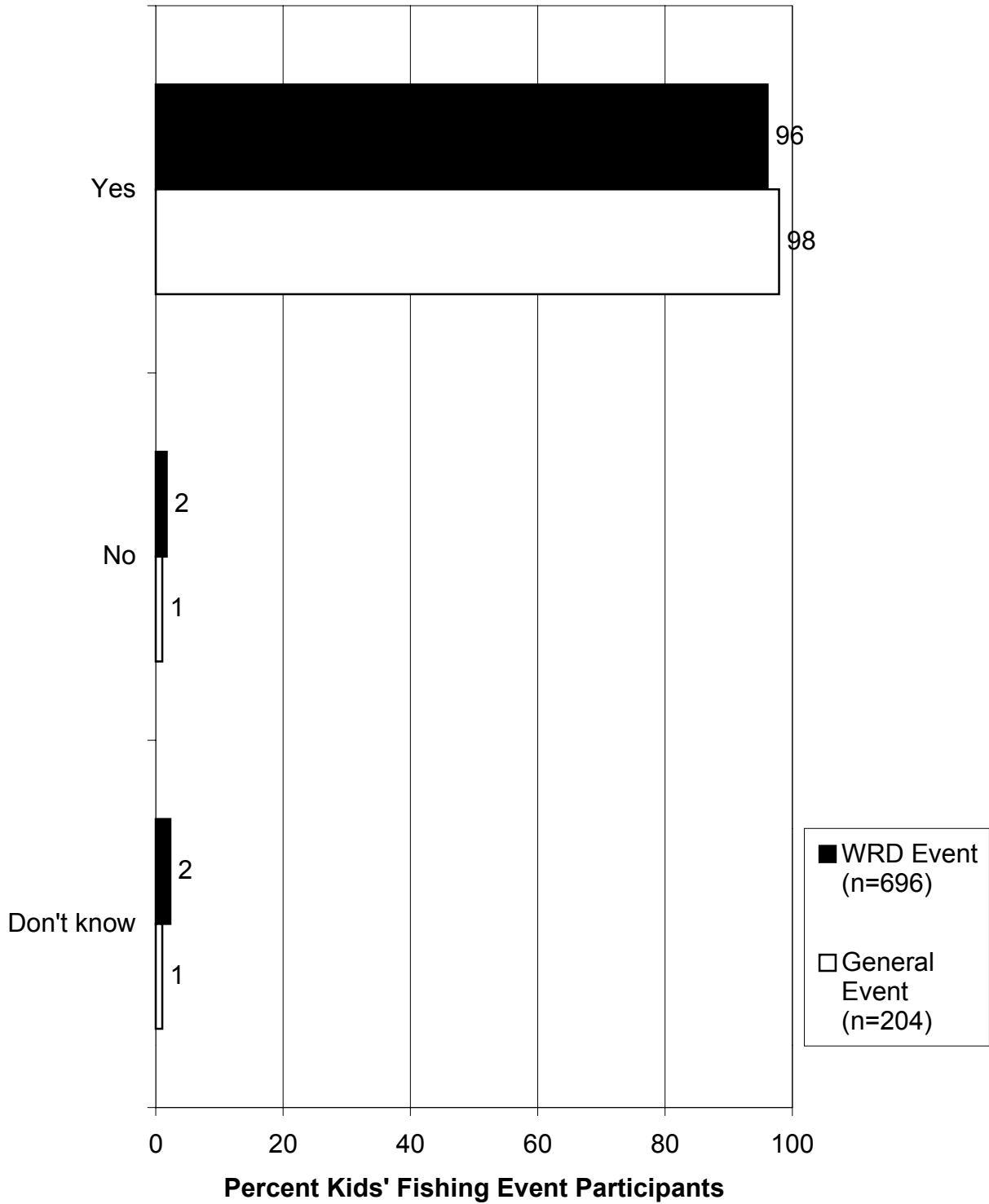
Q43. Would you want to go to another Kids' Fishing Event if you could?



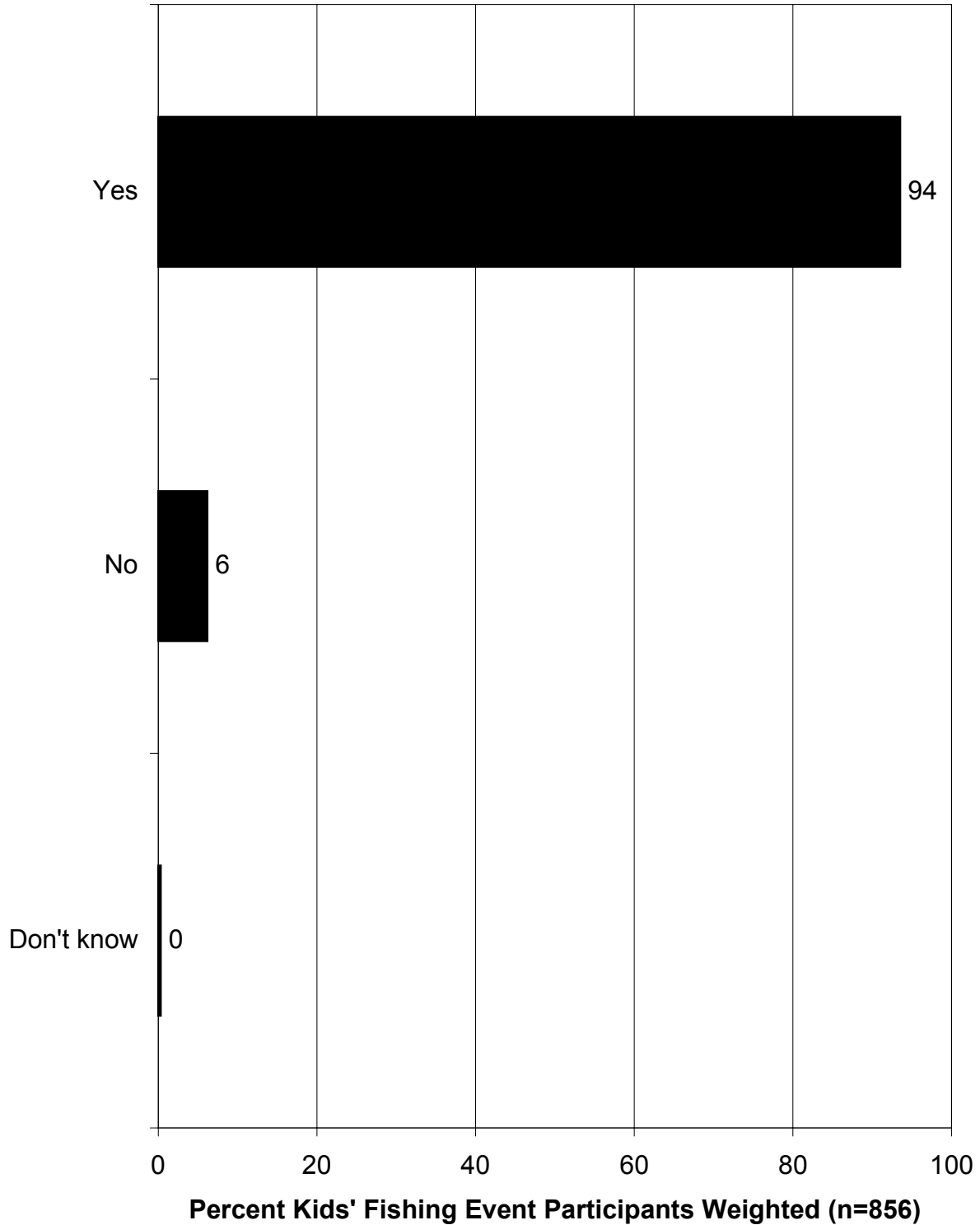
Q44. Would you invite a friend to go with you to another Kids' Fishing Event?



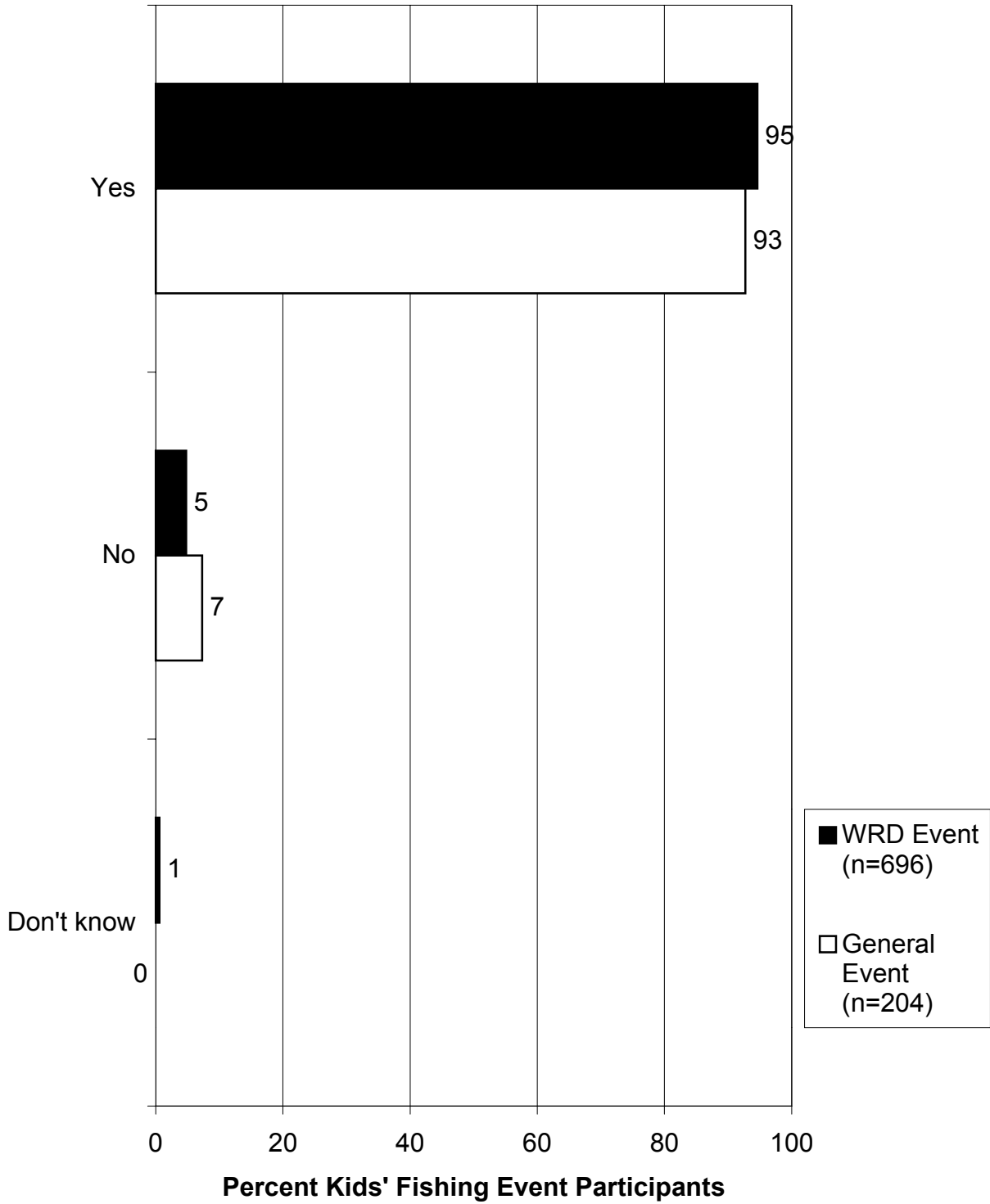
Q44. Would you invite a friend to go with you to another Kids' Fishing Event?



Q45. Before you went to the Kids' Fishing Event, did you ever go fishing?

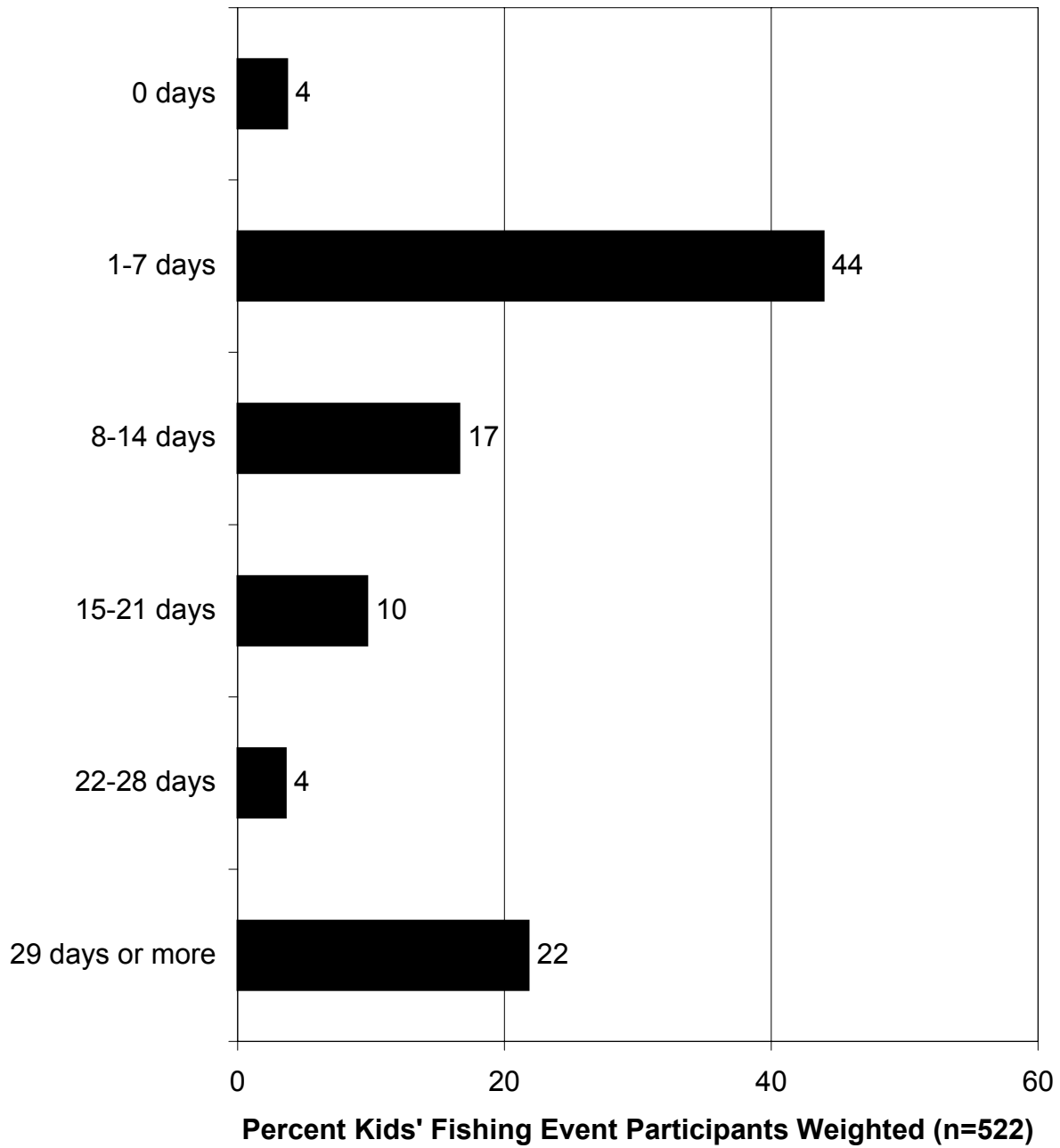


Q45. Before you went to the Kids' Fishing Event, did you ever go fishing?

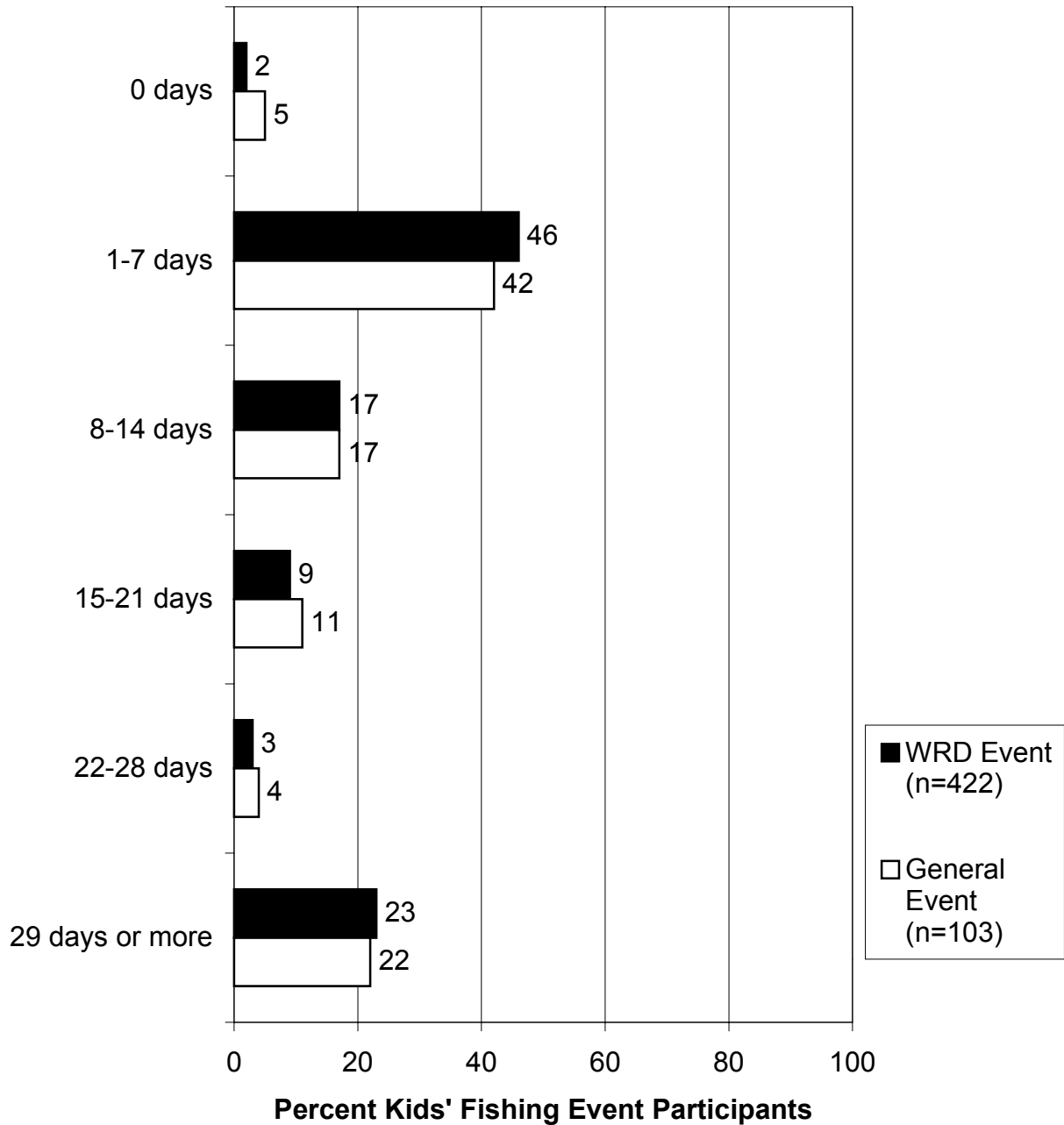


Q46. Before you went to the Kids' Fishing Event, how many days per year did you go fishing?

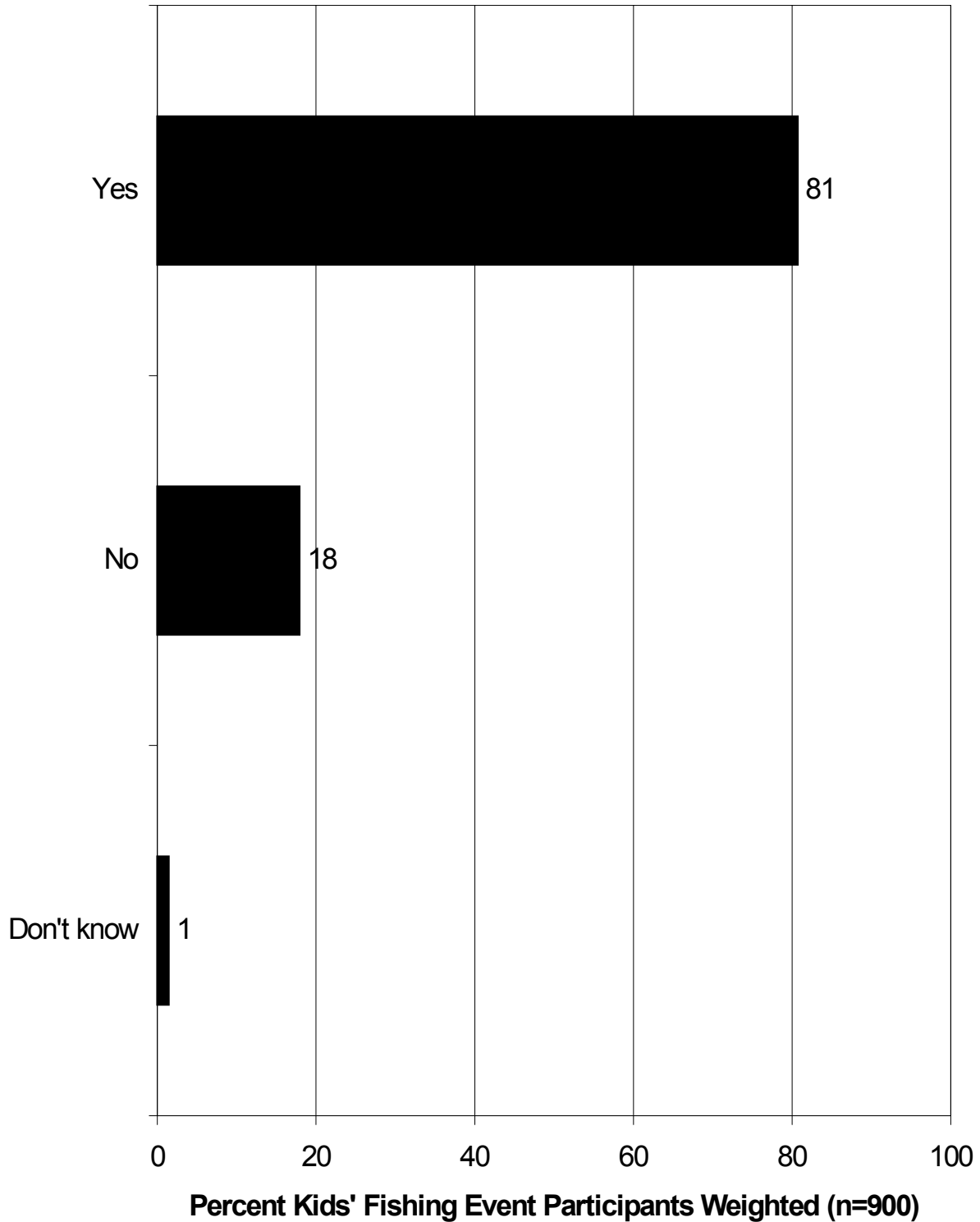
(Asked of those who reported going fishing before the Kids' Fishing Event.)



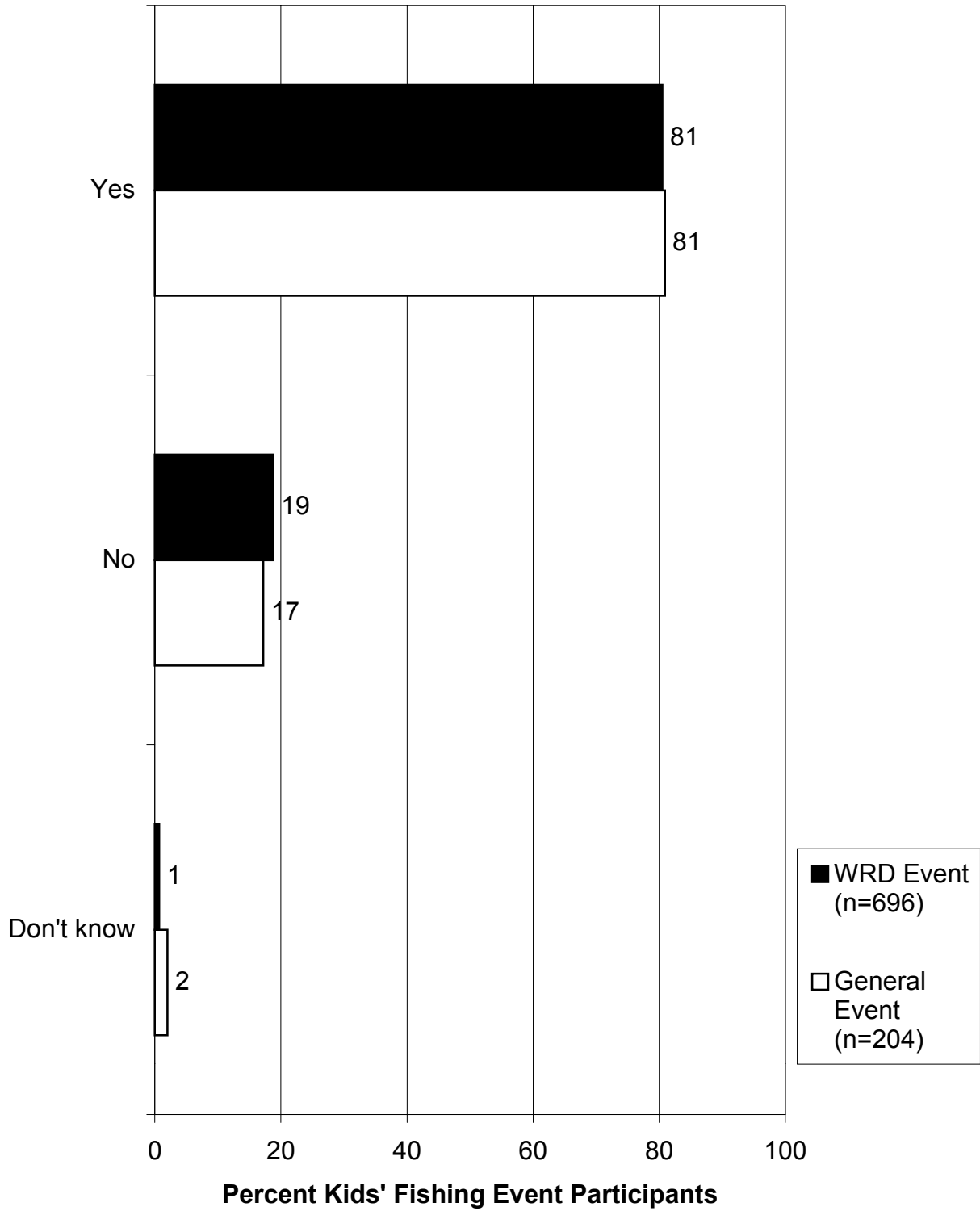
**Q46. Before you went to the Kids' Fishing Event, how many days per year did you go fishing?
(Asked of those who reported going fishing before the Kids' Fishing Event.)**



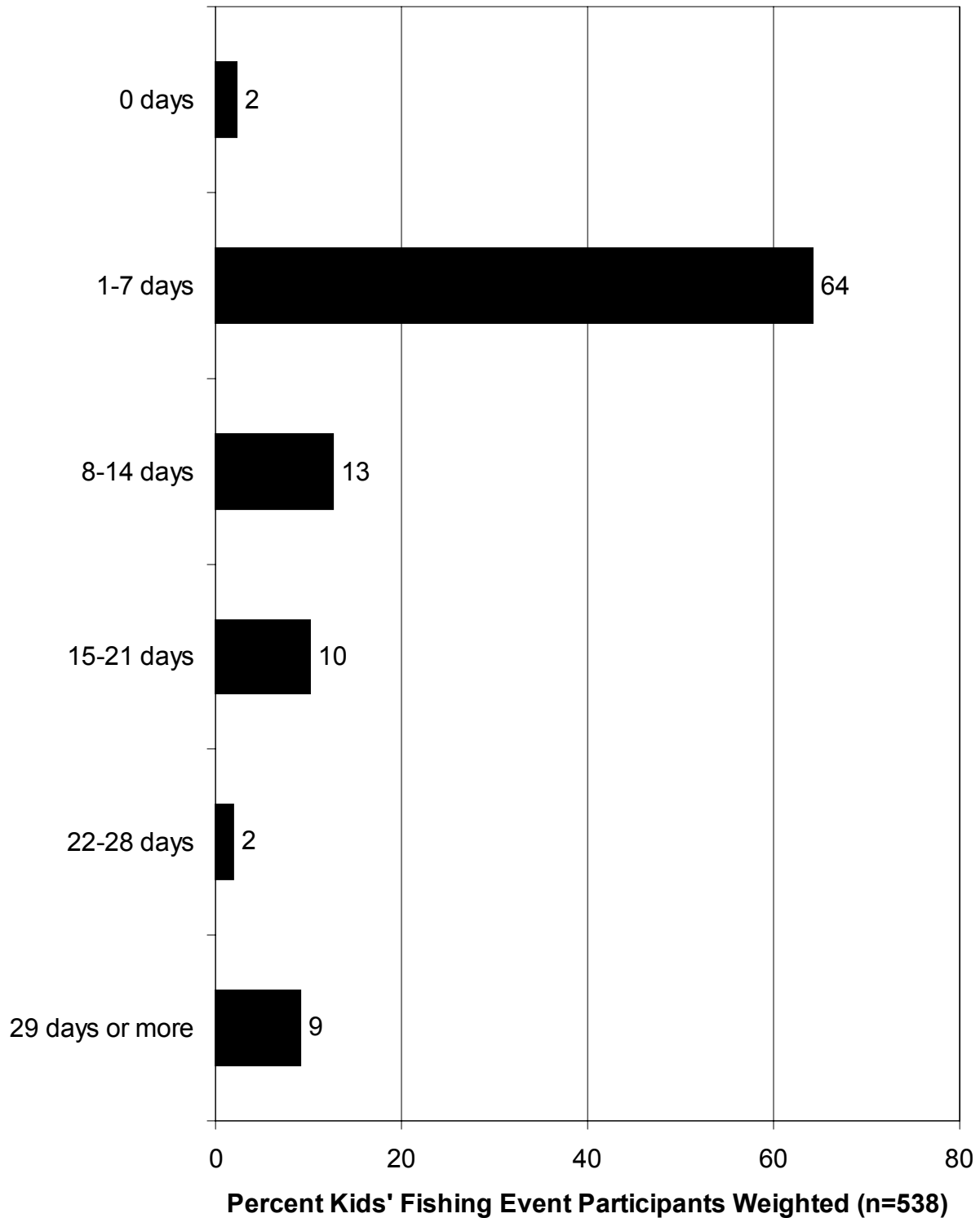
Q47. Since you went to the Kids' Fishing Event, have you gone fishing?



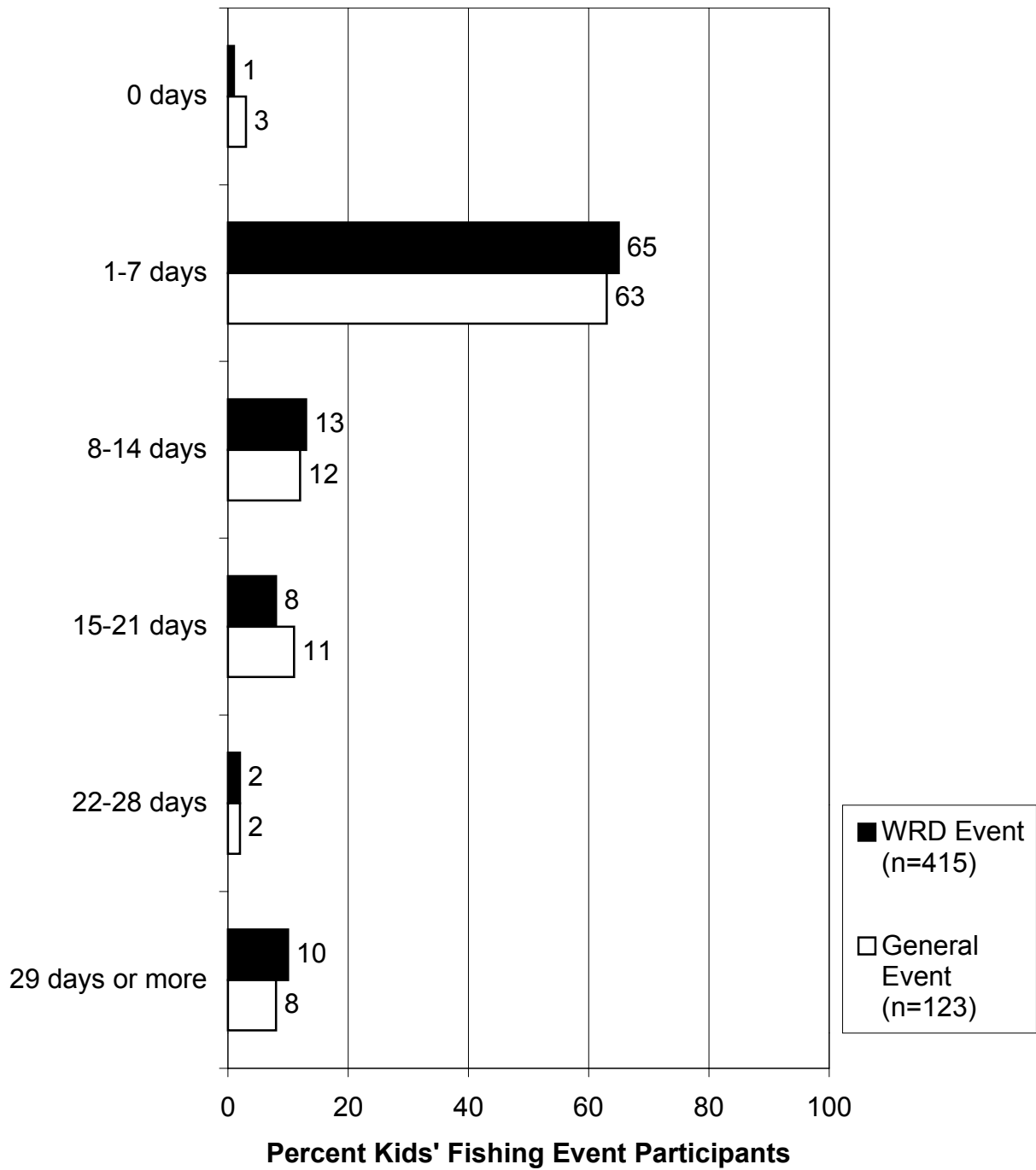
Q47. Since you went to the Kids' Fishing Event, have you gone fishing?



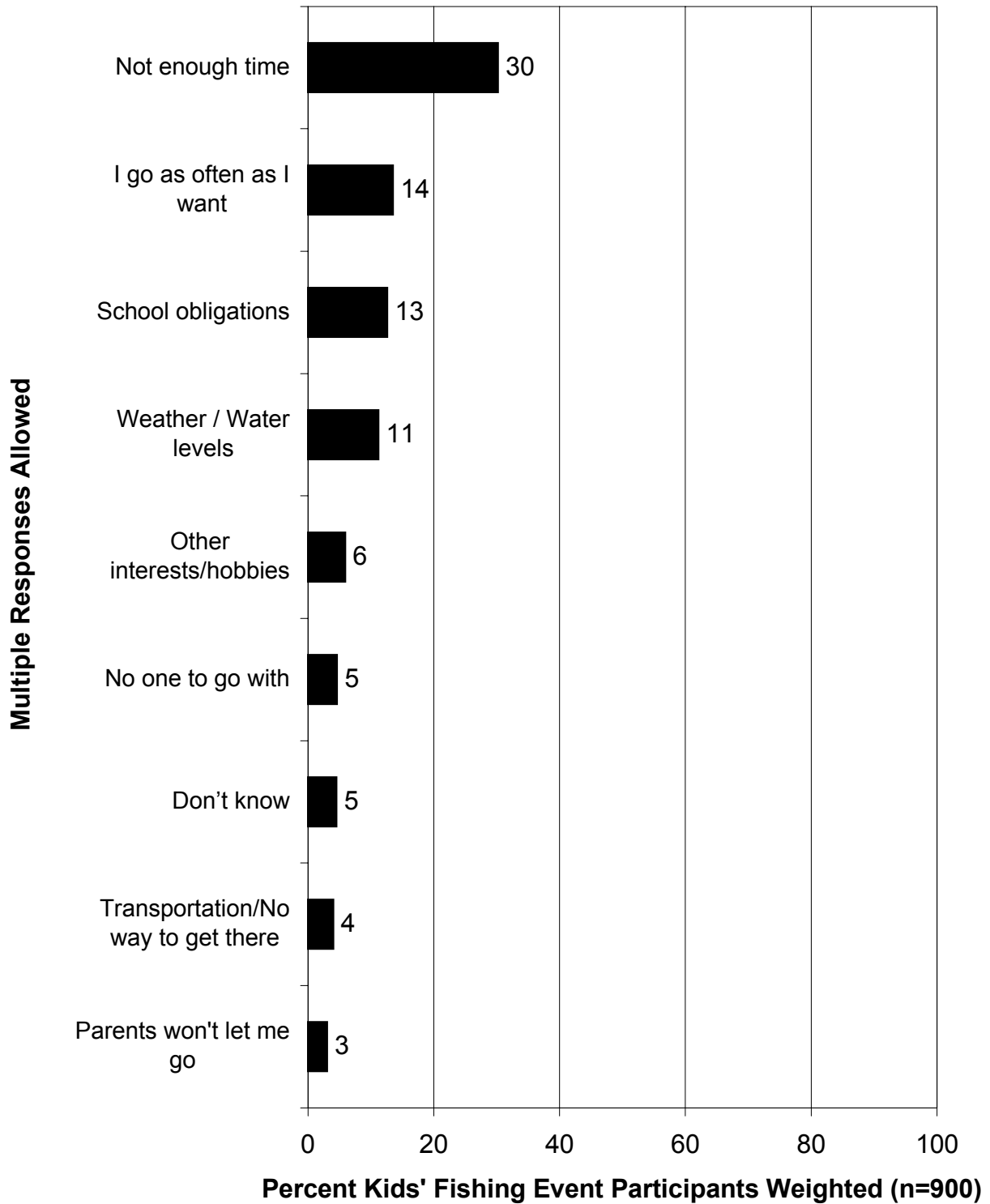
Q48. Since you went to the Kids' Fishing Event, how many times have you gone fishing?



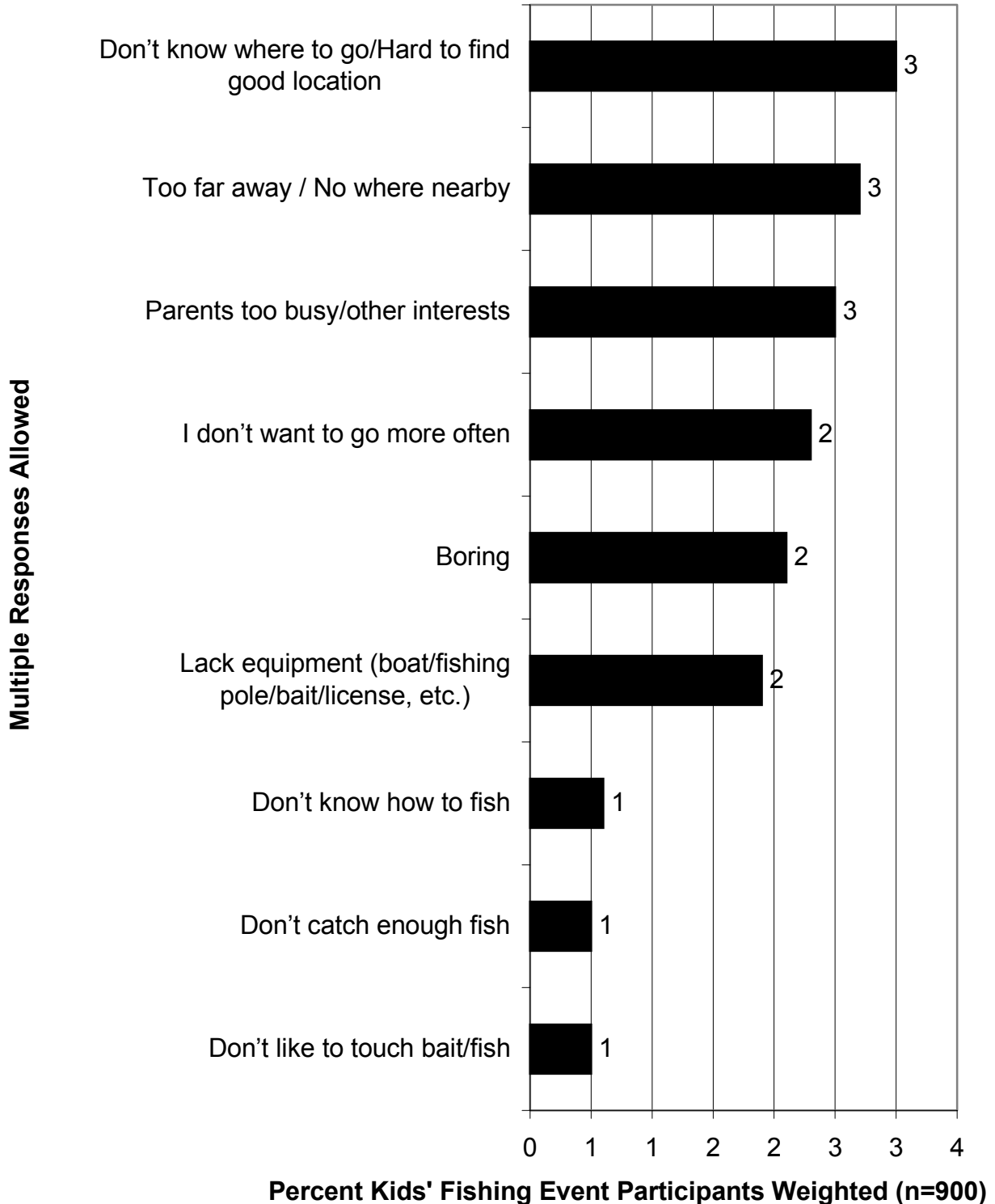
Q48. Since you went to the Kids' Fishing Event, how many times have you gone fishing? (Asked of those who reported going fishing since the Kids' Fishing Event.)



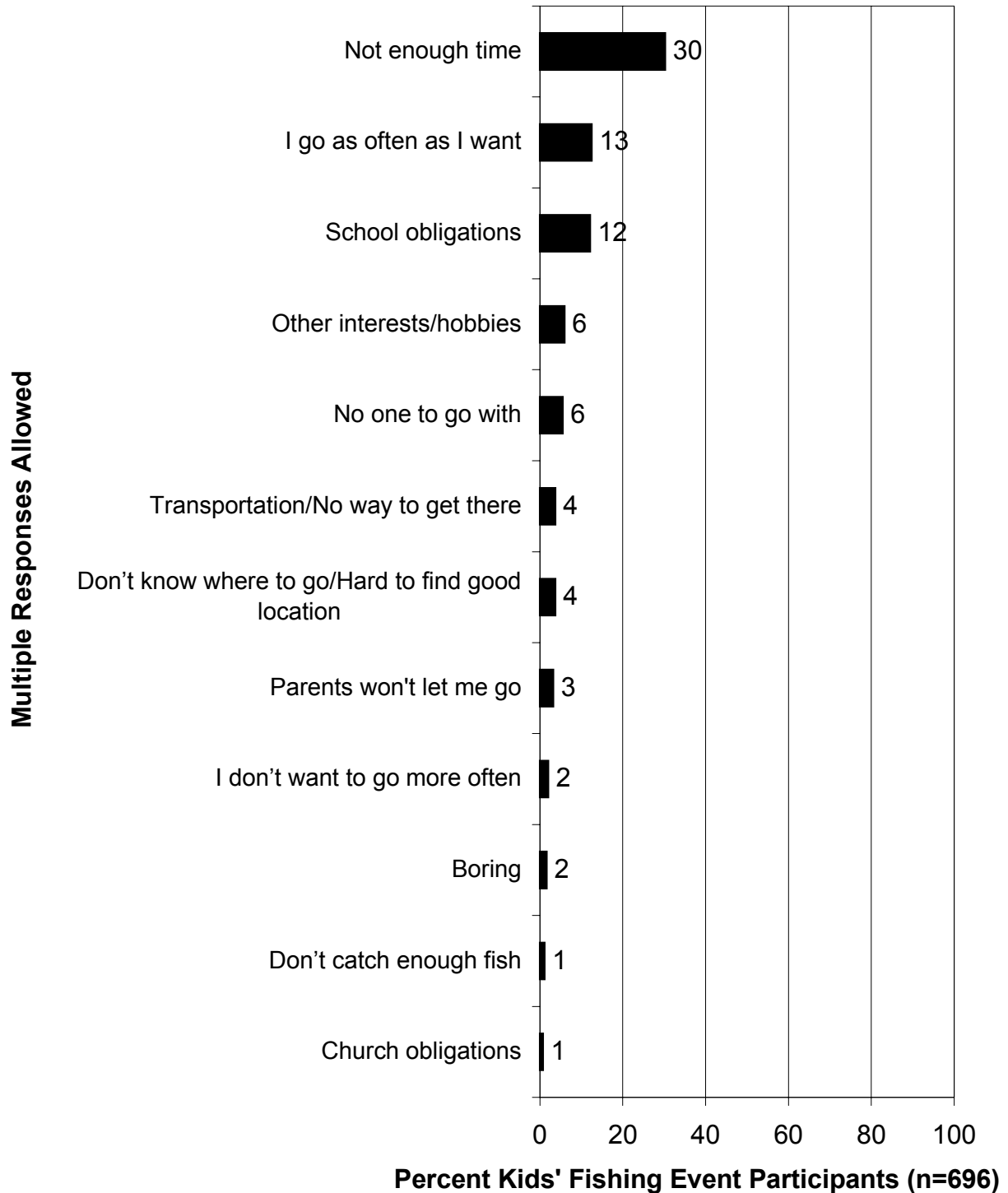
Q50. In general, what are some of the reasons why you don't go fishing more often?



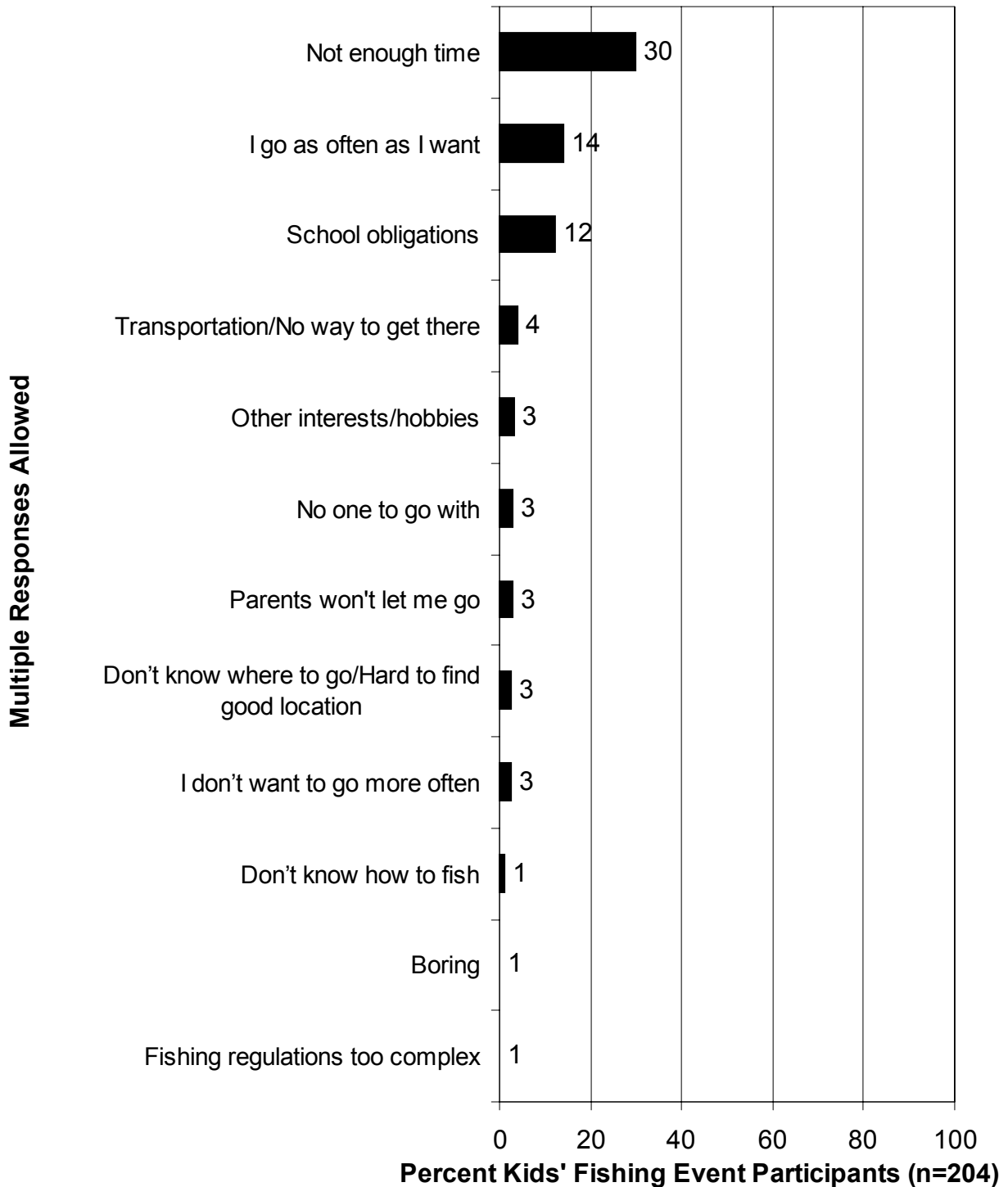
Q50 continued. In general, what are some of the reasons why you don't go fishing more often?



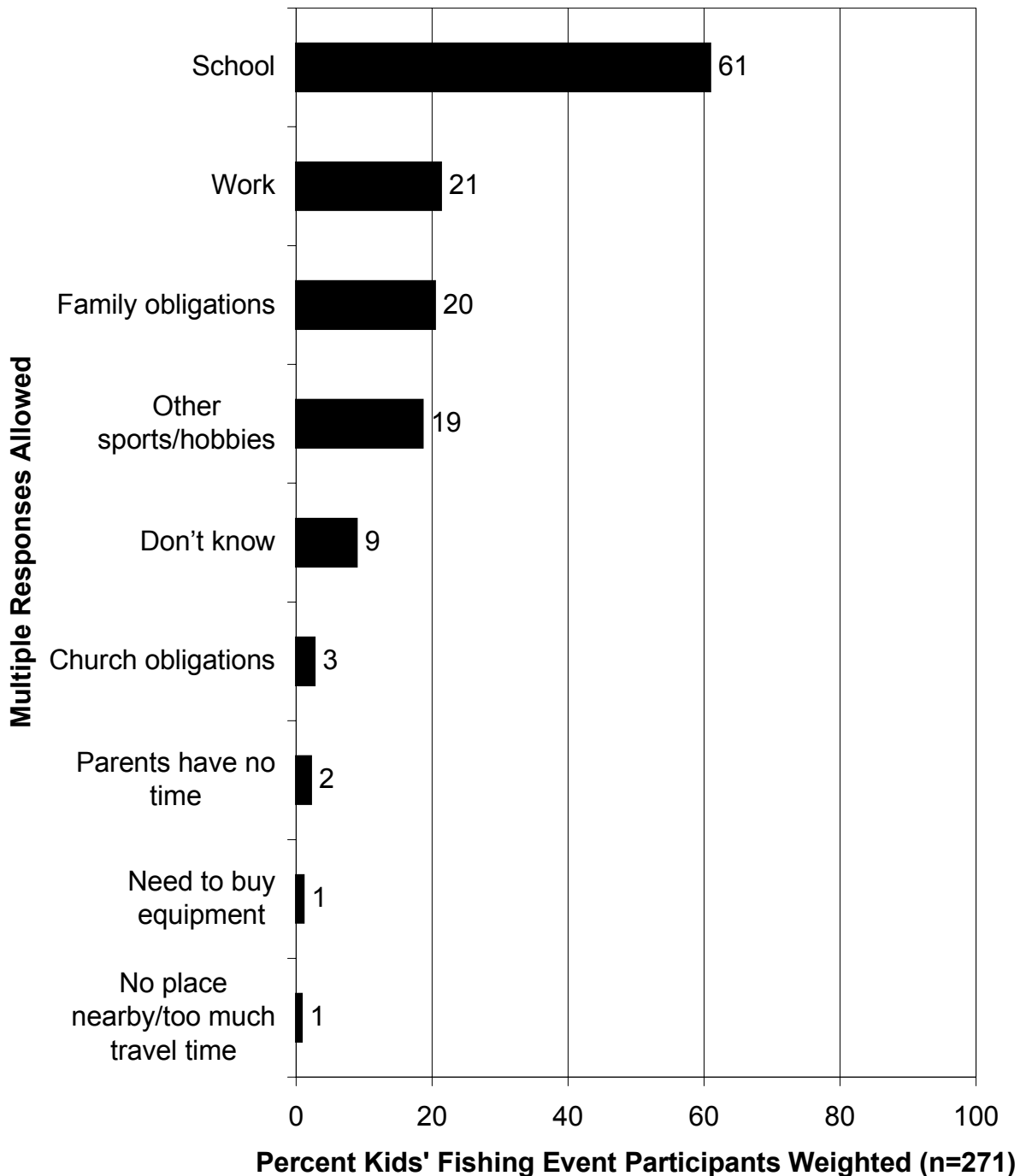
**Q50. In general, what are some of the reasons why you don't go fishing more often?
(WRD Event)**



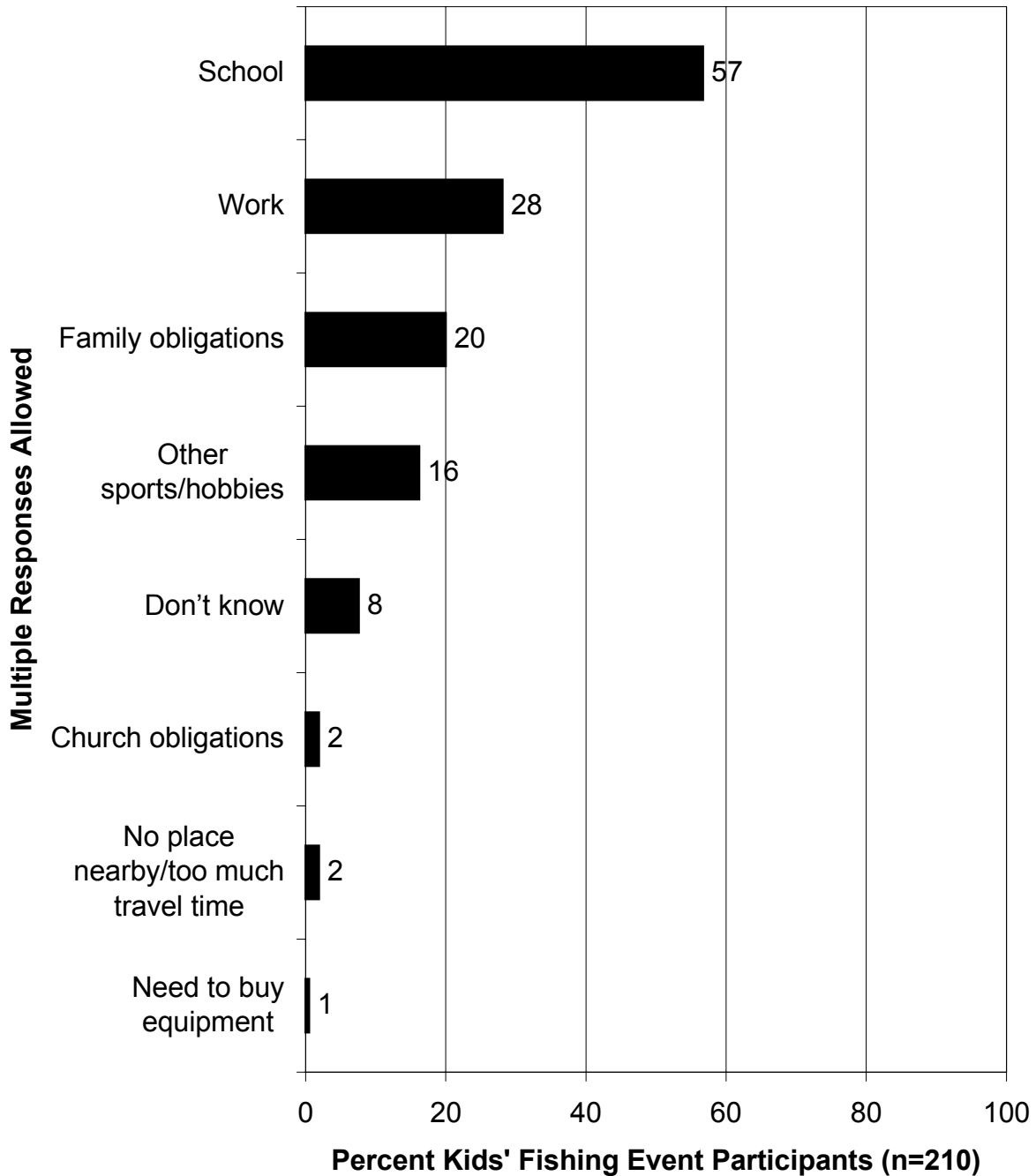
**Q50. In general, what are some of the reasons why you don't go fishing more often?
(General Event)**



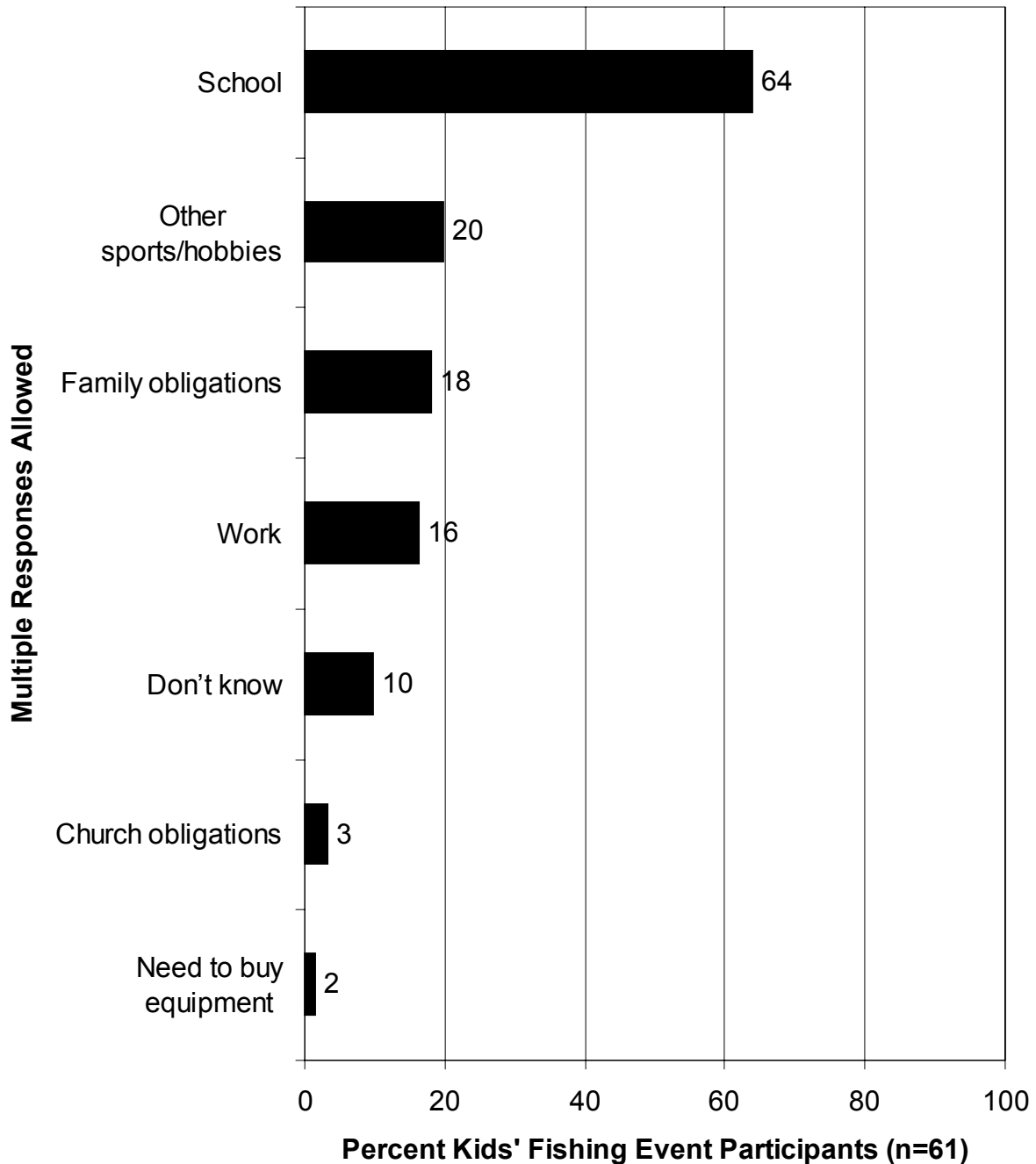
**Q53. What are the specific reasons for not having enough time to go fishing?
(Asked of those who cited "no time" as a reason for not fishing more often.)**



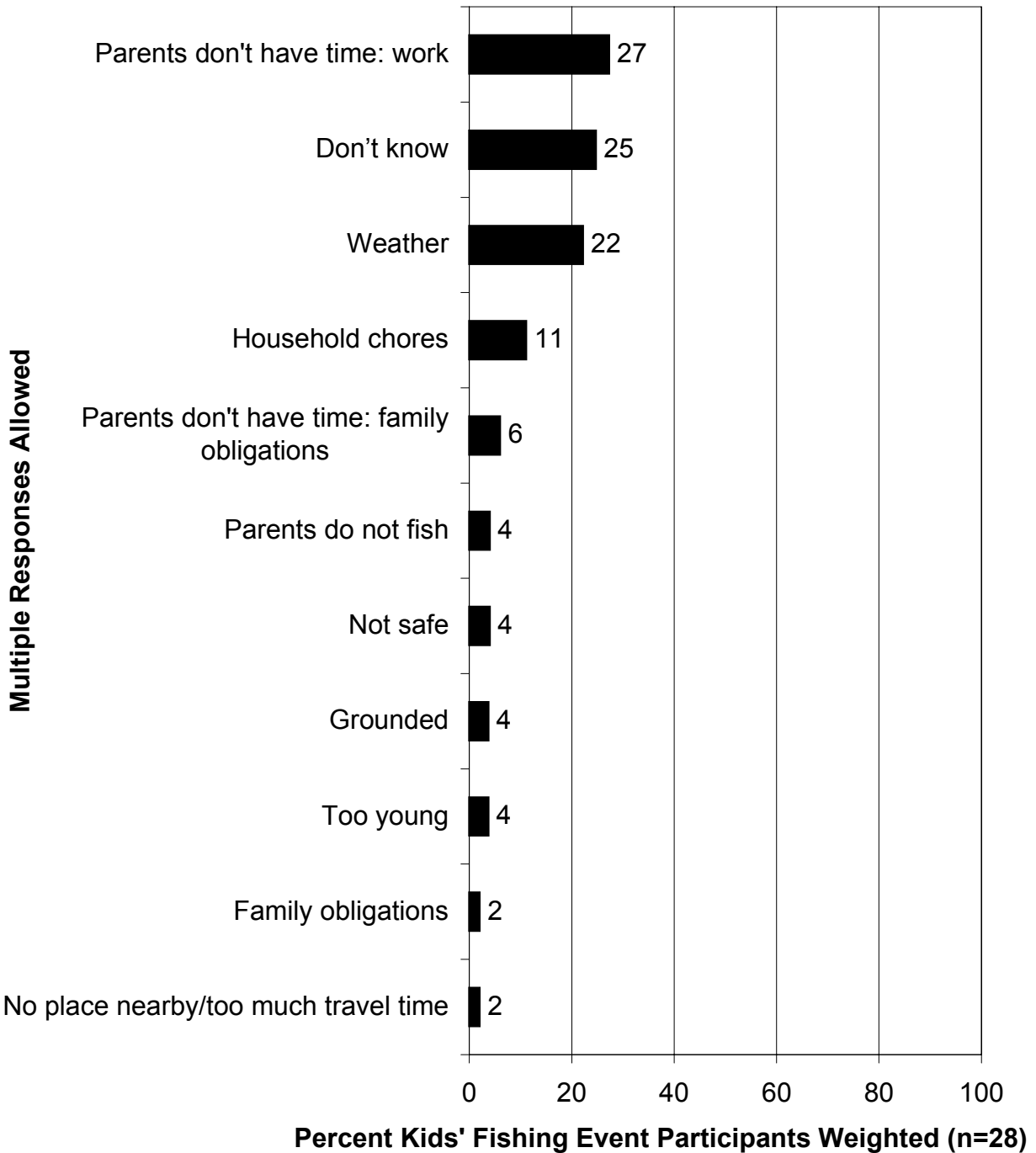
**Q53. What are the specific reasons for not having enough time to go fishing?
(Asked of those who cited "no time" as a reason for not fishing more often.)
(WRD Event)**



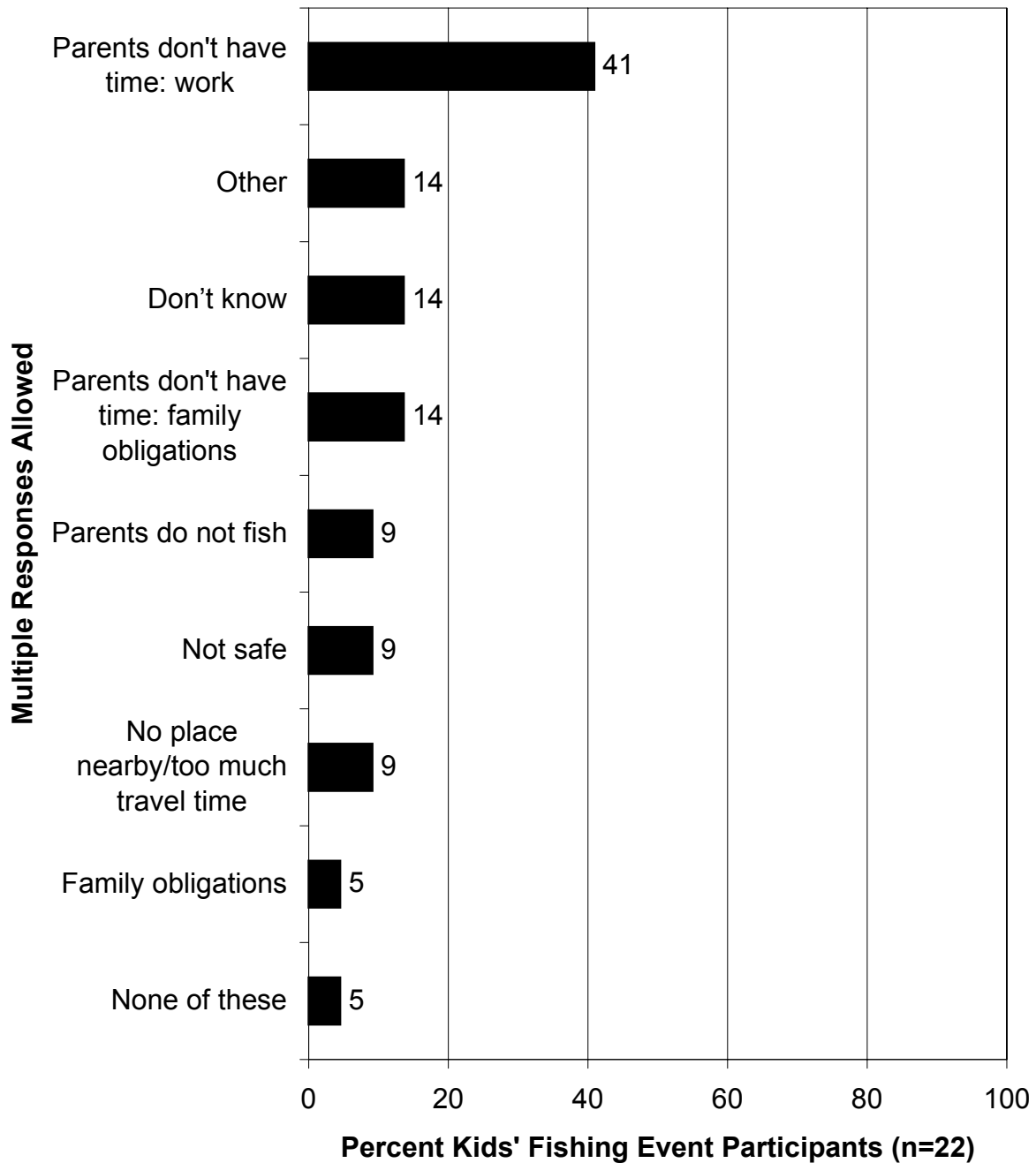
**Q53. What are the specific reasons for not having enough time to go fishing?
(Asked of those who cited "no time" as a reason for not fishing more often.)
(General Event)**



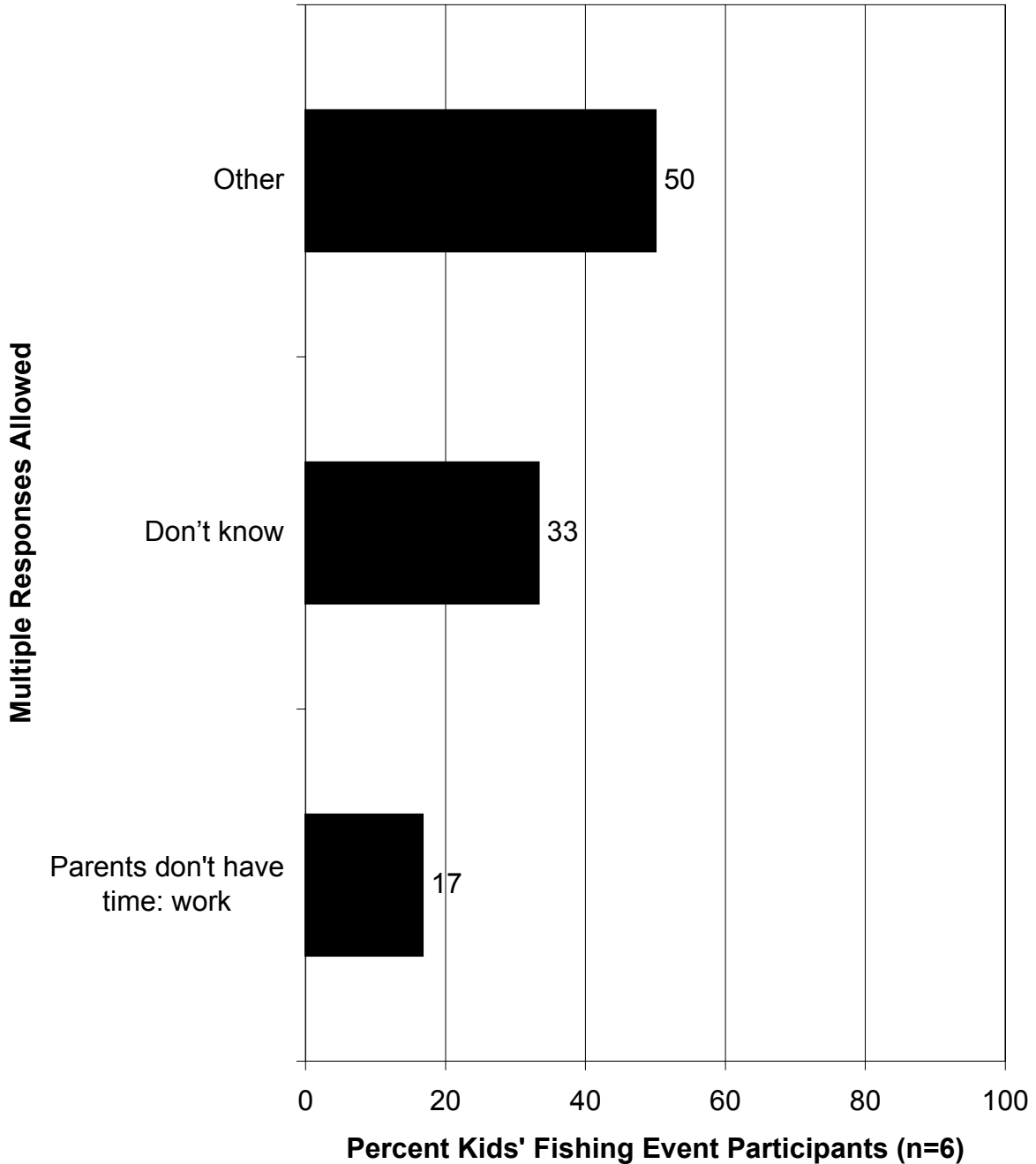
Q56. You said your parents would not let you go fishing. (Asked of those who cited "parents won't let me go" as a reason for not fishing more often)



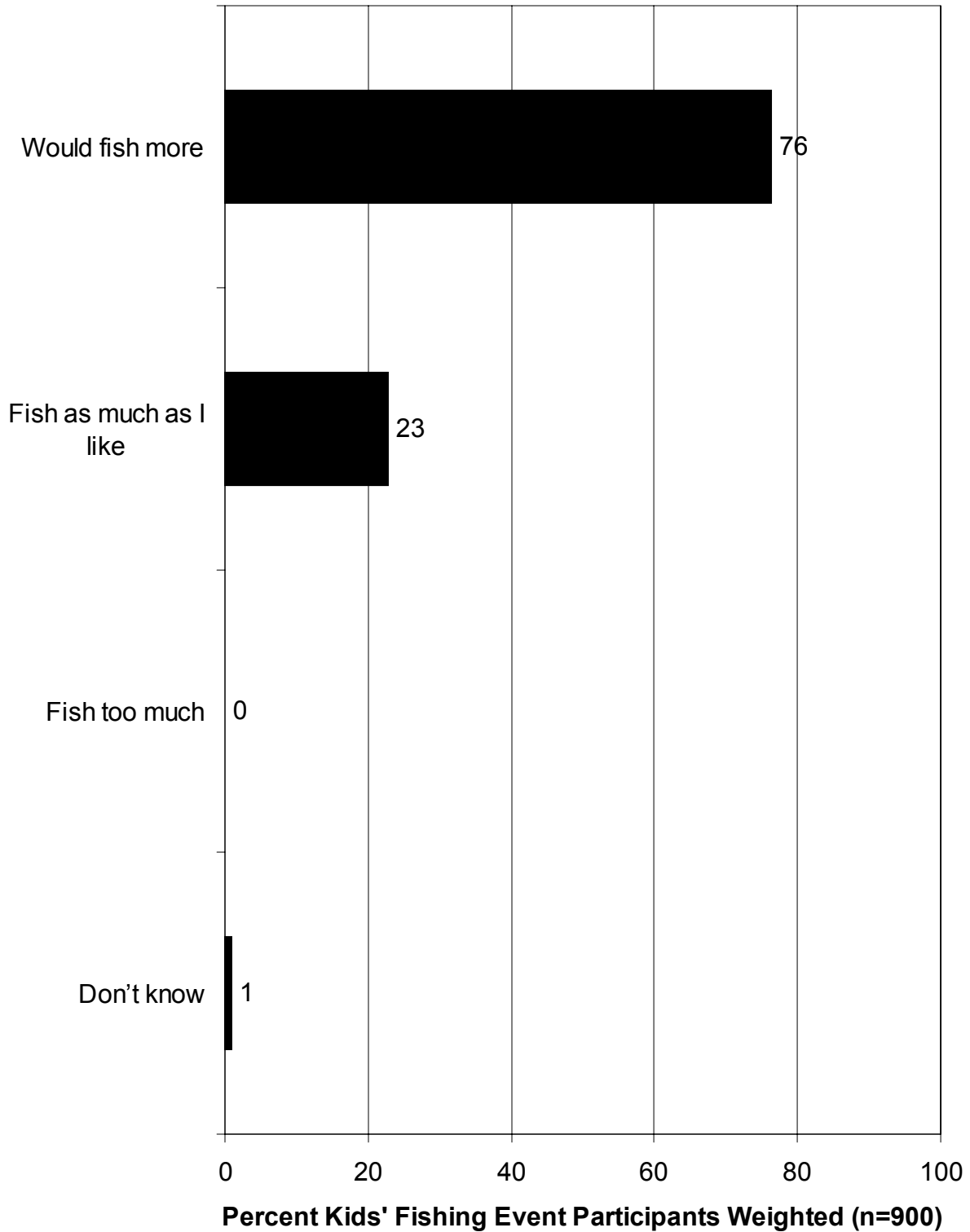
**Q56. You said your parents would not let you go fishing. (Asked of those who cited "parents won't let me go" as a reason for not fishing more often)
(WRD Event)**



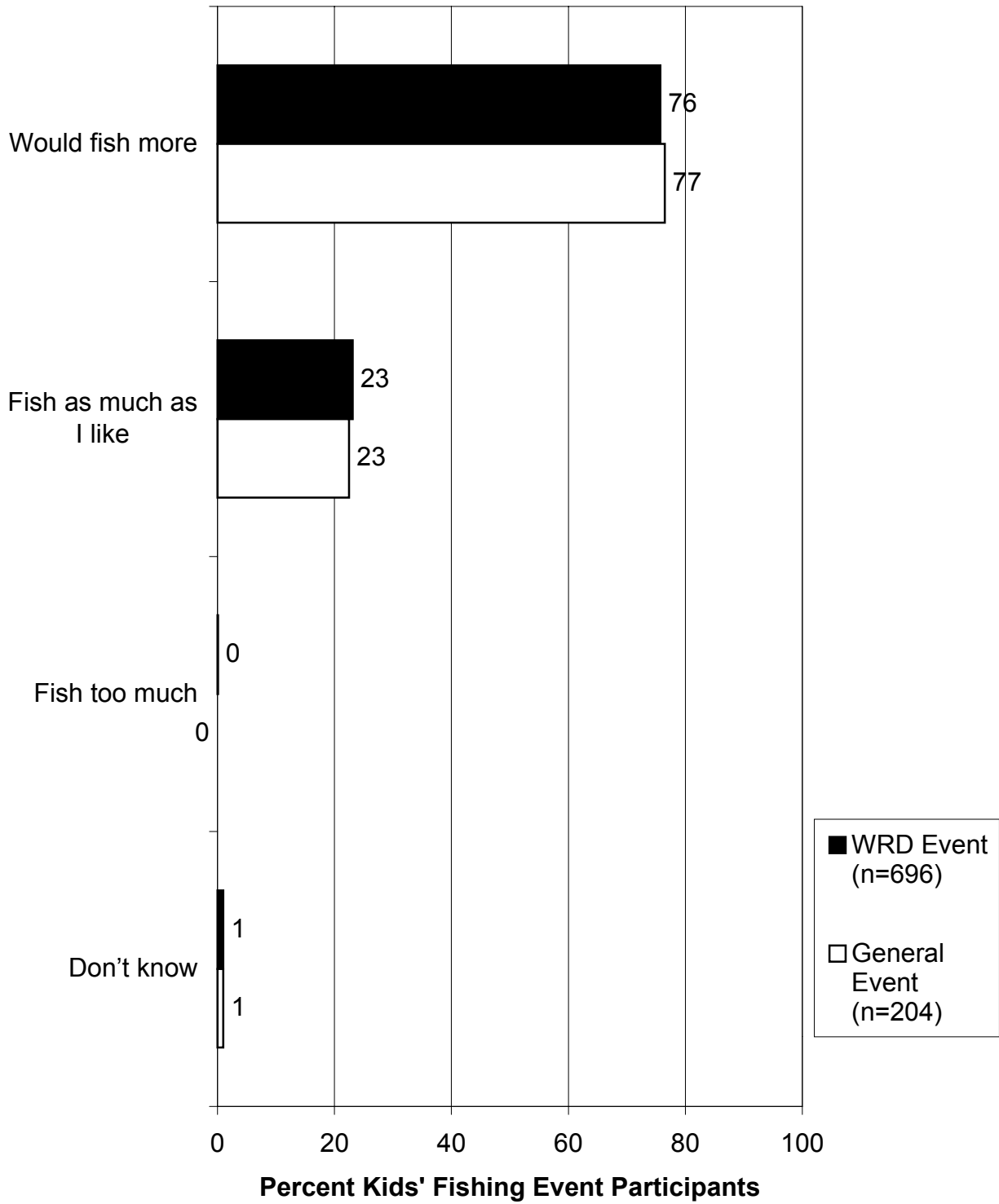
**Q56. You said your parents would not let you go fishing. (Asked of those who cited "parents won't let me go" as a reason for not fishing more often)
(General Event)**



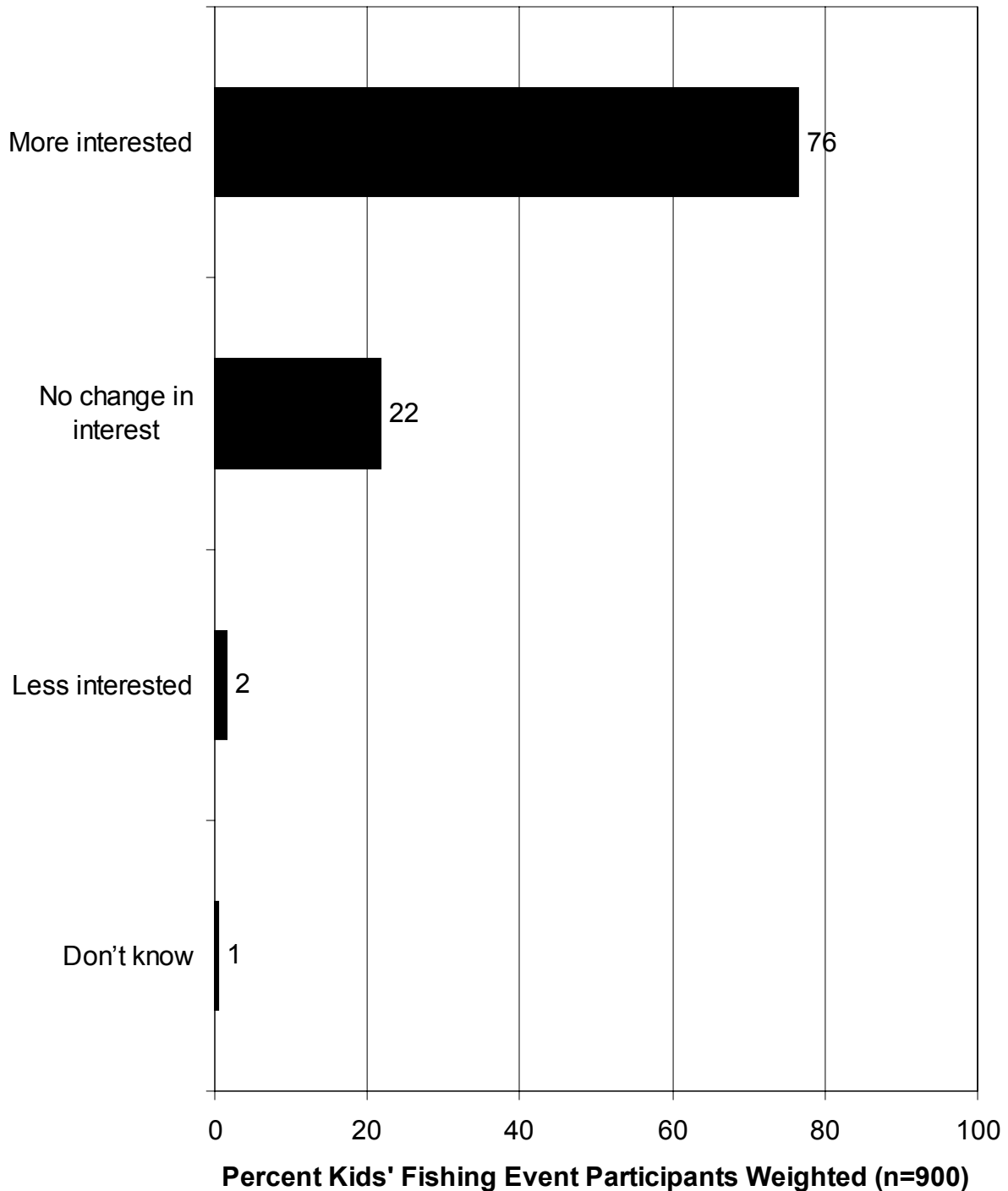
Q58. Would you go fishing more if you could or do you fish as much as you like now?



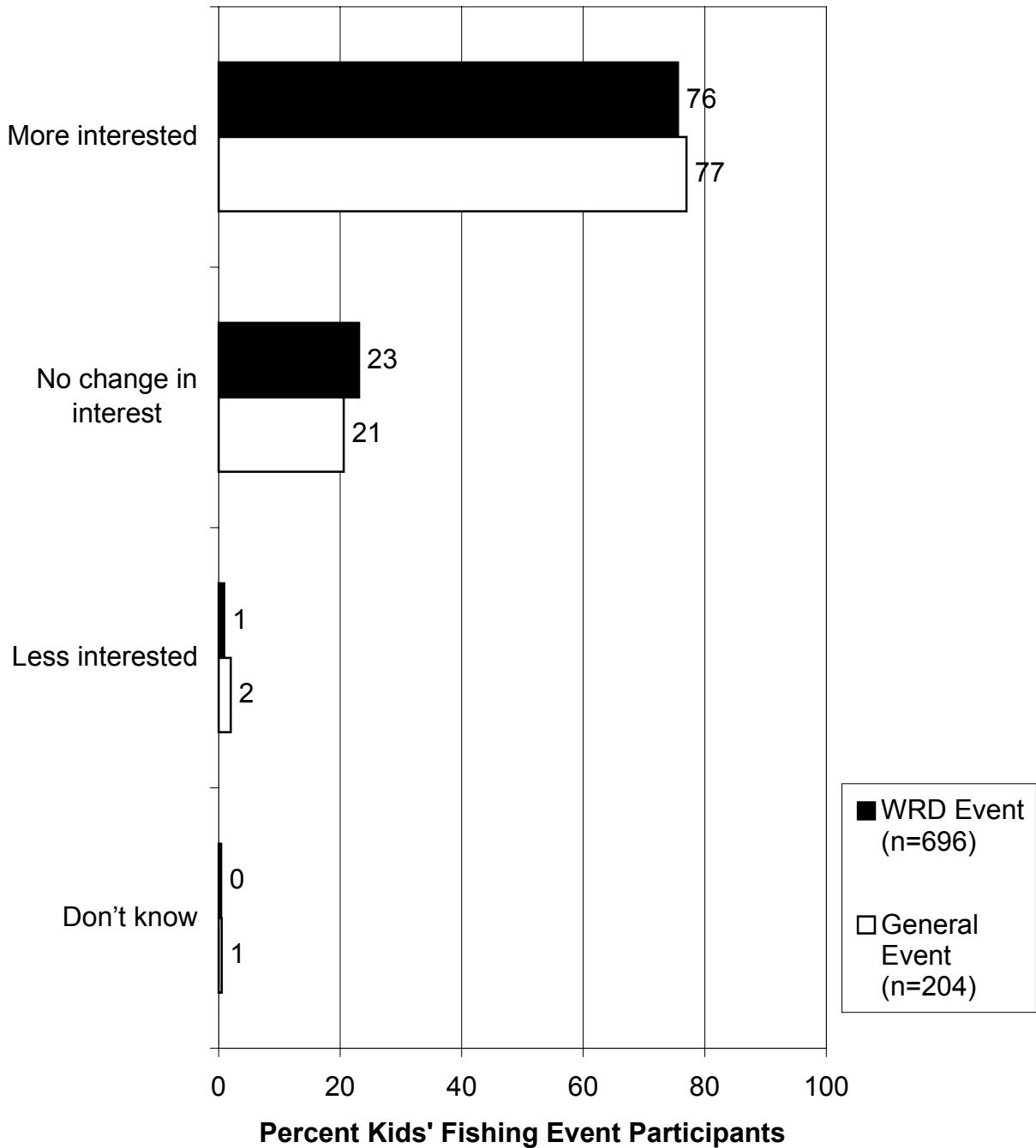
Q58. Would you go fishing more if you could or do you fish as much as you like now?

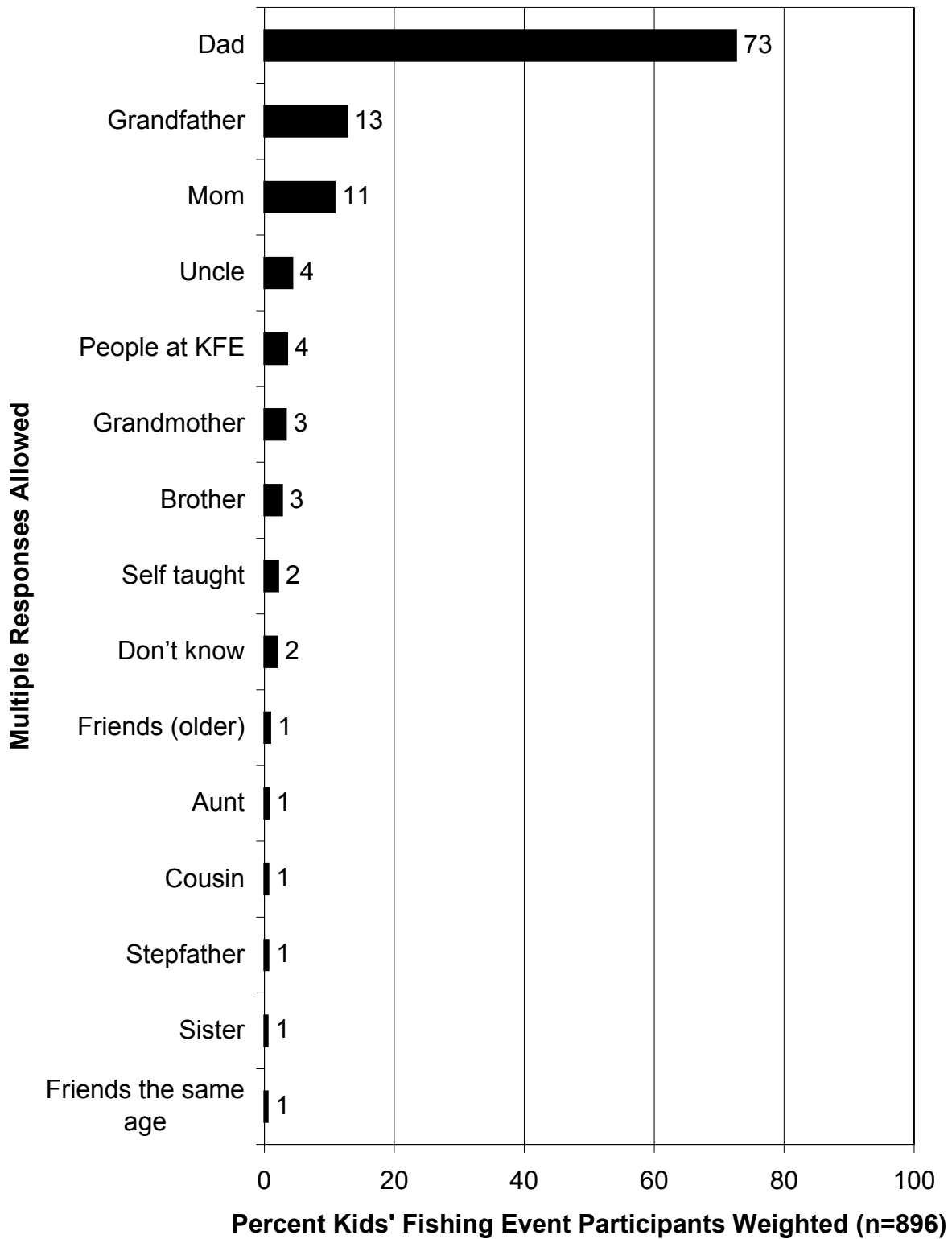


Q59. In thinking about the Kids' Fishing Event that you went to, would you say it made you more or less interested in wanting to go fishing or did it make no difference in your interest?

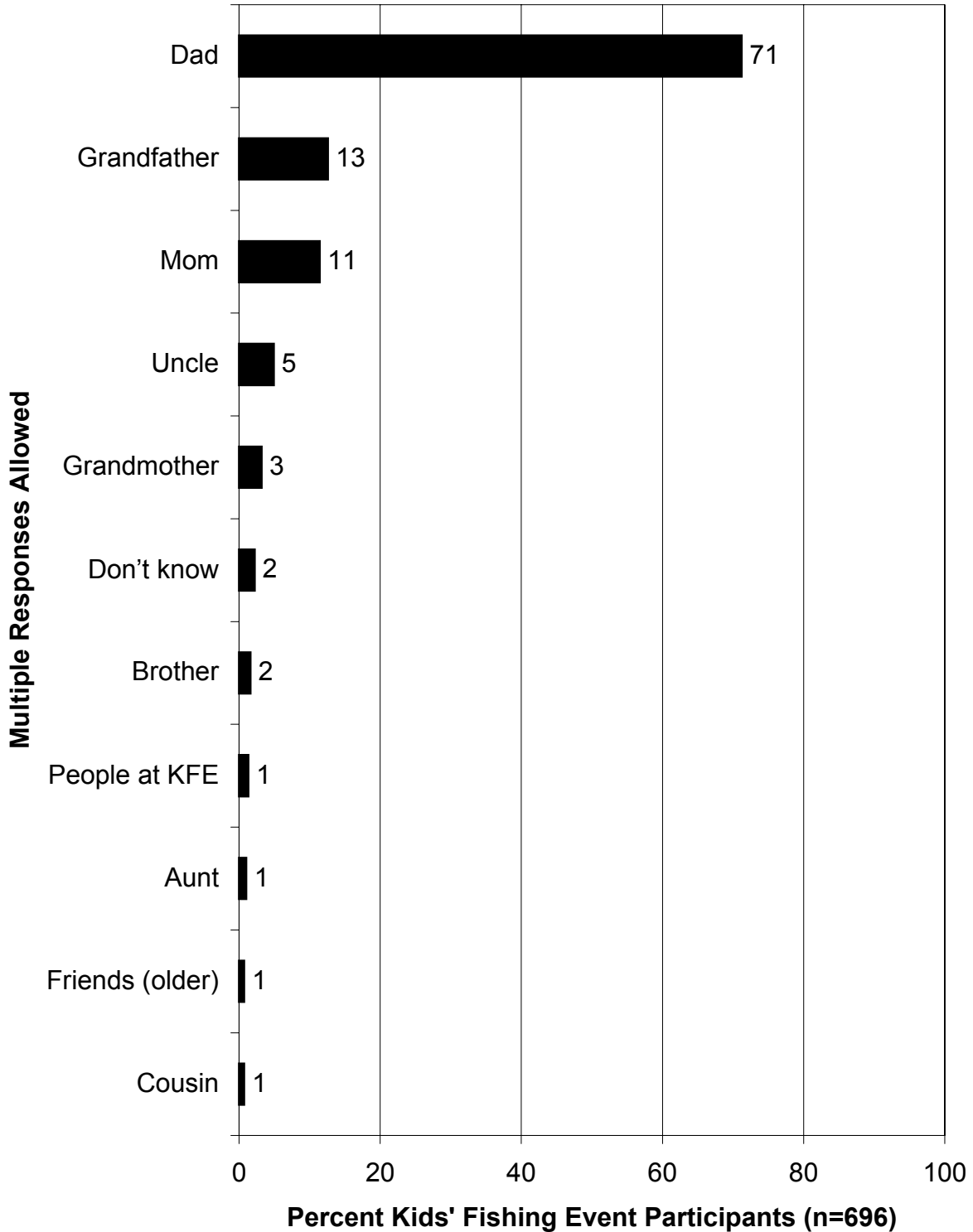


Q59. In thinking about the Kids' Fishing Event that you went to, would you say it made you more or less interested in wanting to go fishing or did it make no difference in your interest?

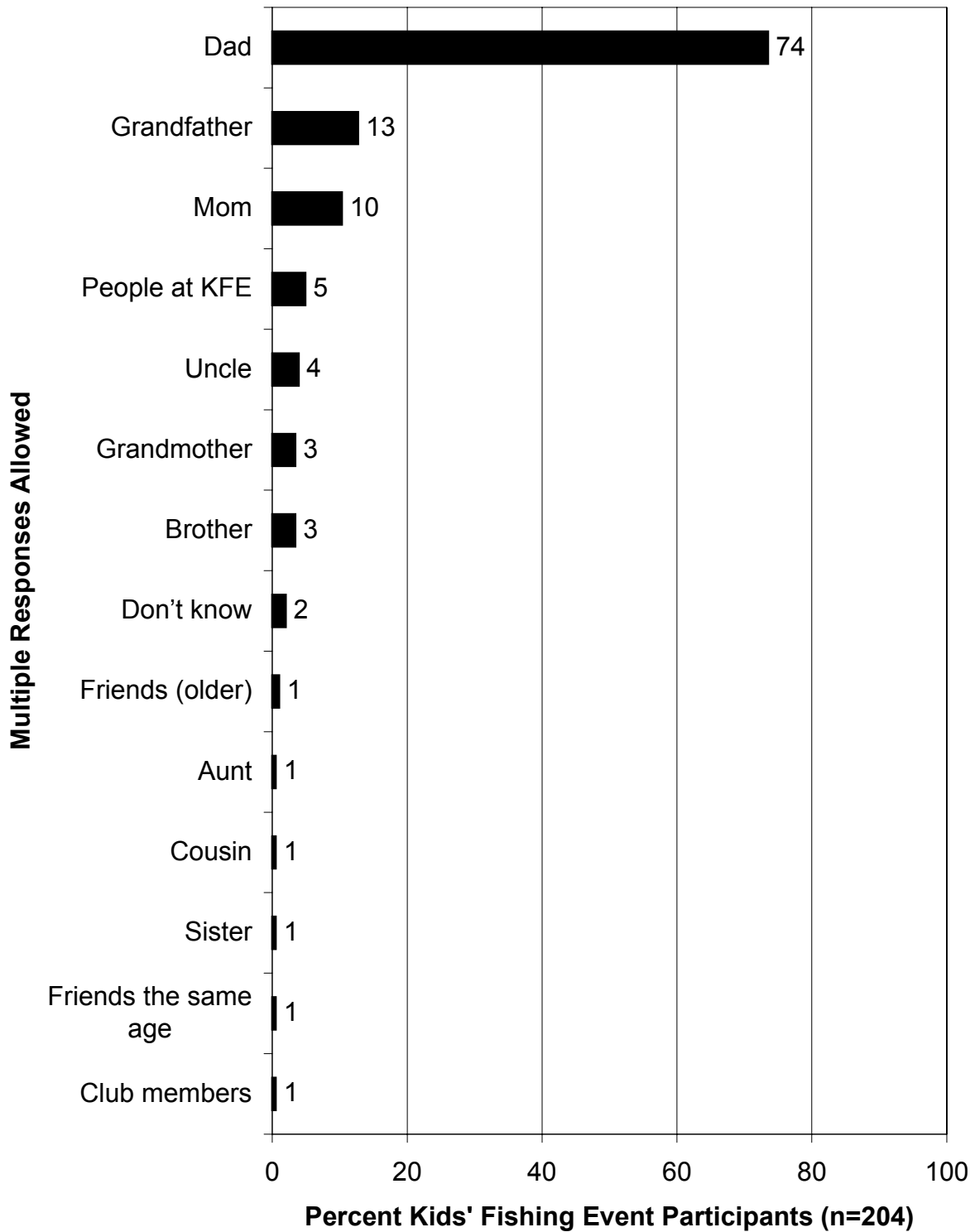


Q61. Who taught you how to fish?

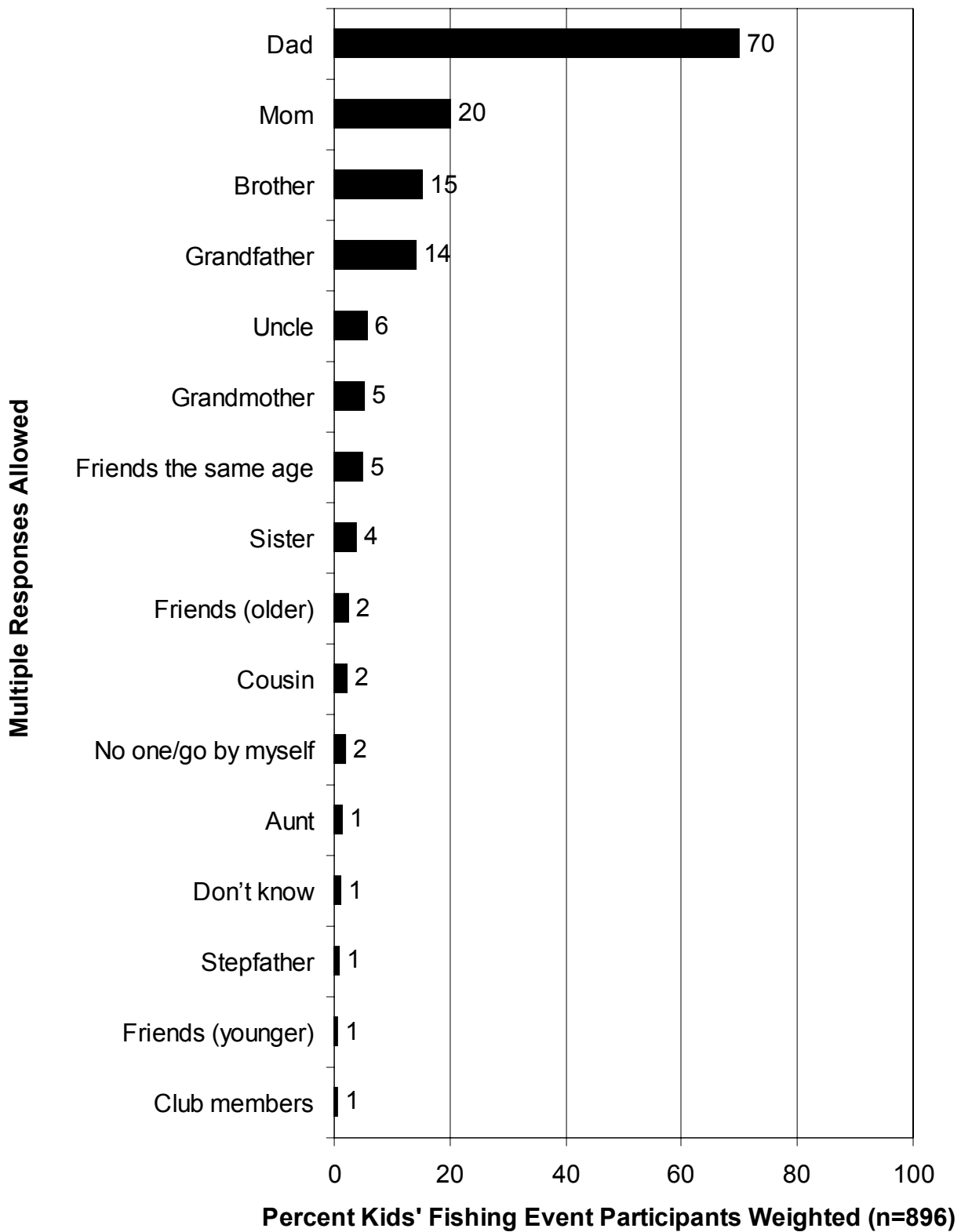
Q61. Who taught you how to fish? (WRD Event)



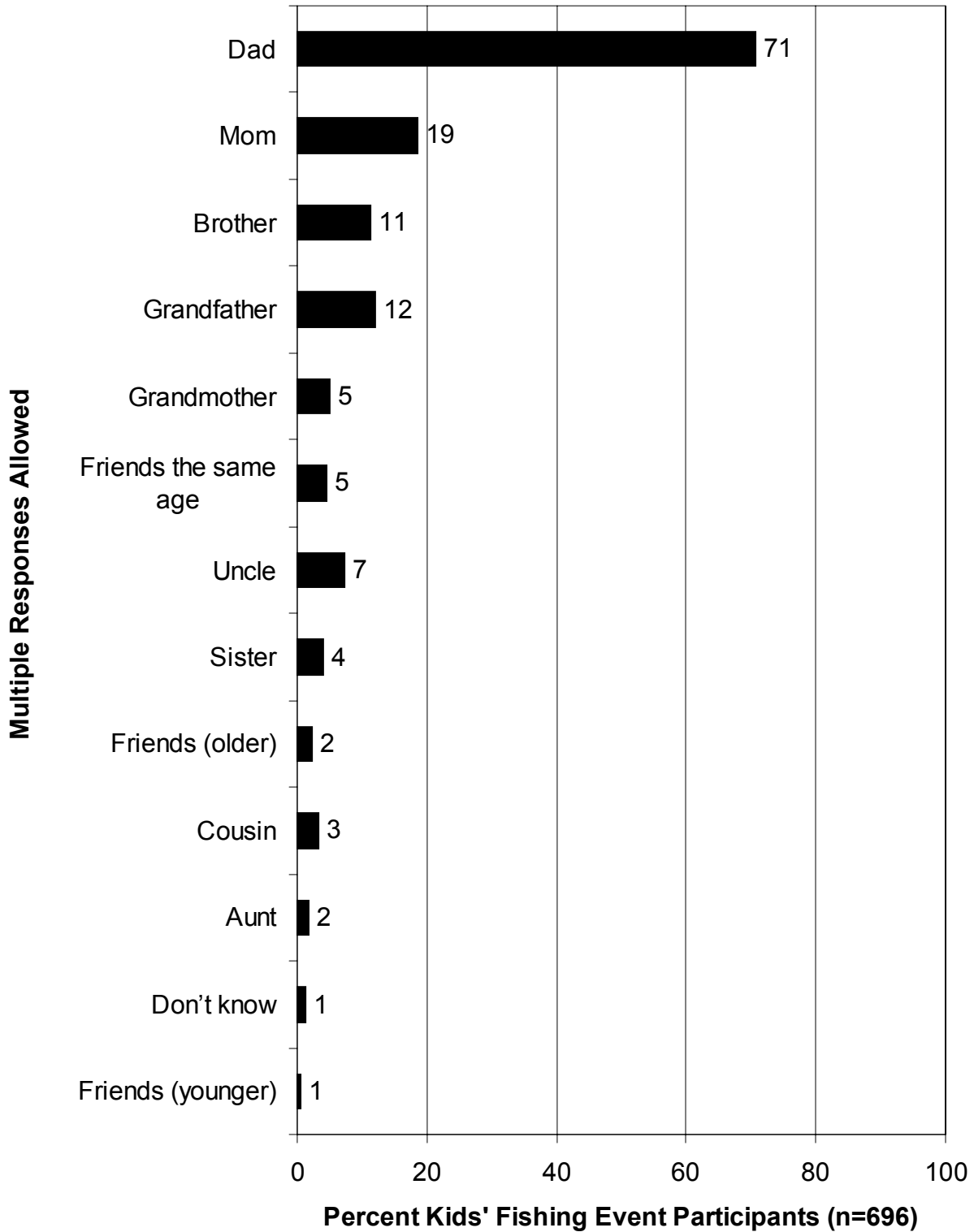
Q61. Who taught you how to fish? (General Event)



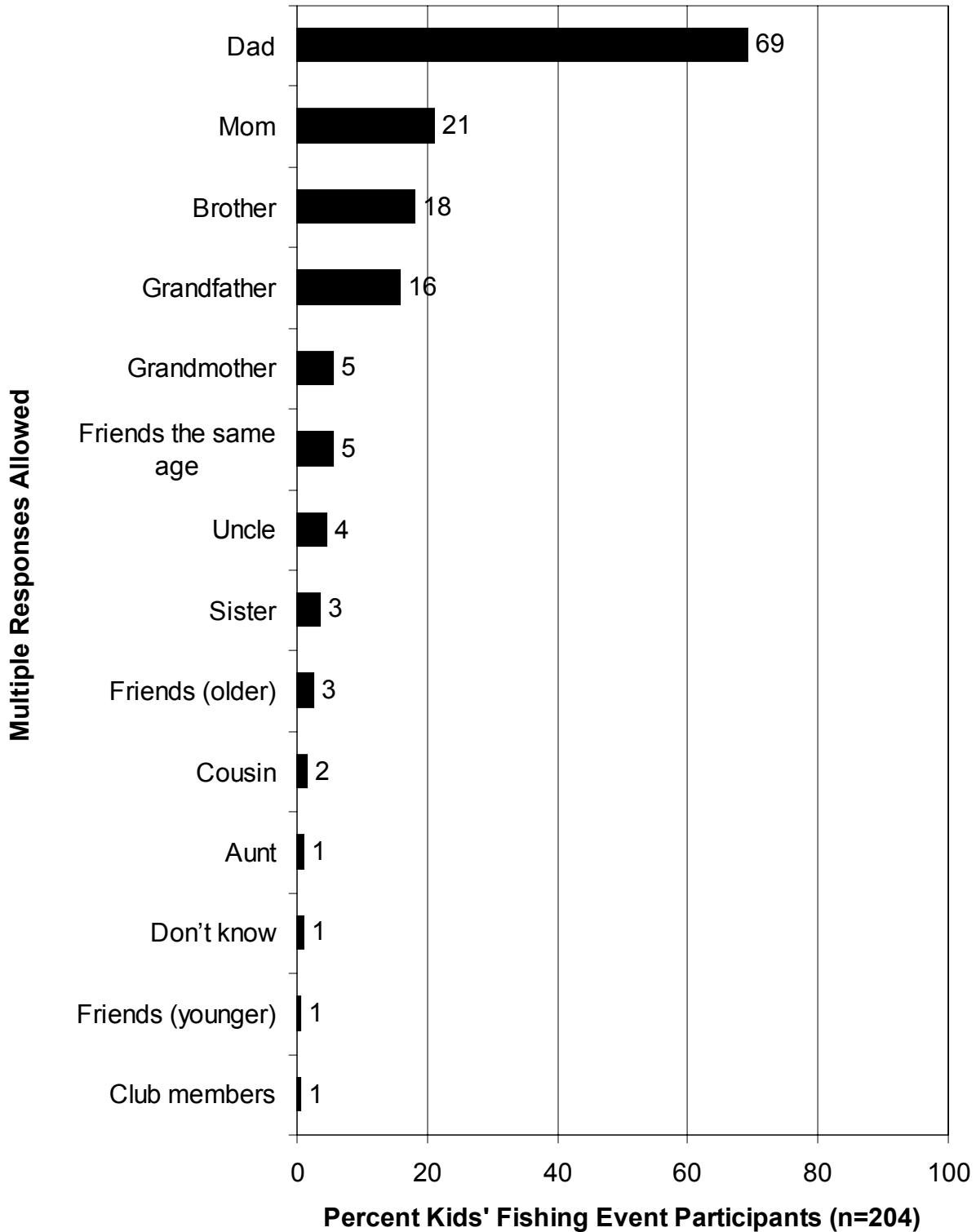
Q64. Who do you usually go fishing with?

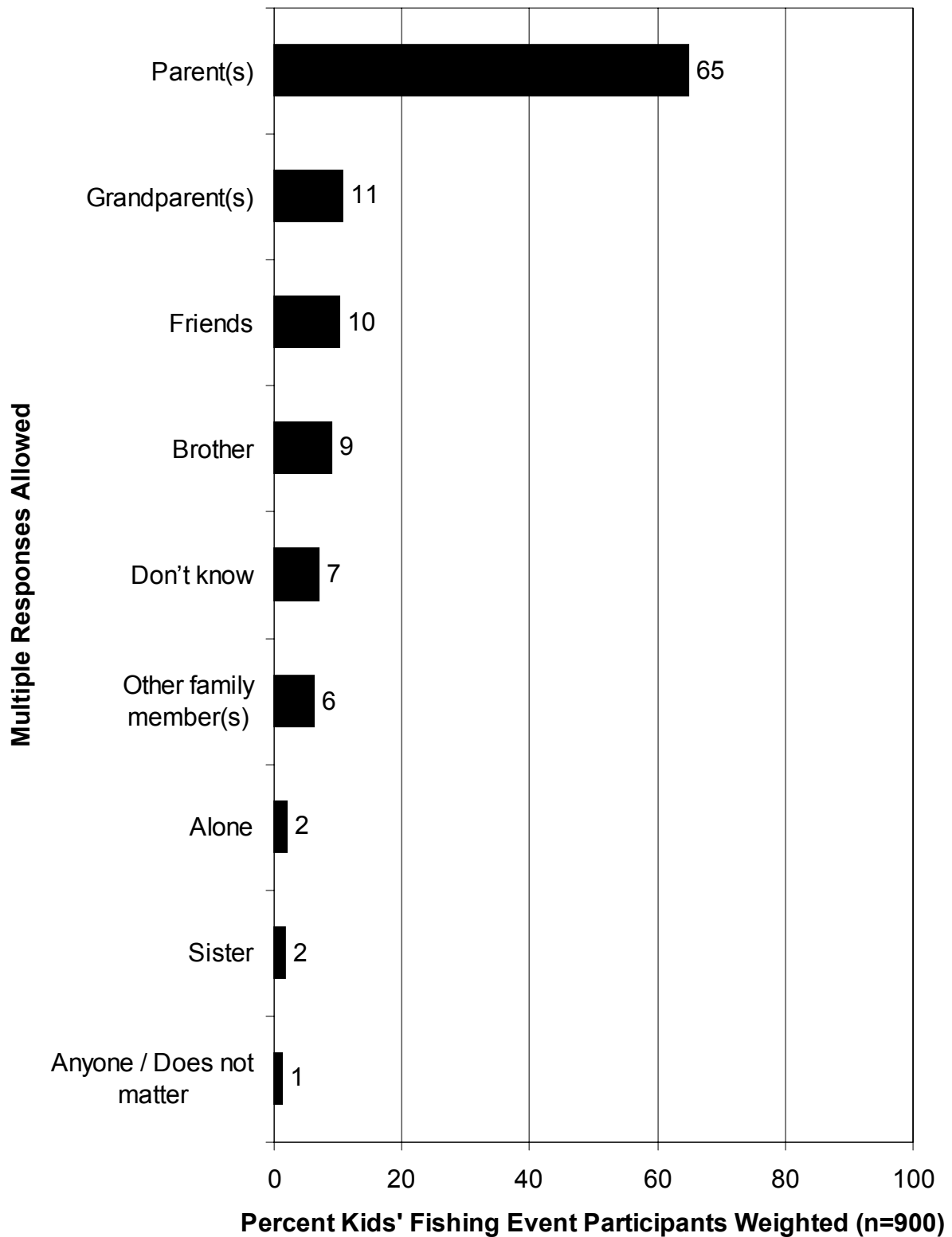


Q64. Who do you usually go fishing with? (WRD Event)

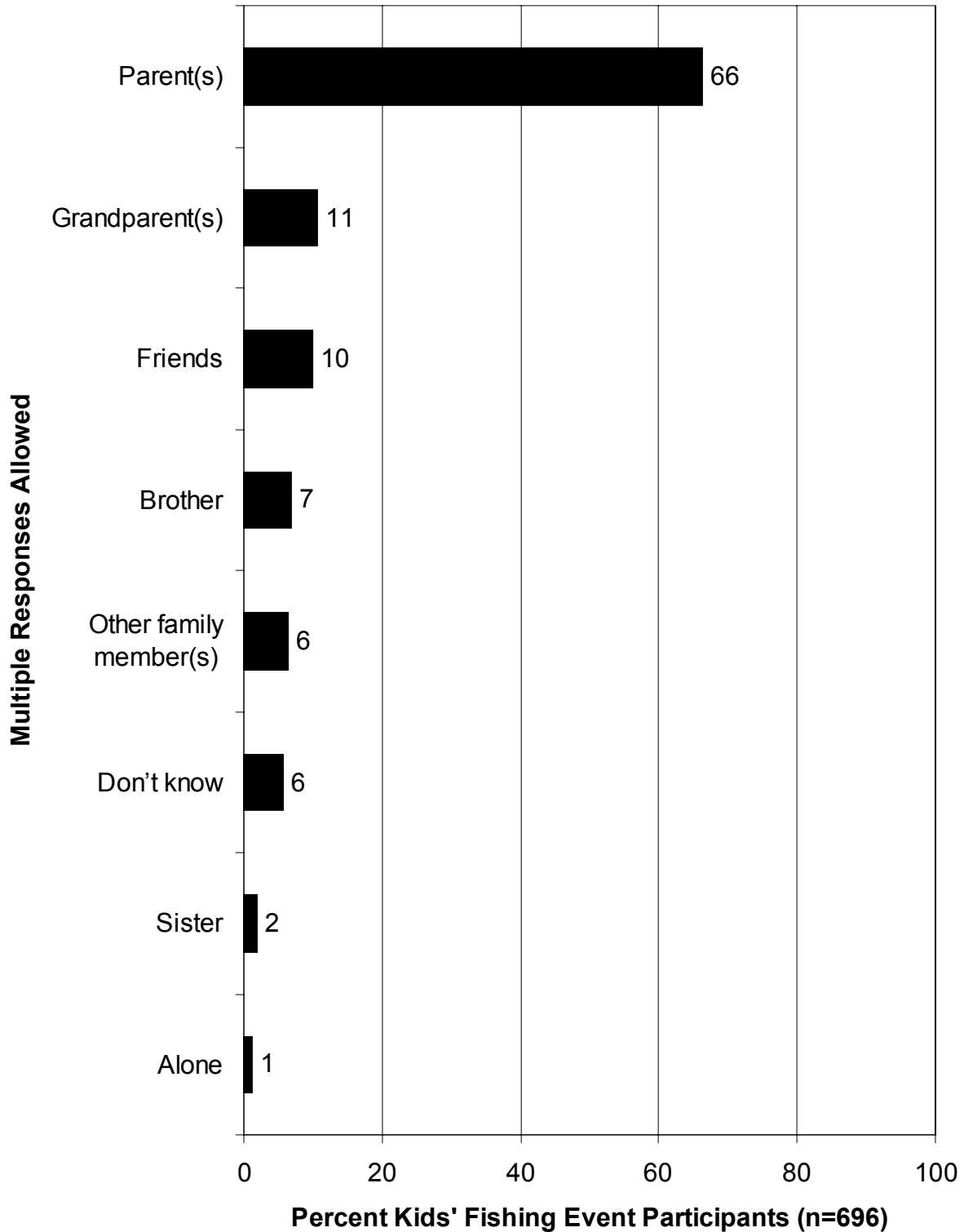


Q64. Who do you usually go fishing with? (General Event)

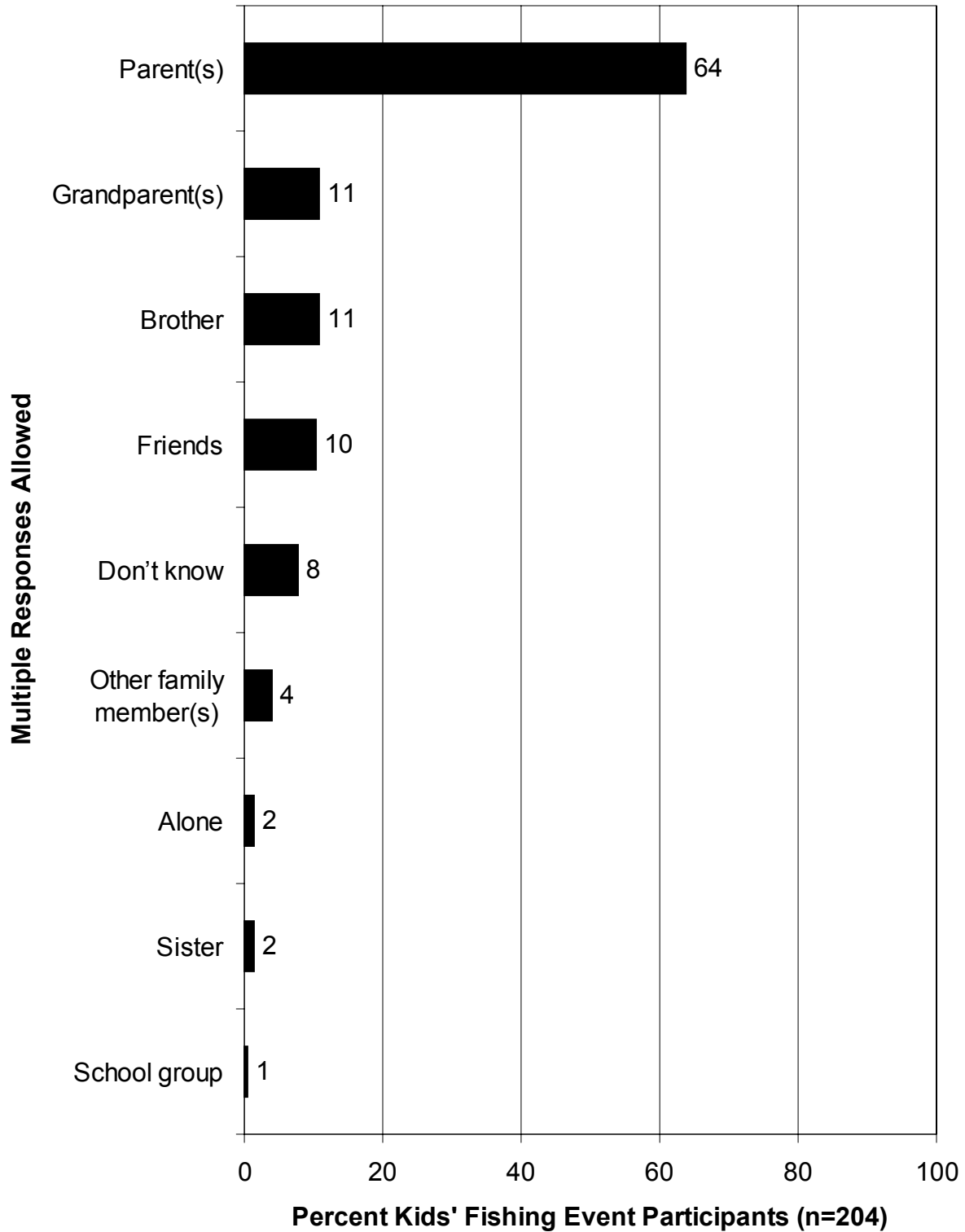


Q67. Who would you rather go fishing with?

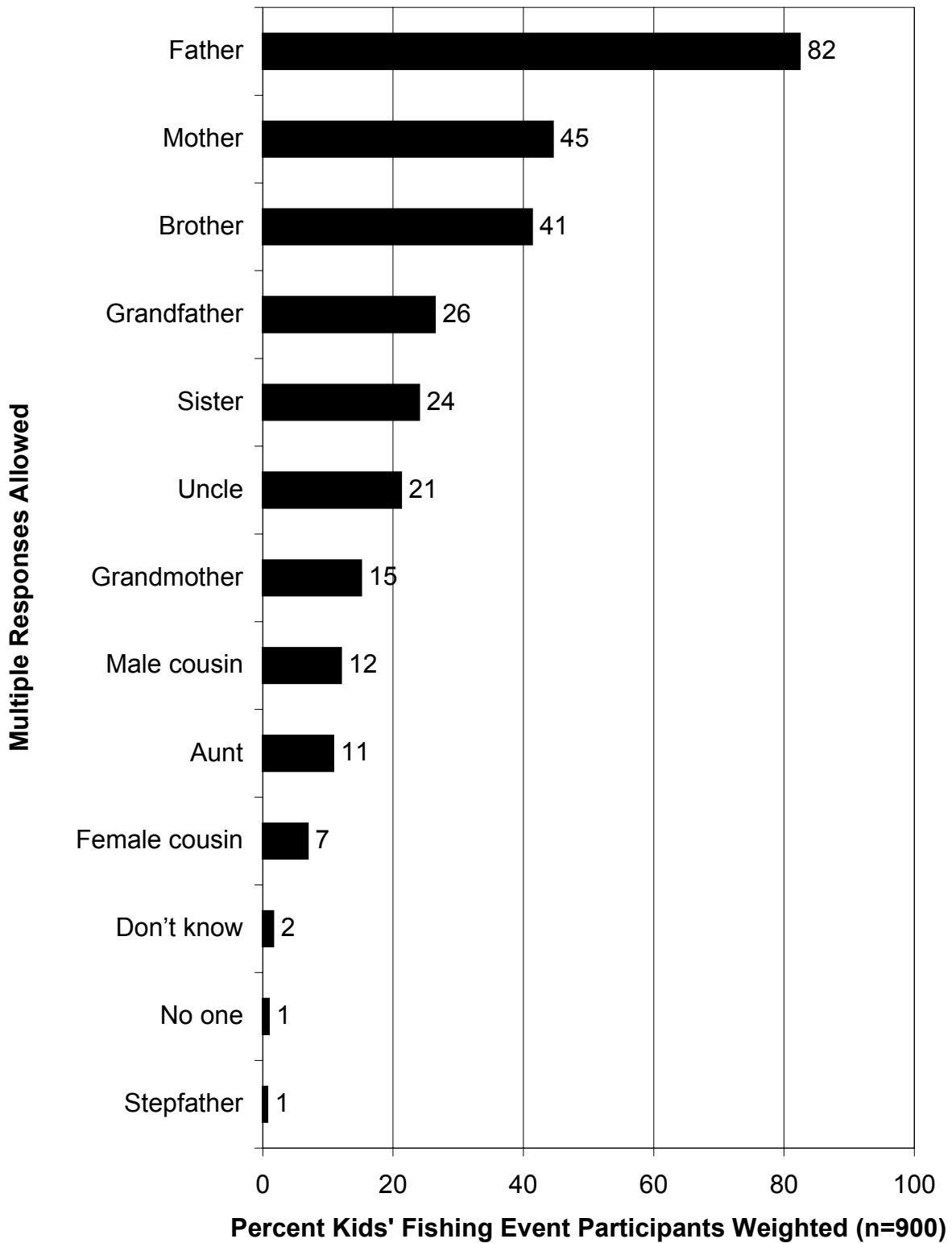
Q67. Who would you rather go fishing with? (WRD Event)



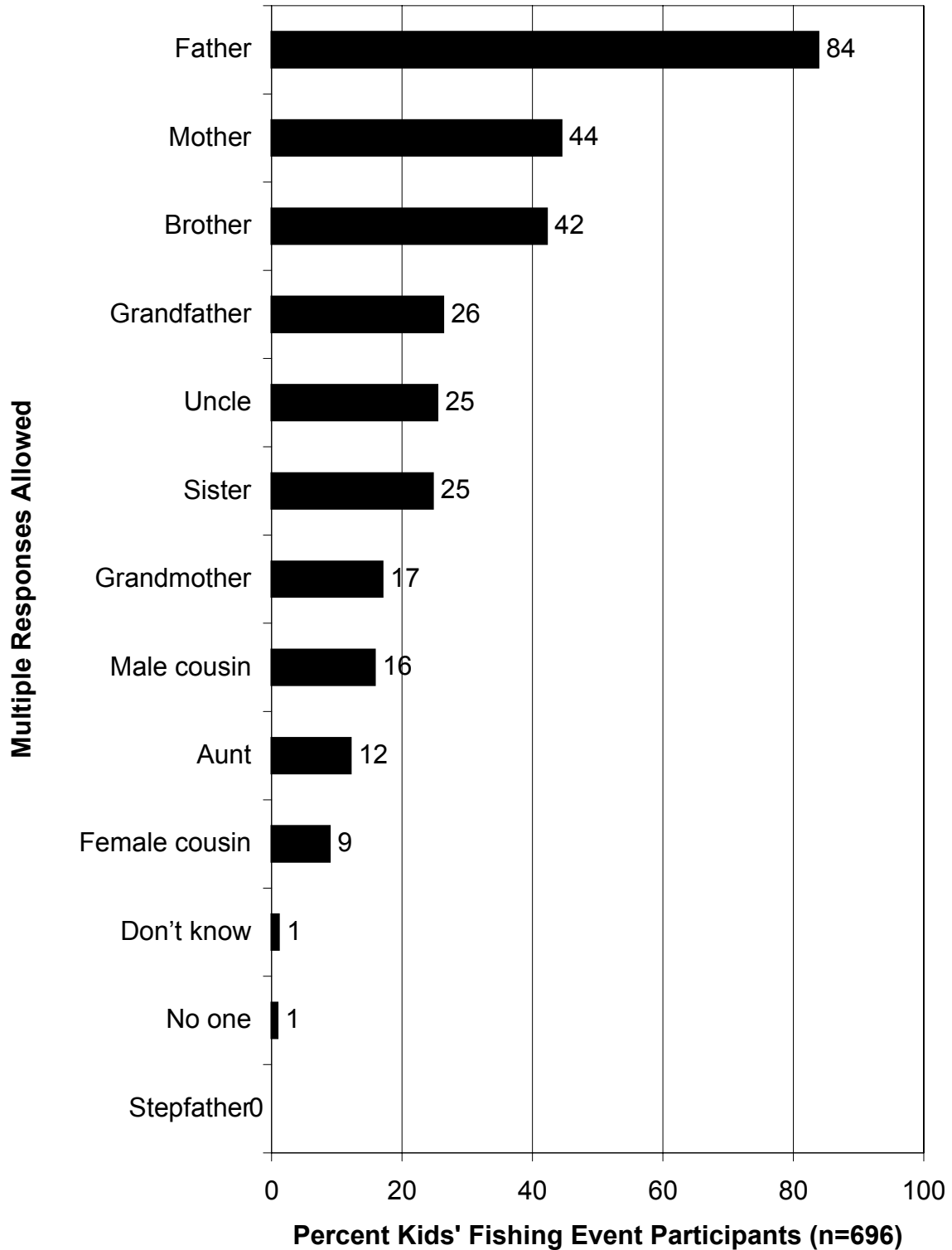
**Q67. Who would you rather go fishing with?
(General Event)**



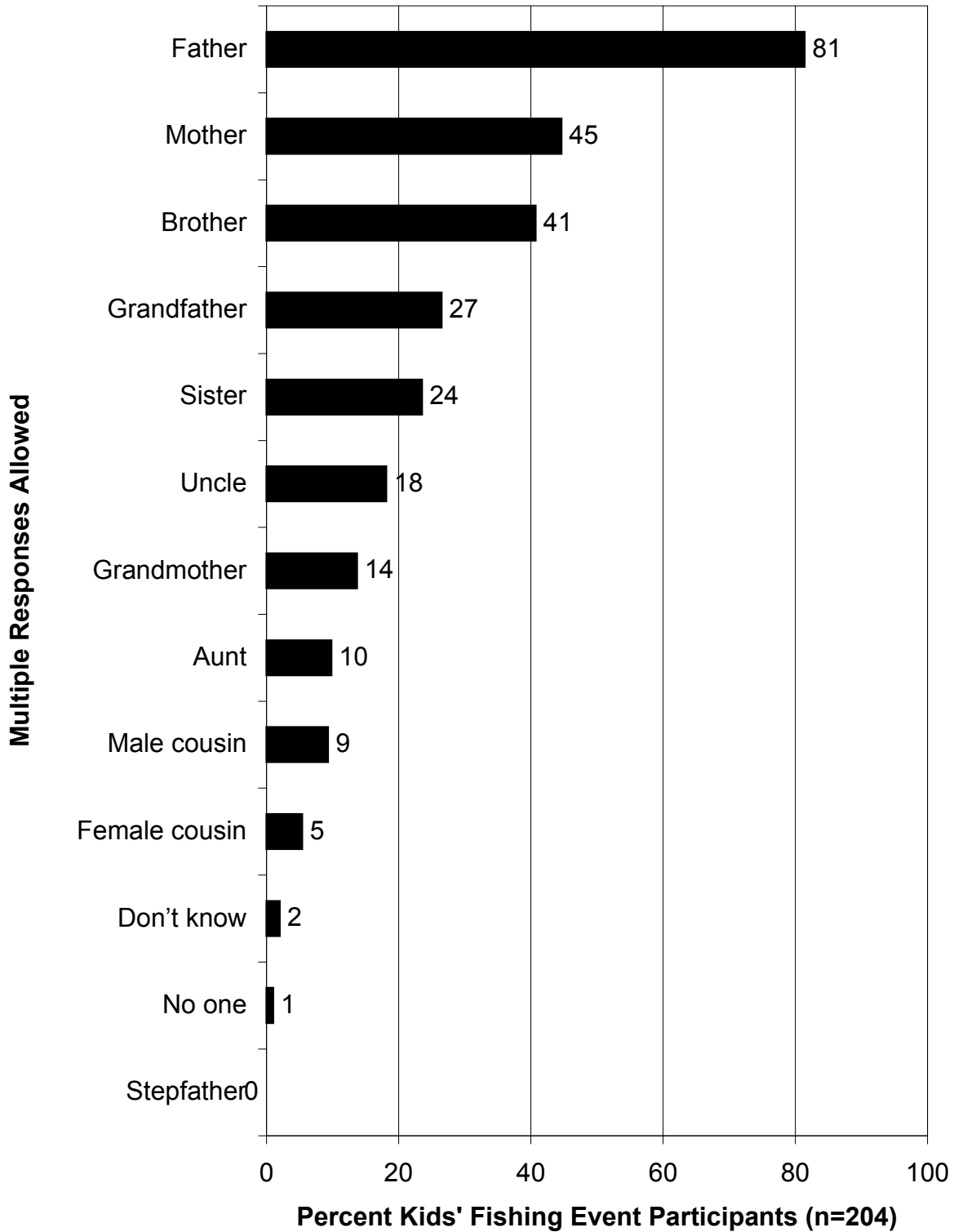
Q70. Who in your family fishes?



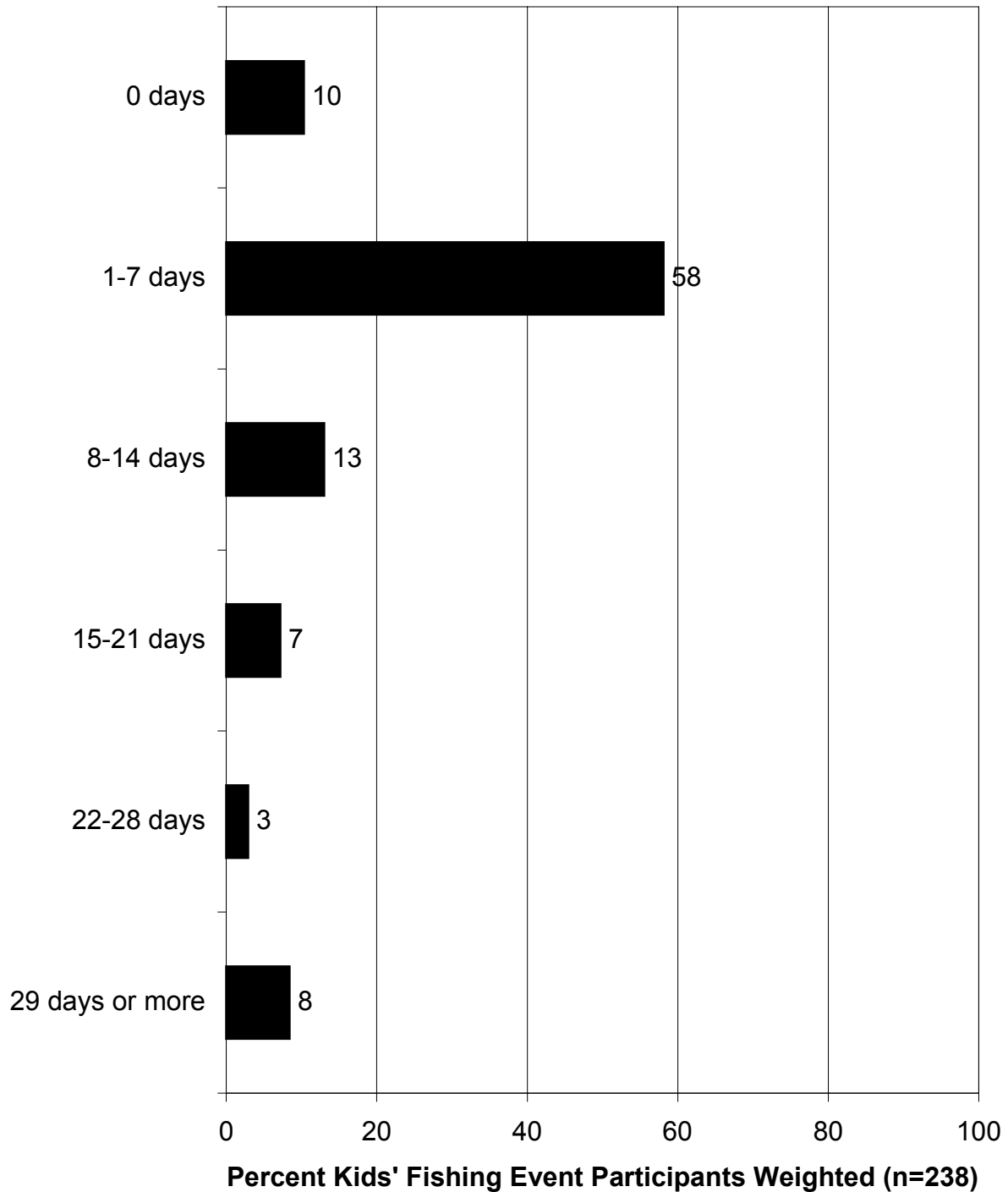
Q70. Who in your family fishes? (WRD Event)



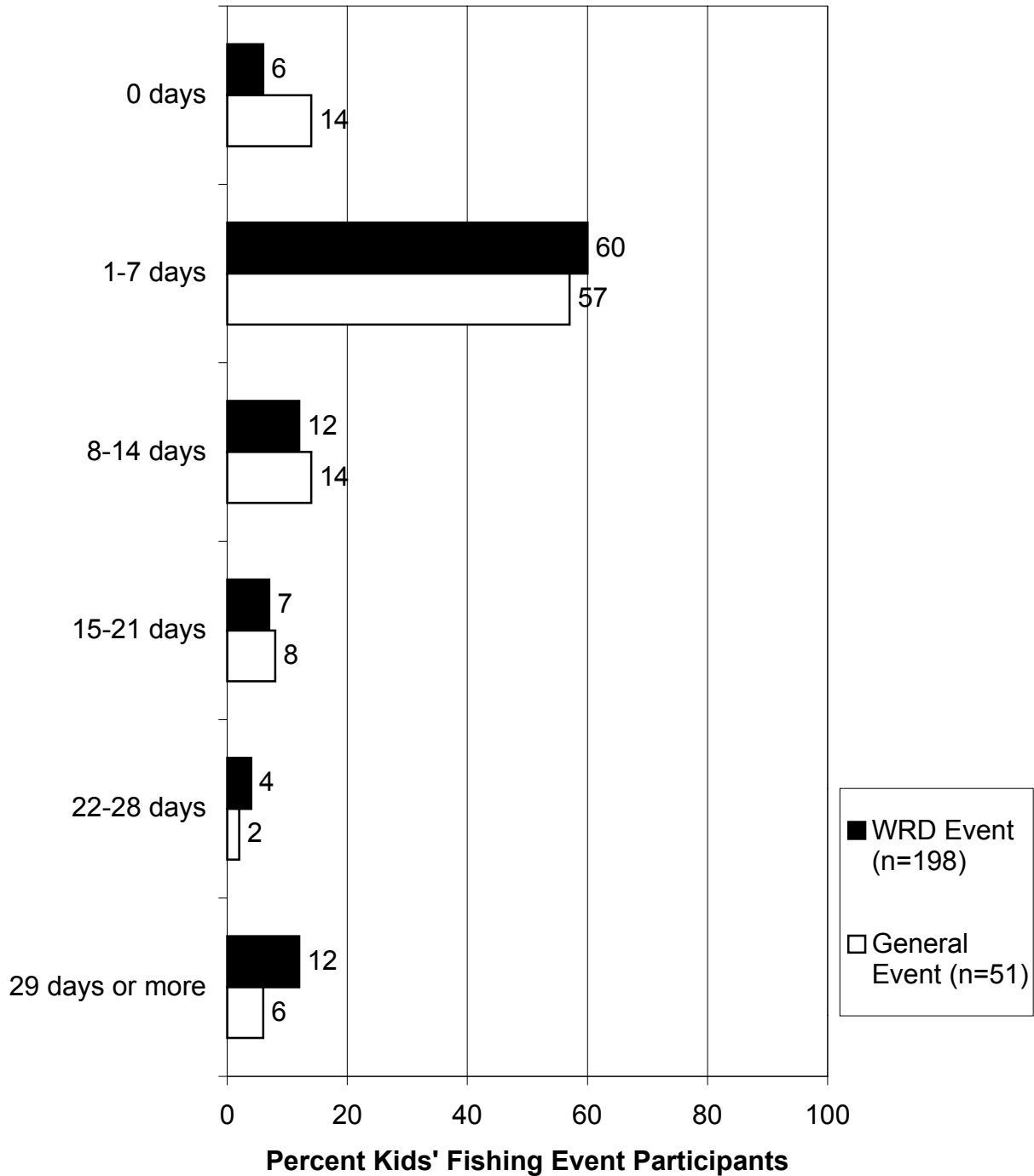
Q70. Who in your family fishes? (General Event)



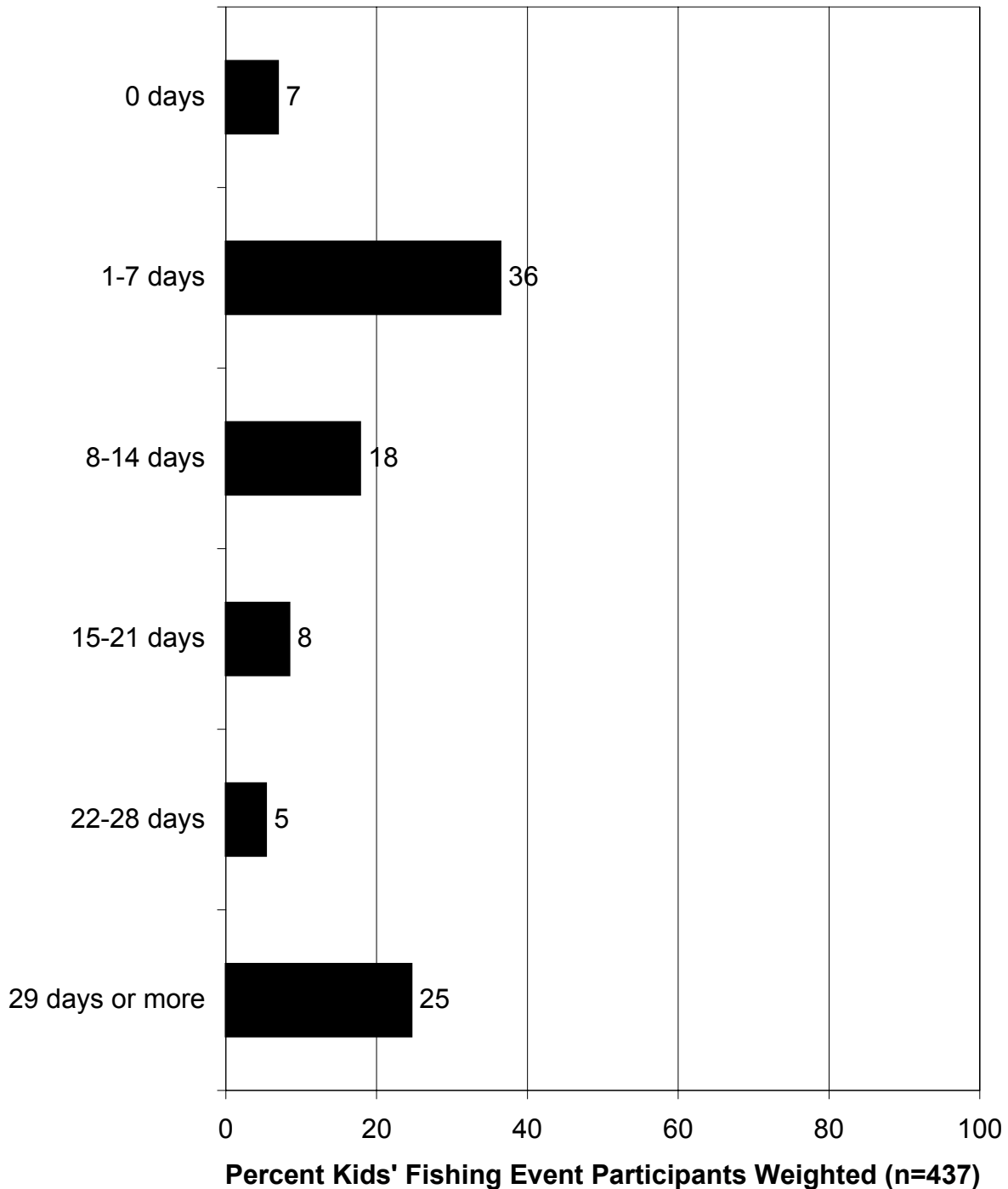
**Q72. About how many days per year would you say your mom fishes?
(Asked of those who reported that their mother fishes.)**



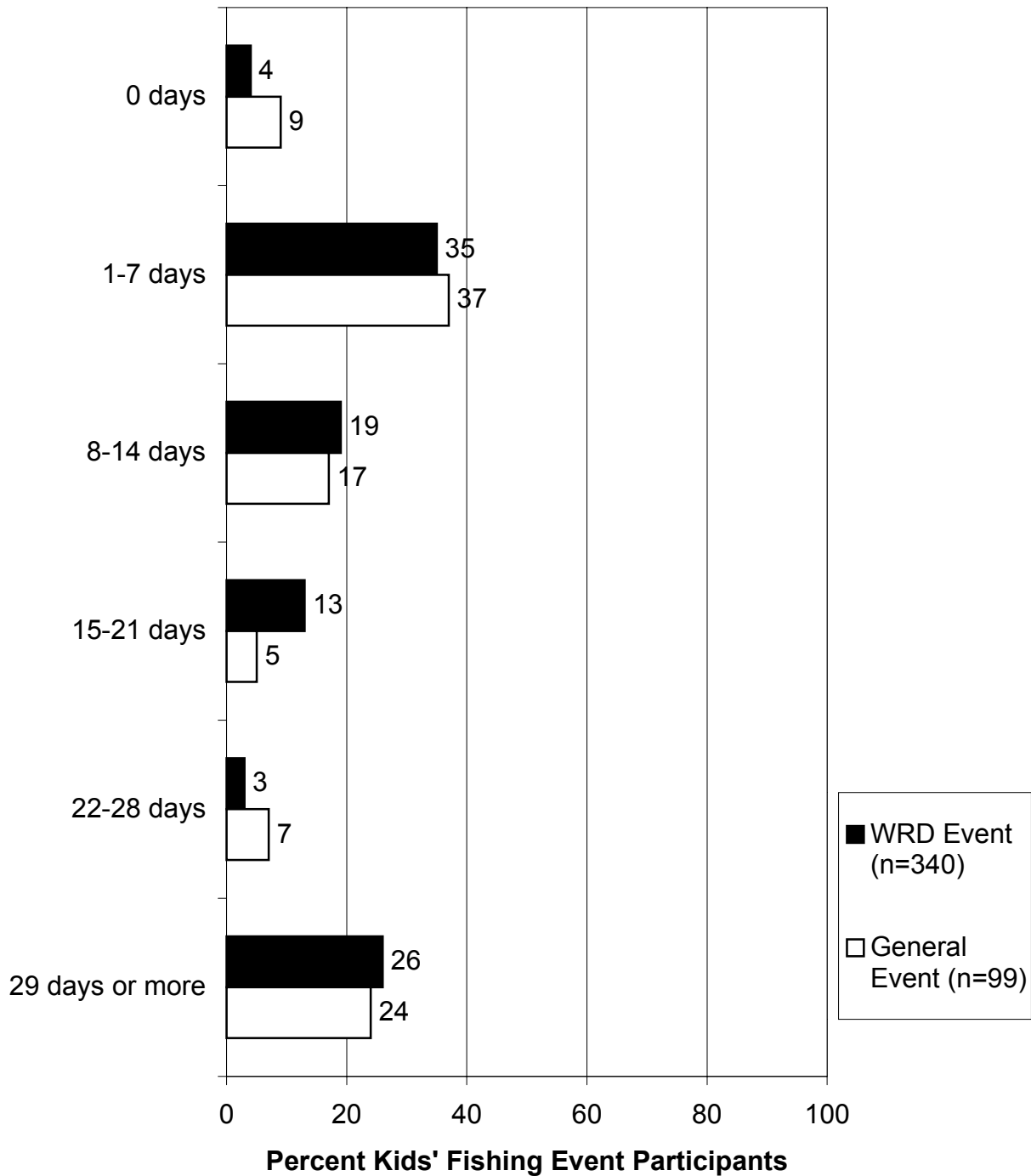
**Q72. About how many days per year would you say your mom fishes?
(Asked of those who reported that their mother fishes.)**



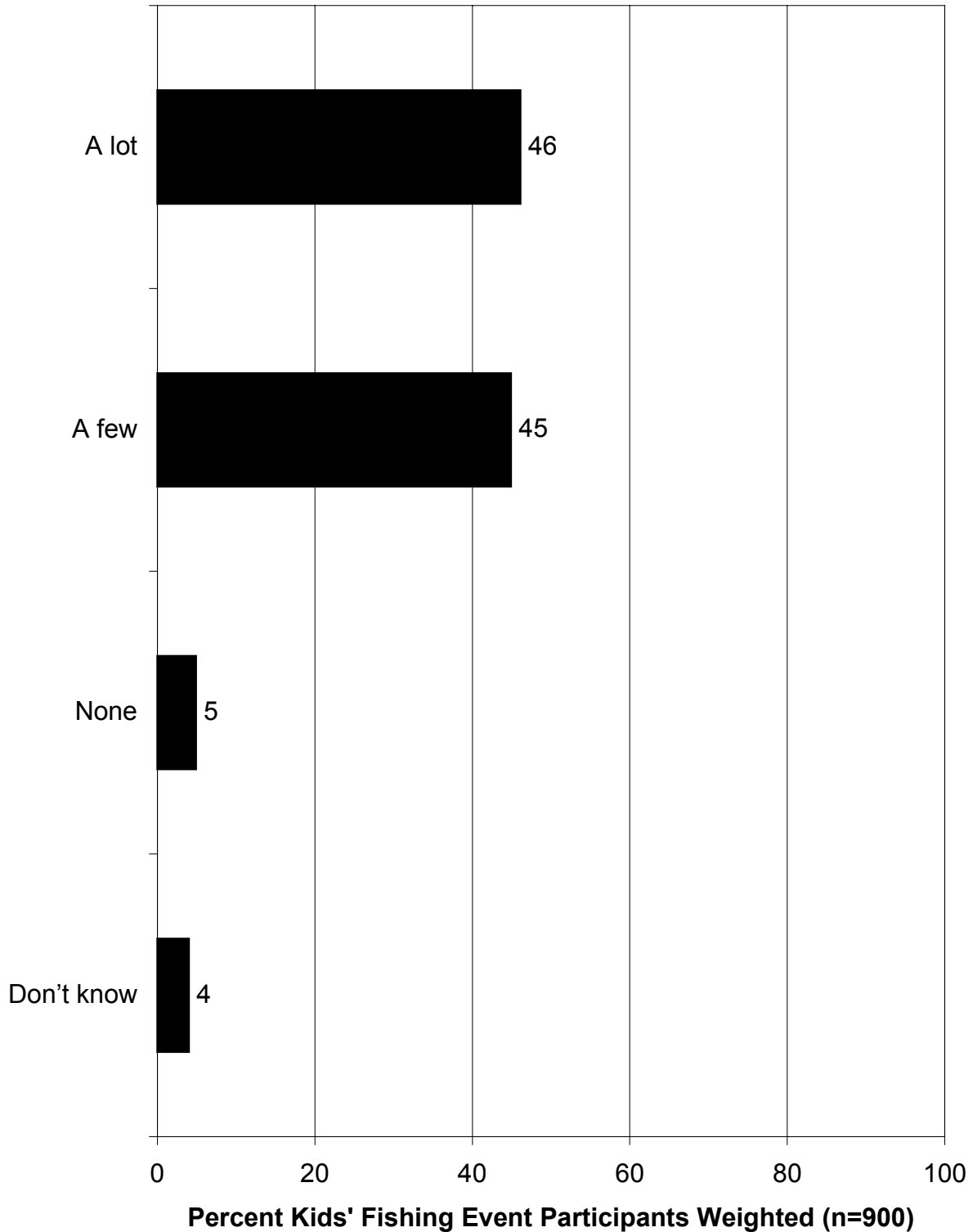
**Q73. About how many days per year would you say your father fishes?
(Asked of those who reported that their father fishes.)**



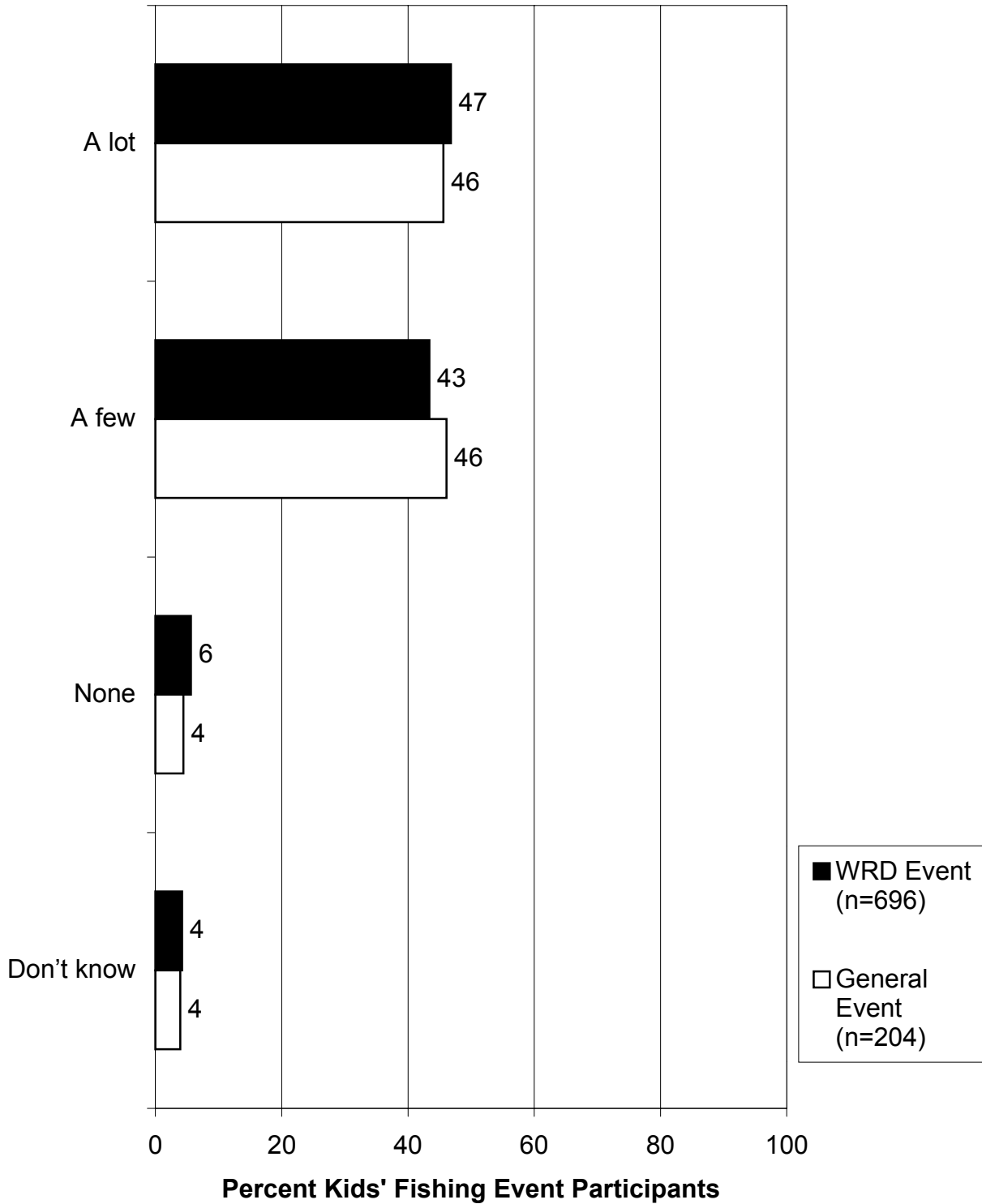
**Q73. About how many days per year would you say your father fishes?
(Asked of those who reported that their father fishes.)**



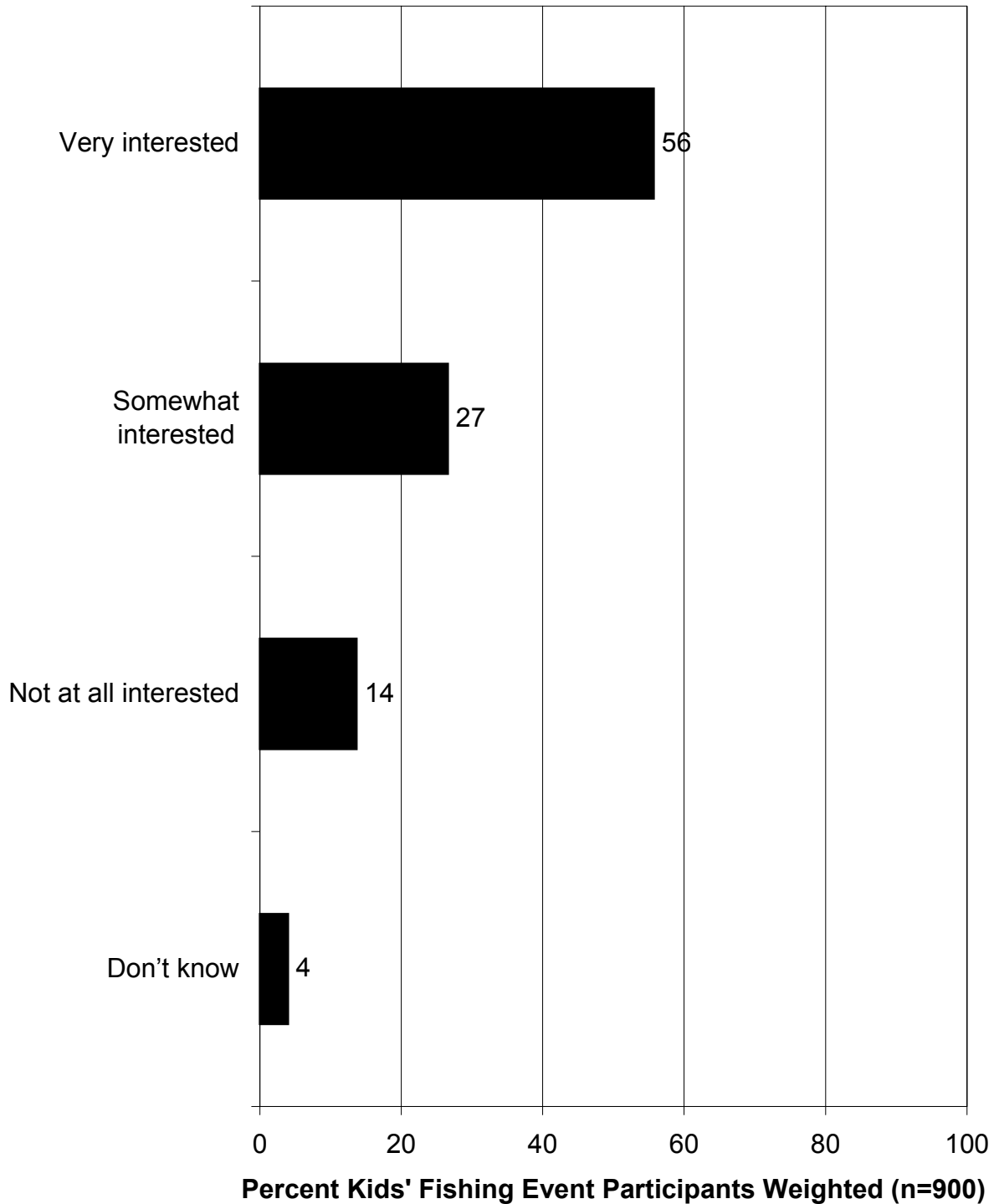
Q74. Would you say that a lot, a few, or none of your friends fish?



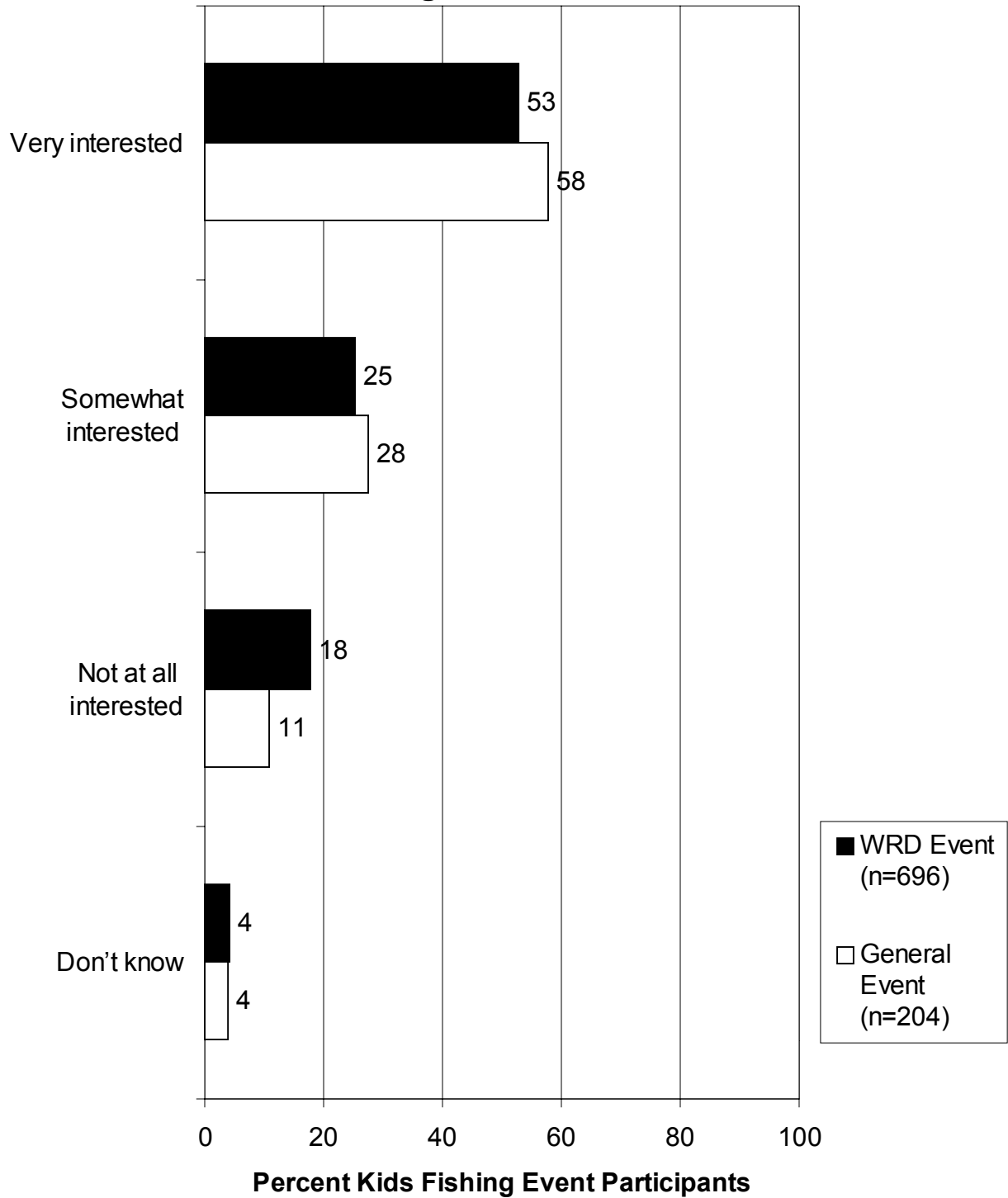
Q74. Would you say that a lot, a few, or none of your friends fish?



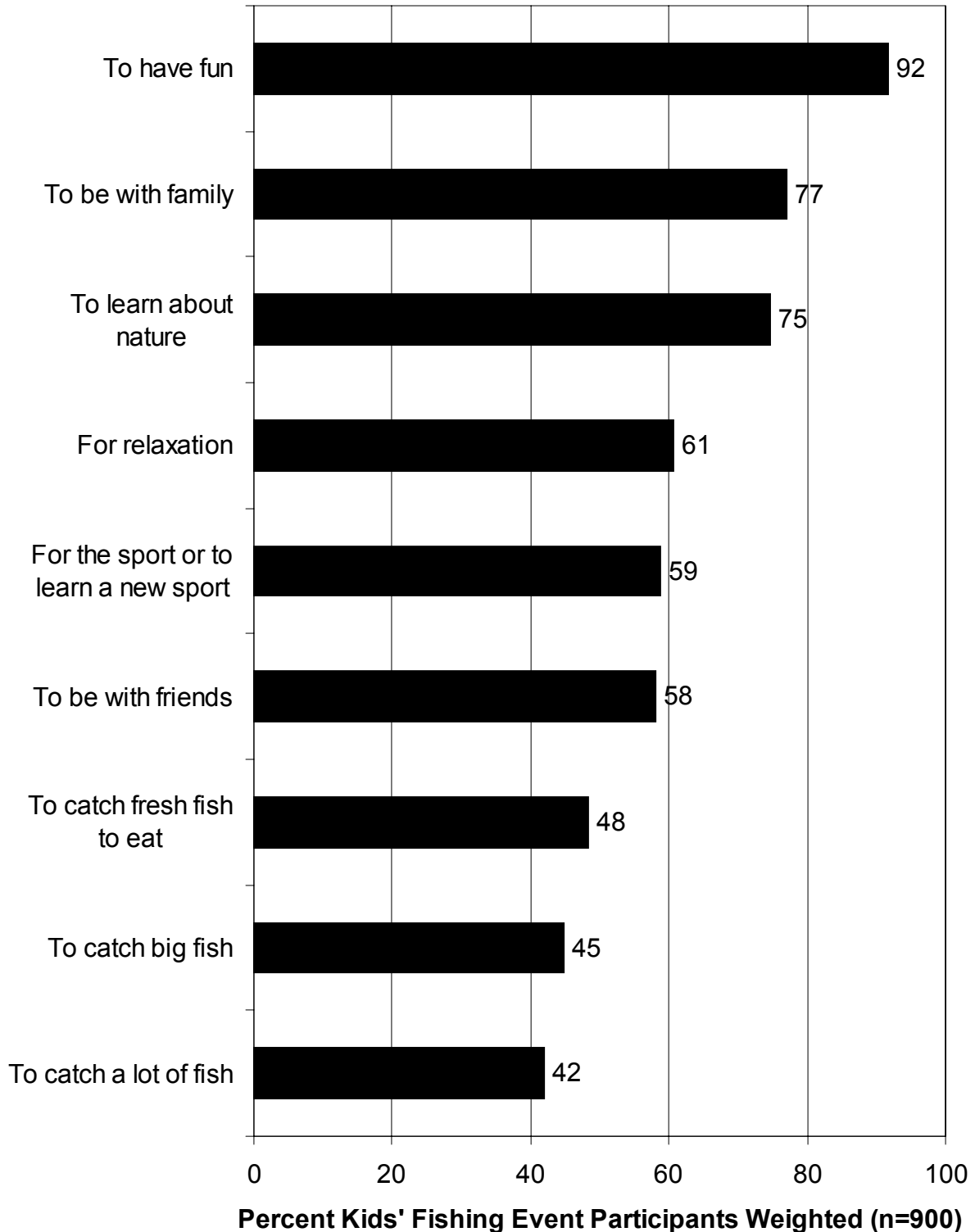
Q75. Would you be very interested, somewhat interested, or not at all interested in joining a fishing club for kids?



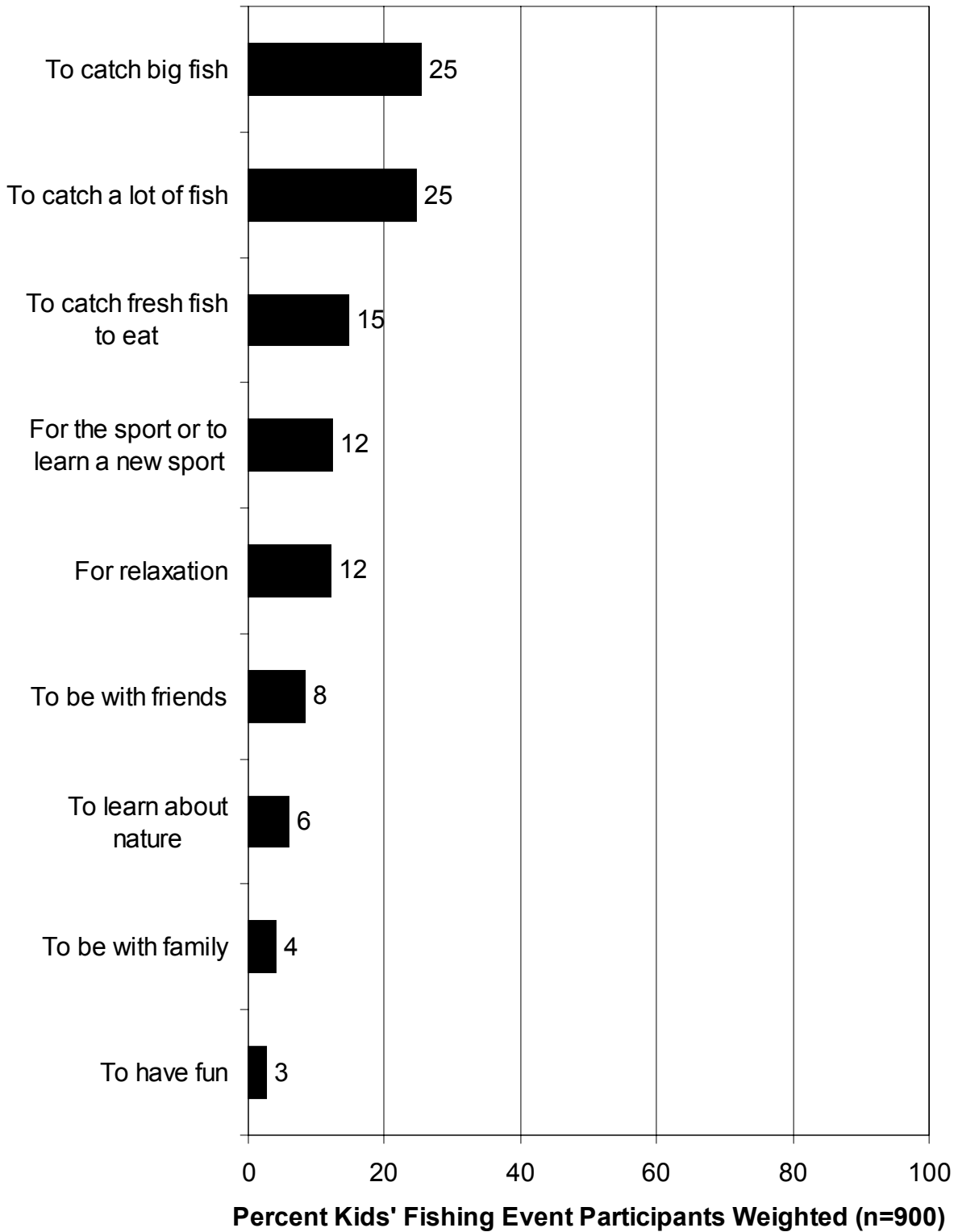
Q75. Would you be very interested, somewhat interested, or not at all interested in joining a fishing club for kids?



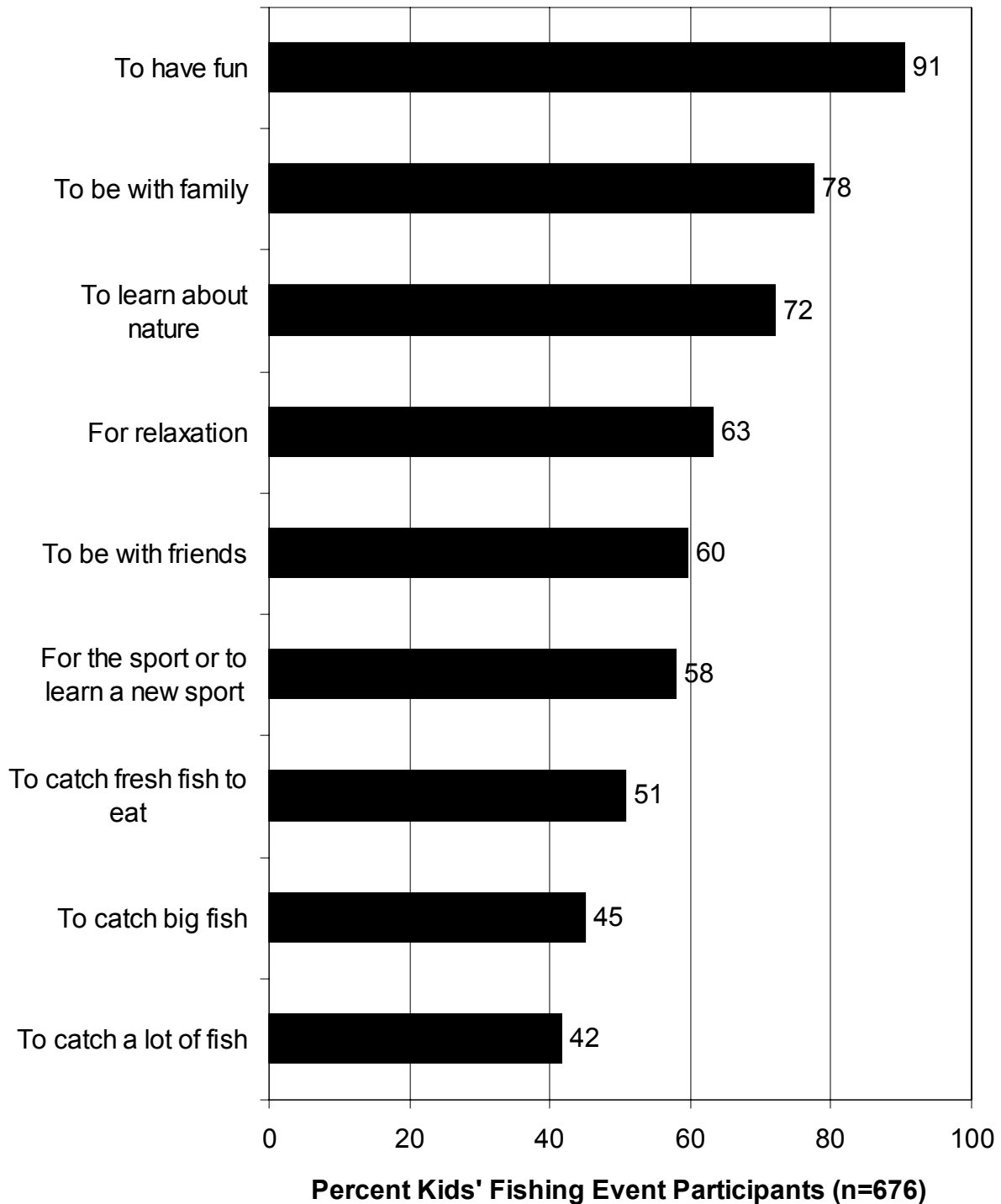
Q76-84. Percent who reported each item as a very important reason to go fishing.



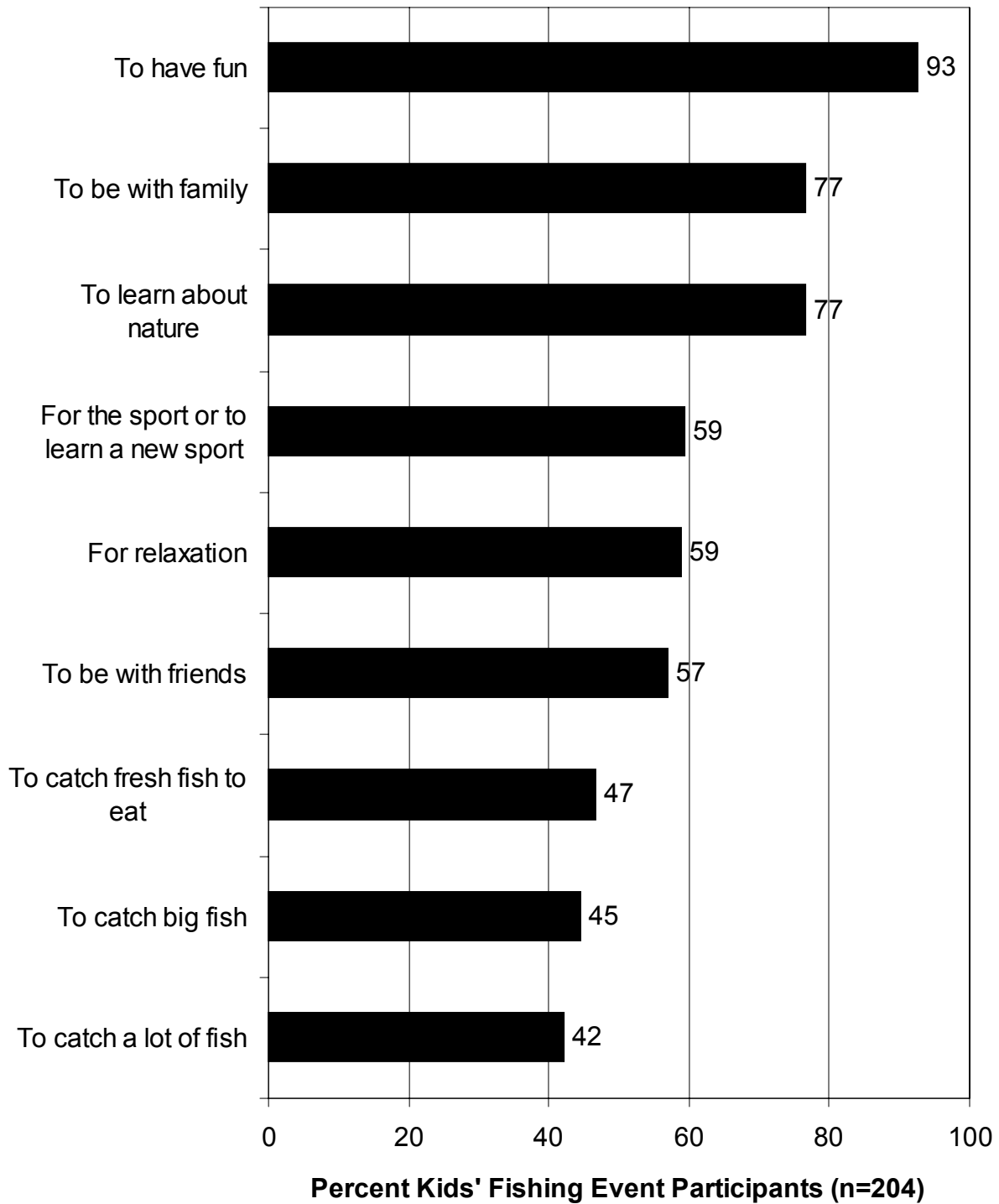
Q76-84. Percent who reported each item as not a reason at all to go fishing.



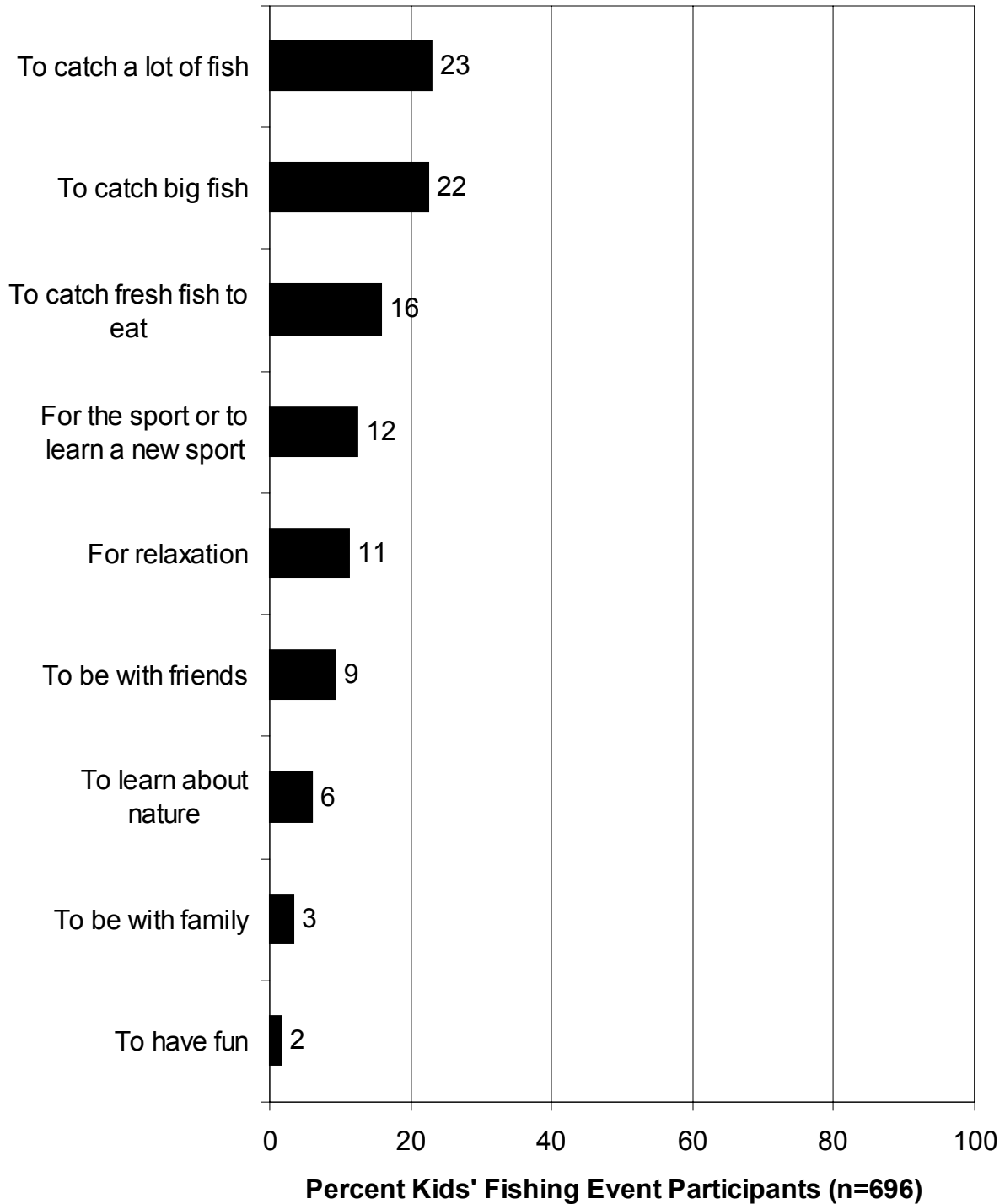
**Q76-84. Percent who reported each item as a very important reason to go fishing.
(WRD Event)**



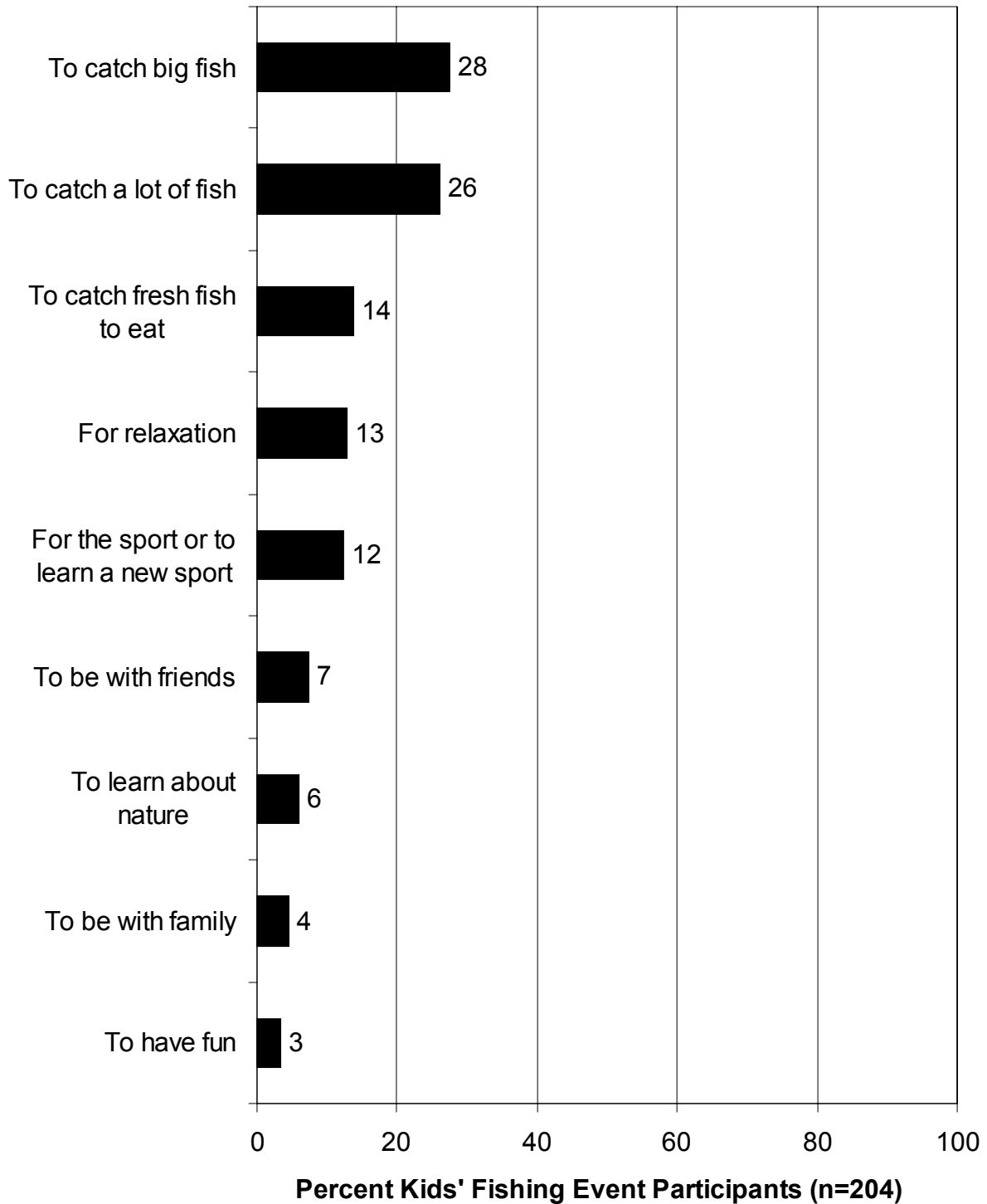
**Q76-84. Percent who reported each item as a very important reason to go fishing.
(General Event)**



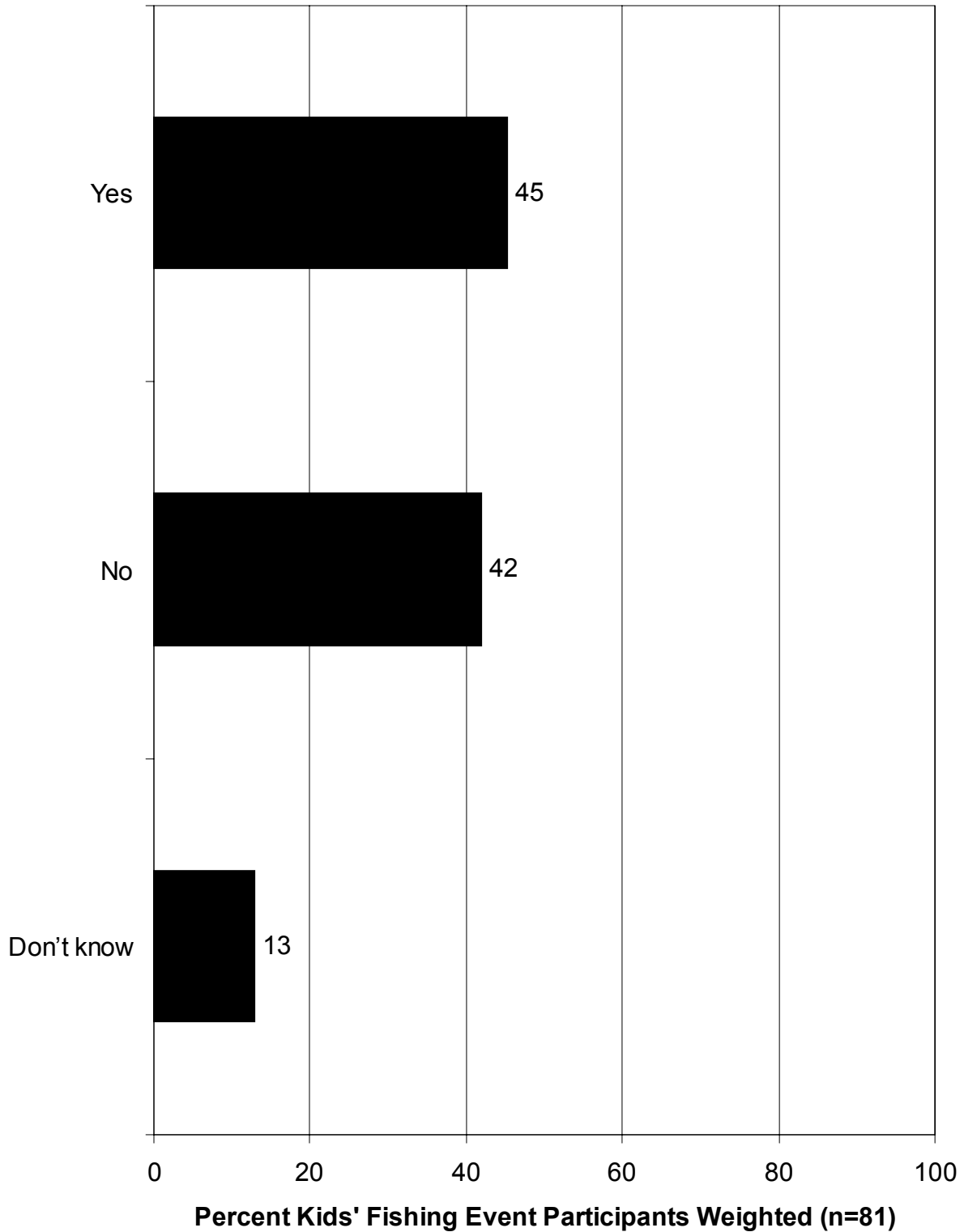
**Q76-84. Percent who reported each item as not a reason at all to go fishing.
(WRD Event)**



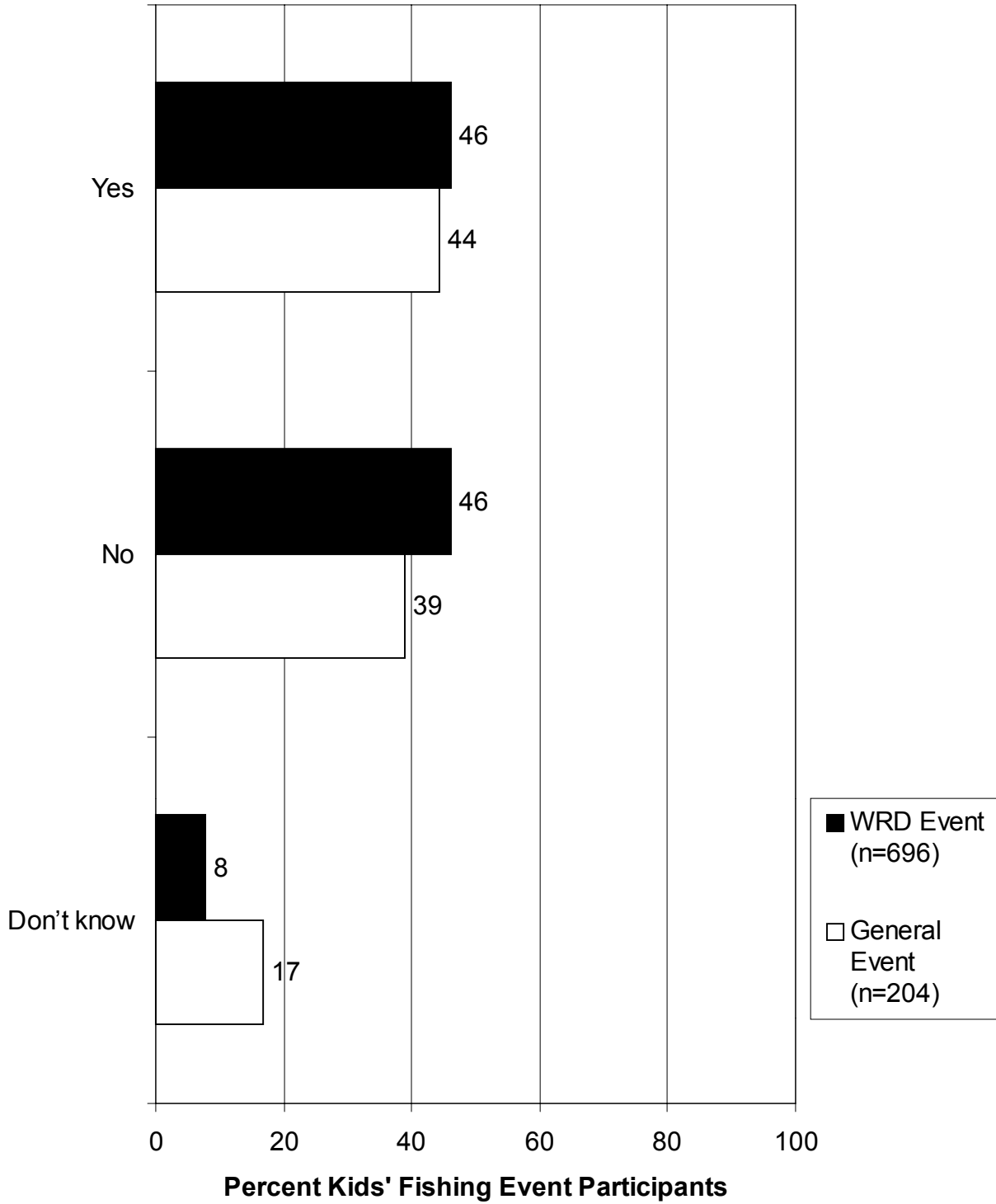
**Q76-84. Percent who reported each item as not a reason at all to go fishing.
(General Event)**



**Q92. Have you purchased a fishing license?
(Asked of those aged 16 or older.)**

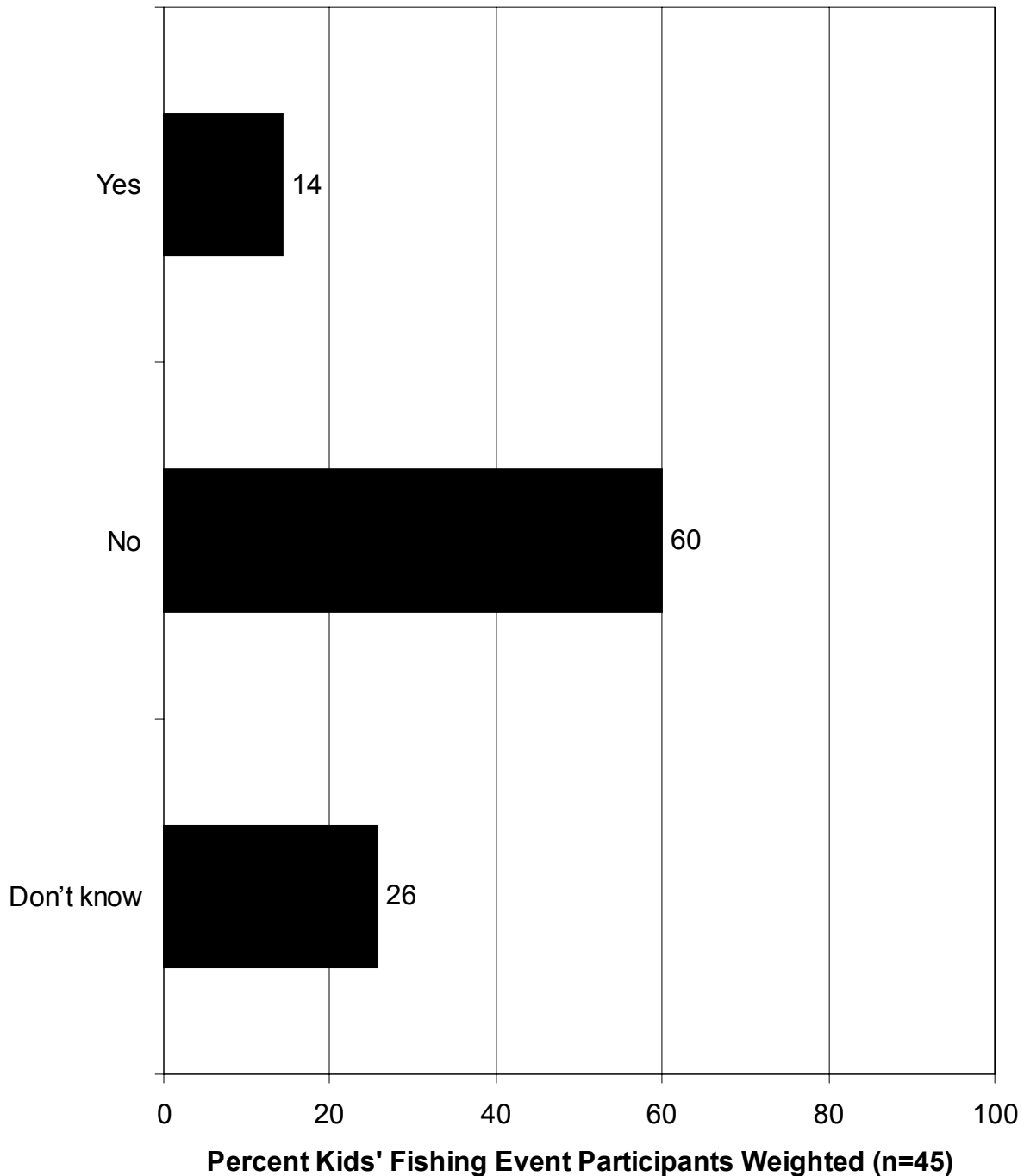


**Q92. Have you purchased a fishing license?
(Asked of those aged 16 or older.)**



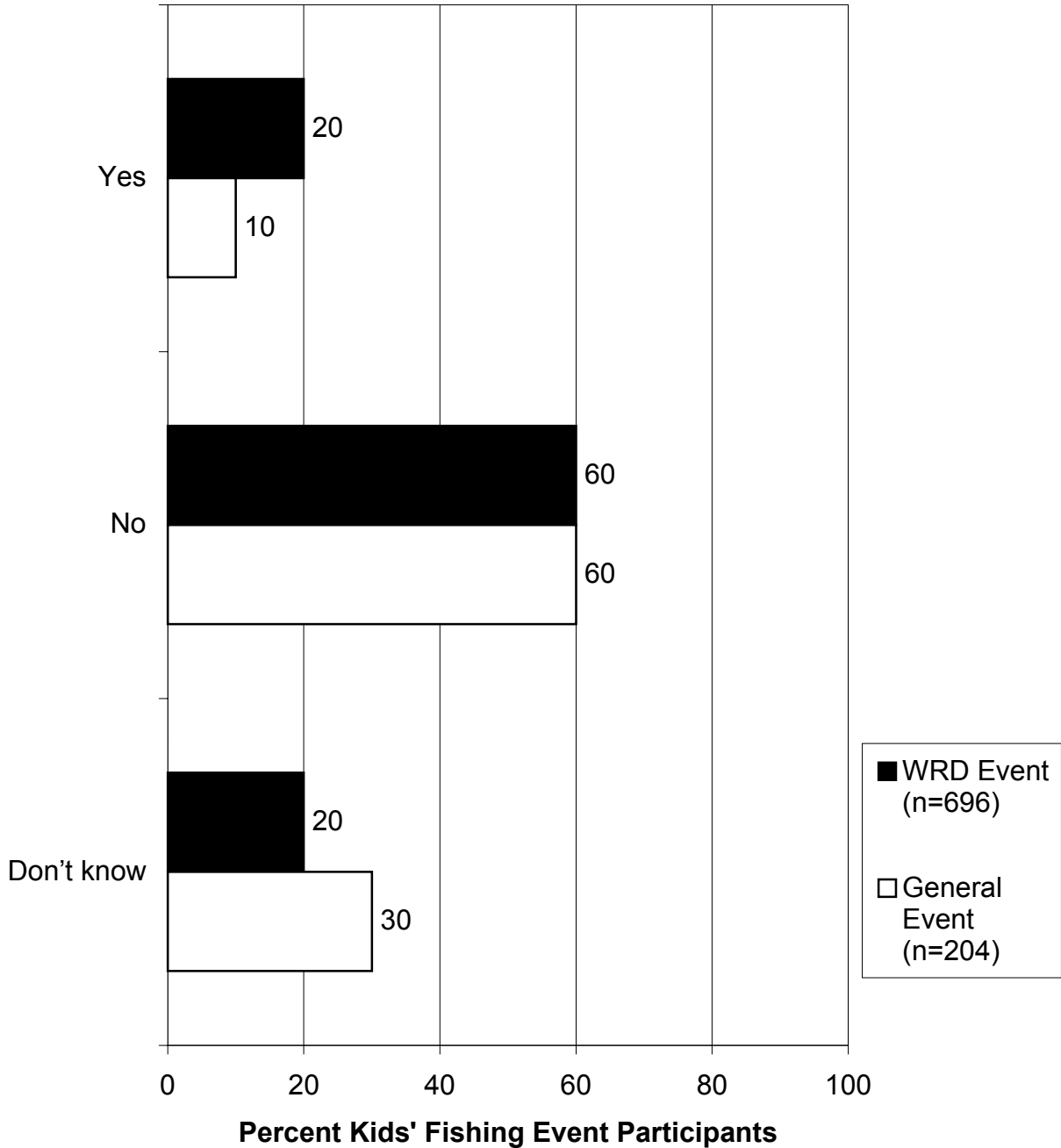
Q93. Does the fact that you must buy a fishing license keep you from buying a license and going fishing?

(Asked of those aged 16 or older who reported not purchasing a fishing license.)

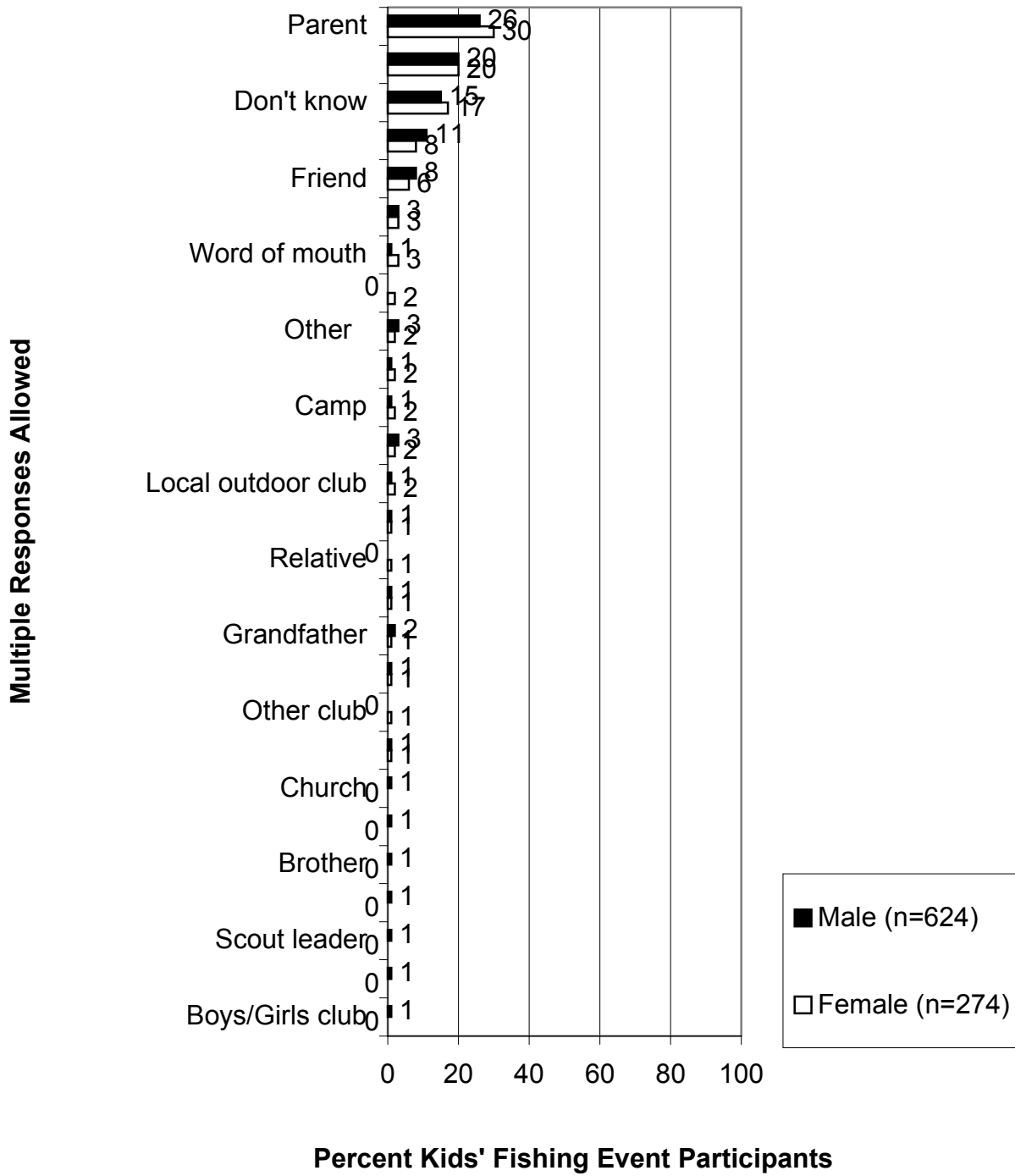


Q93. Does the fact that you must buy a fishing license keep you from buying a license and going fishing?

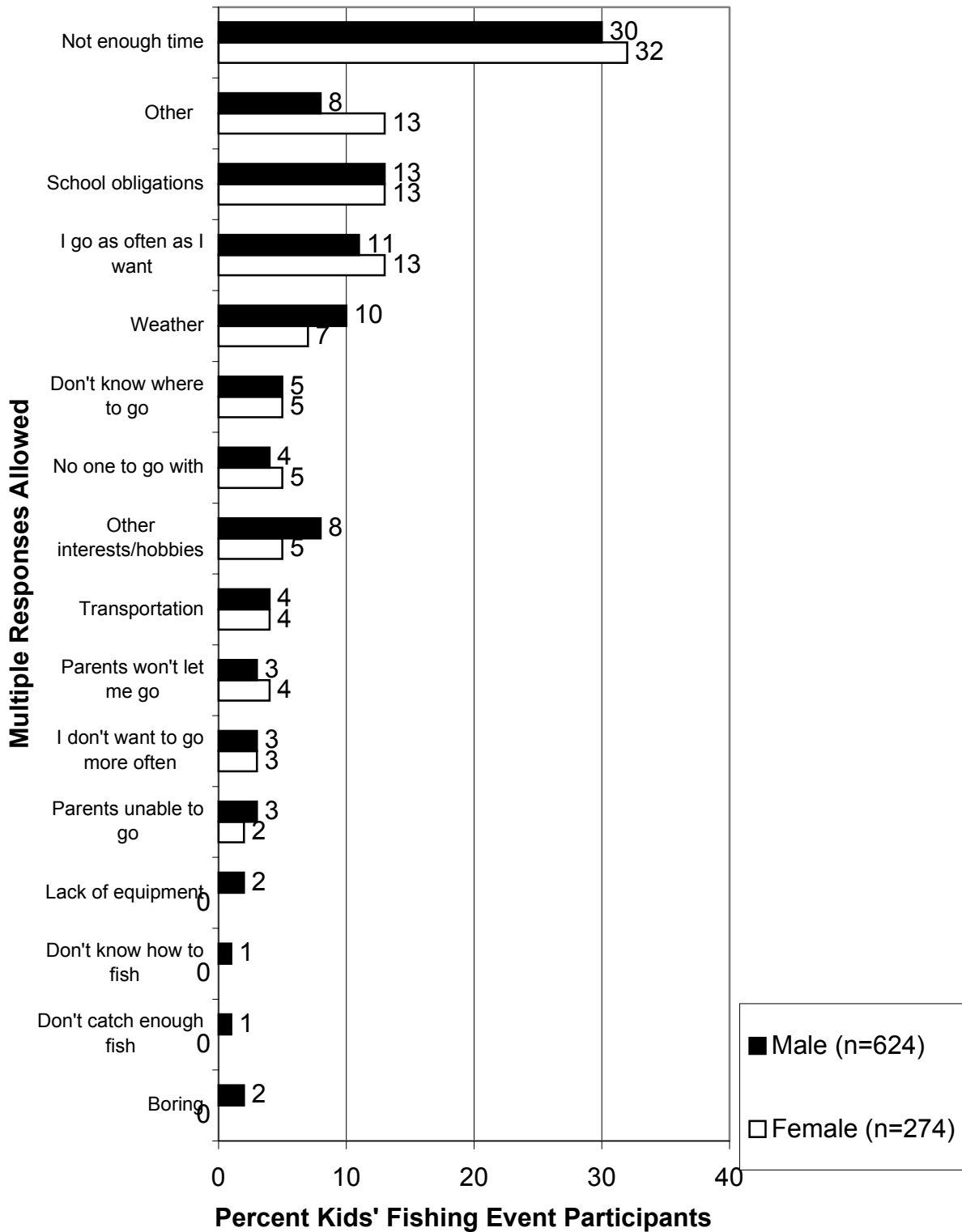
(Asked of those aged 16 or older who reported not purchasing a fishing license.)



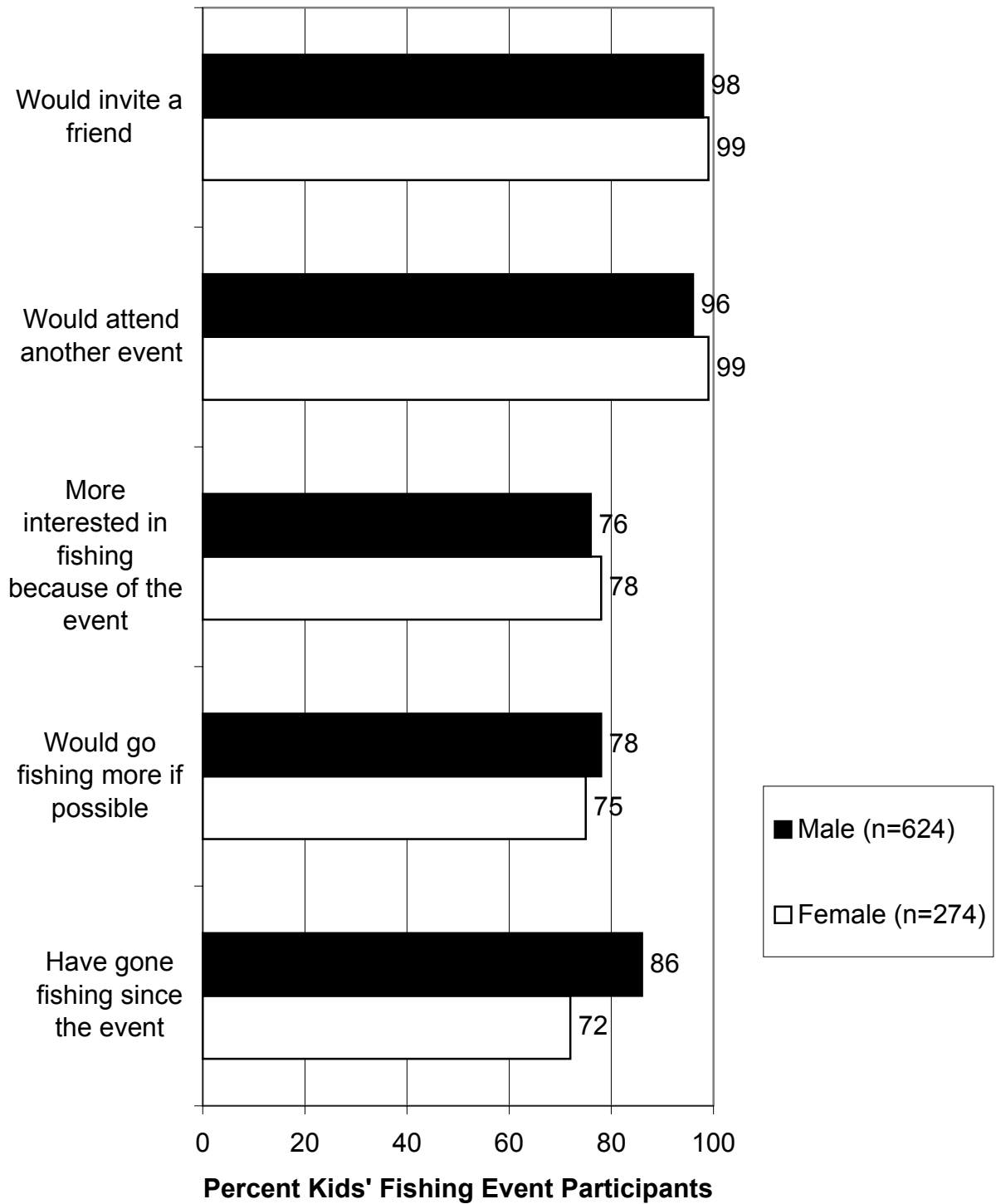
Q41. Where did you hear about the Kids' Fishing Event that you went to?



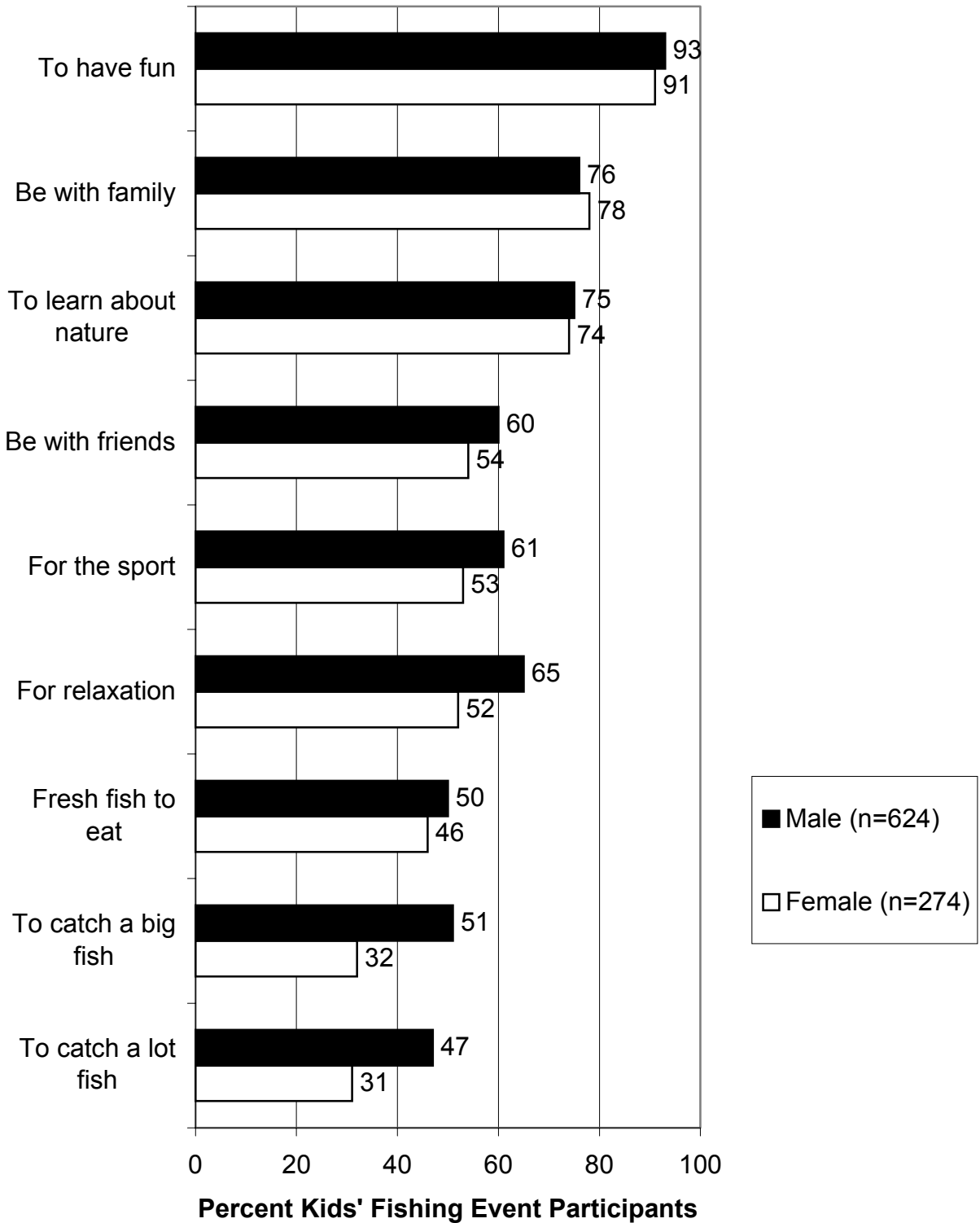
Q50. What are some of the reasons why you don't go fishing more often?



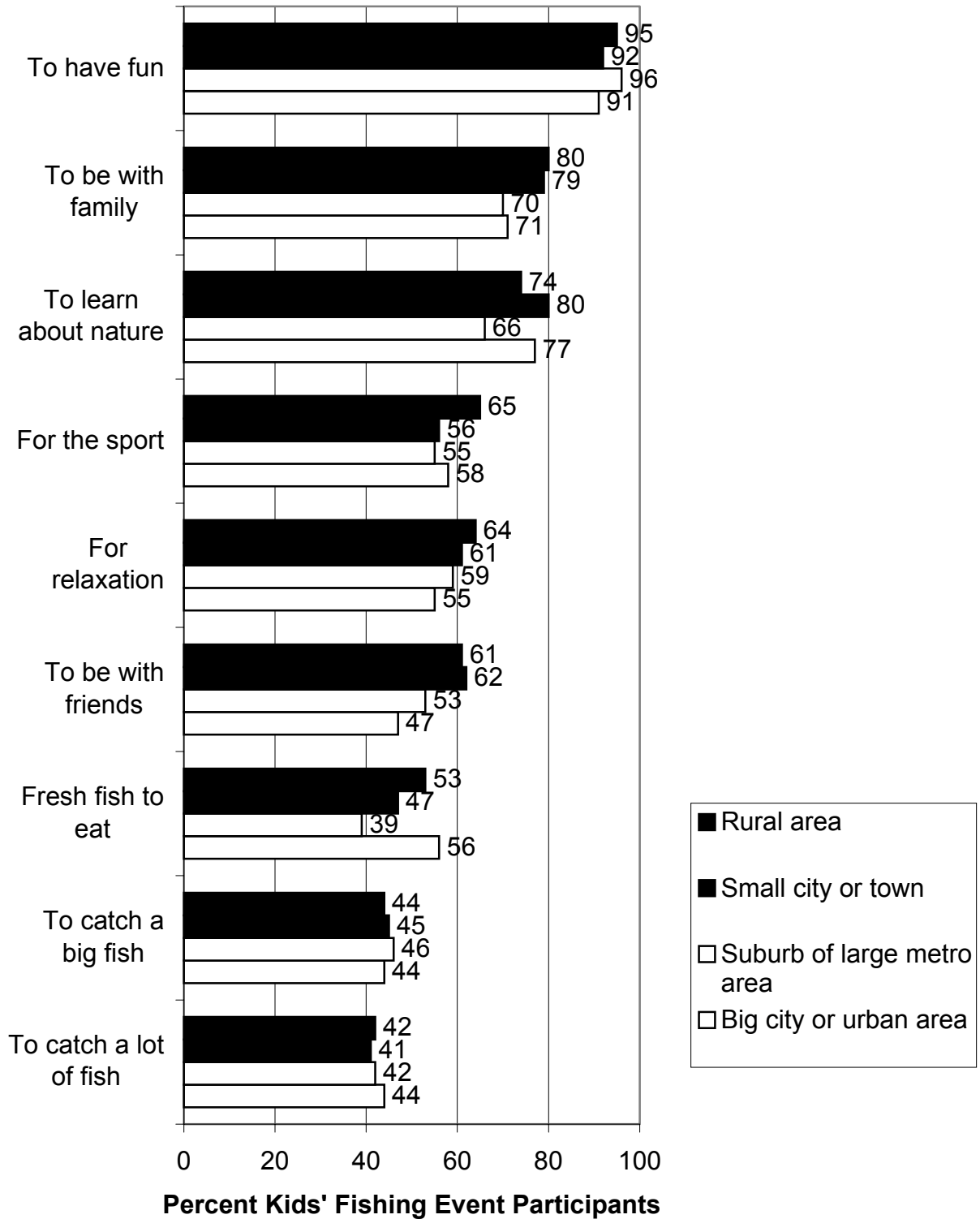
Q's 43-46 and 58-59. Impact of the fishing event.



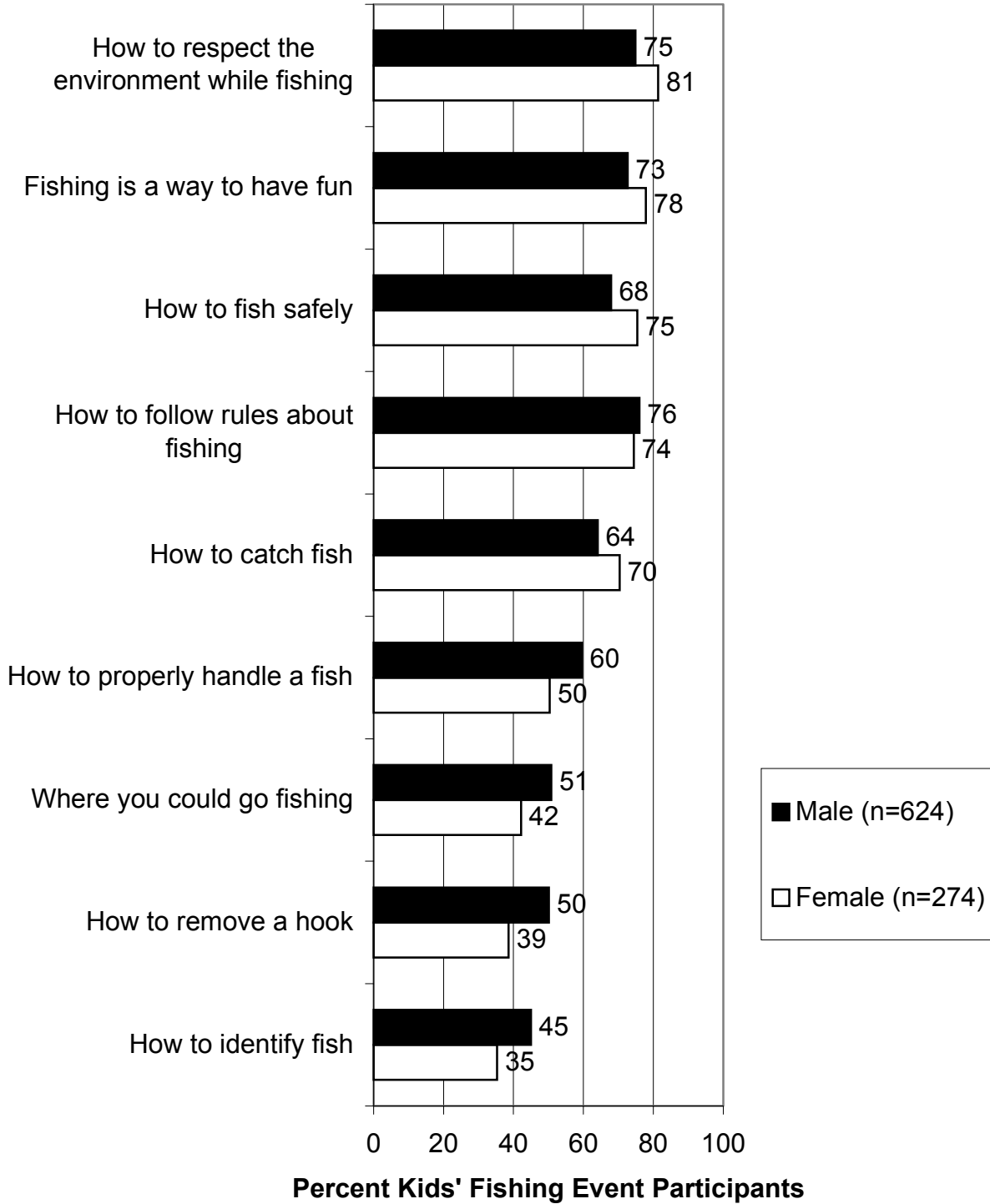
Q76-84. Reasons to fish.



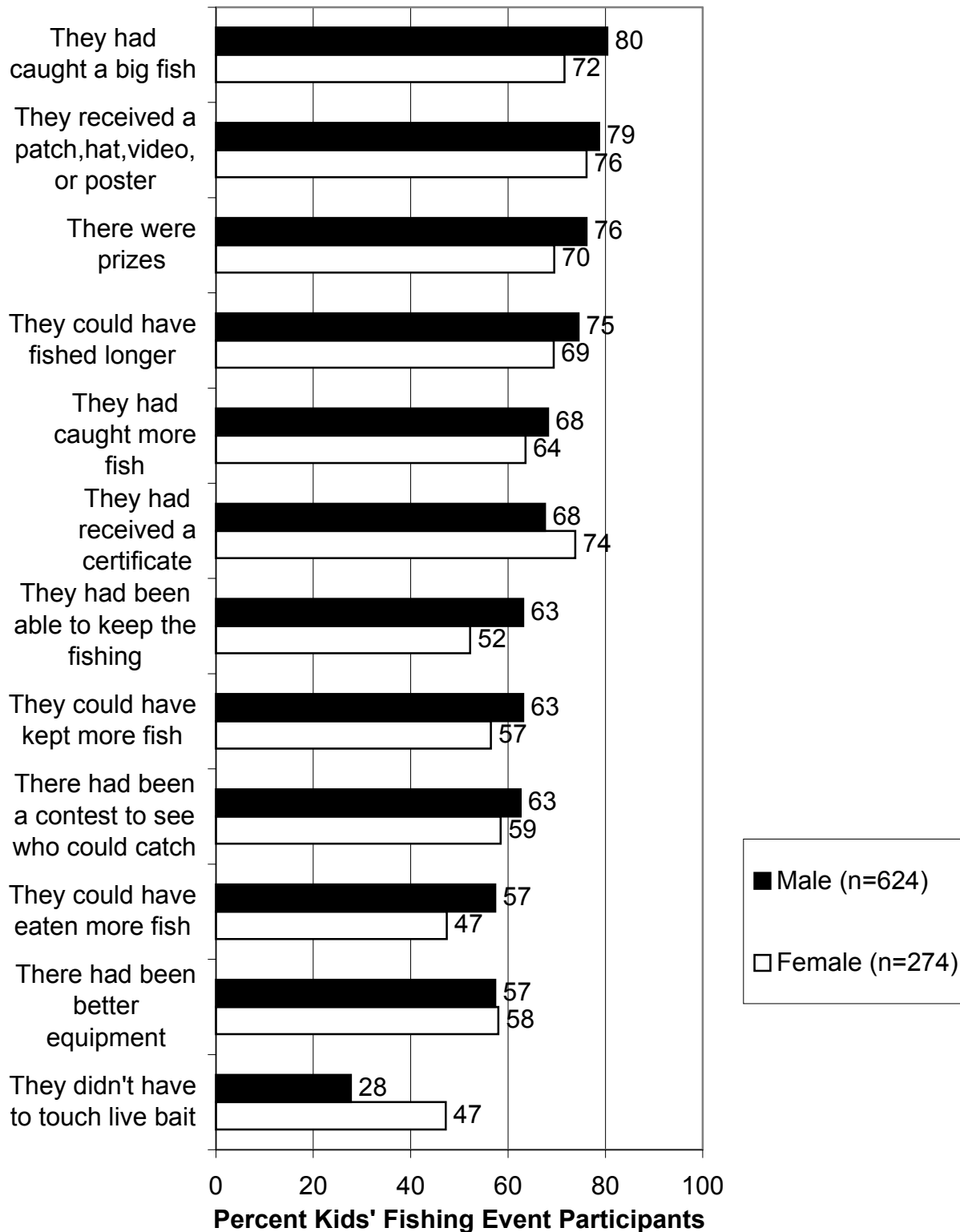
Q76-84. Reasons to fish.



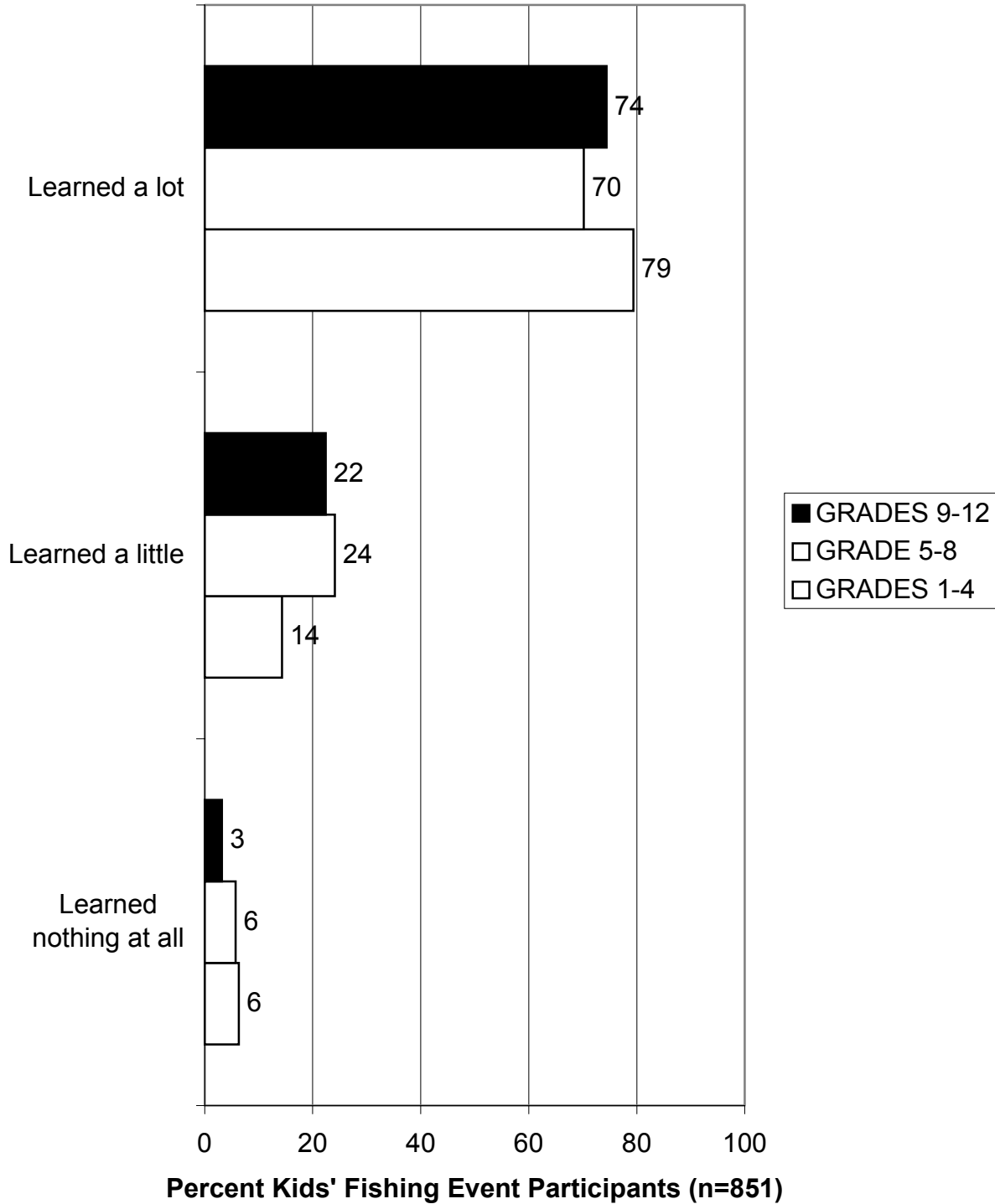
Q15-23. Percent responding "learned a lot" in each category.



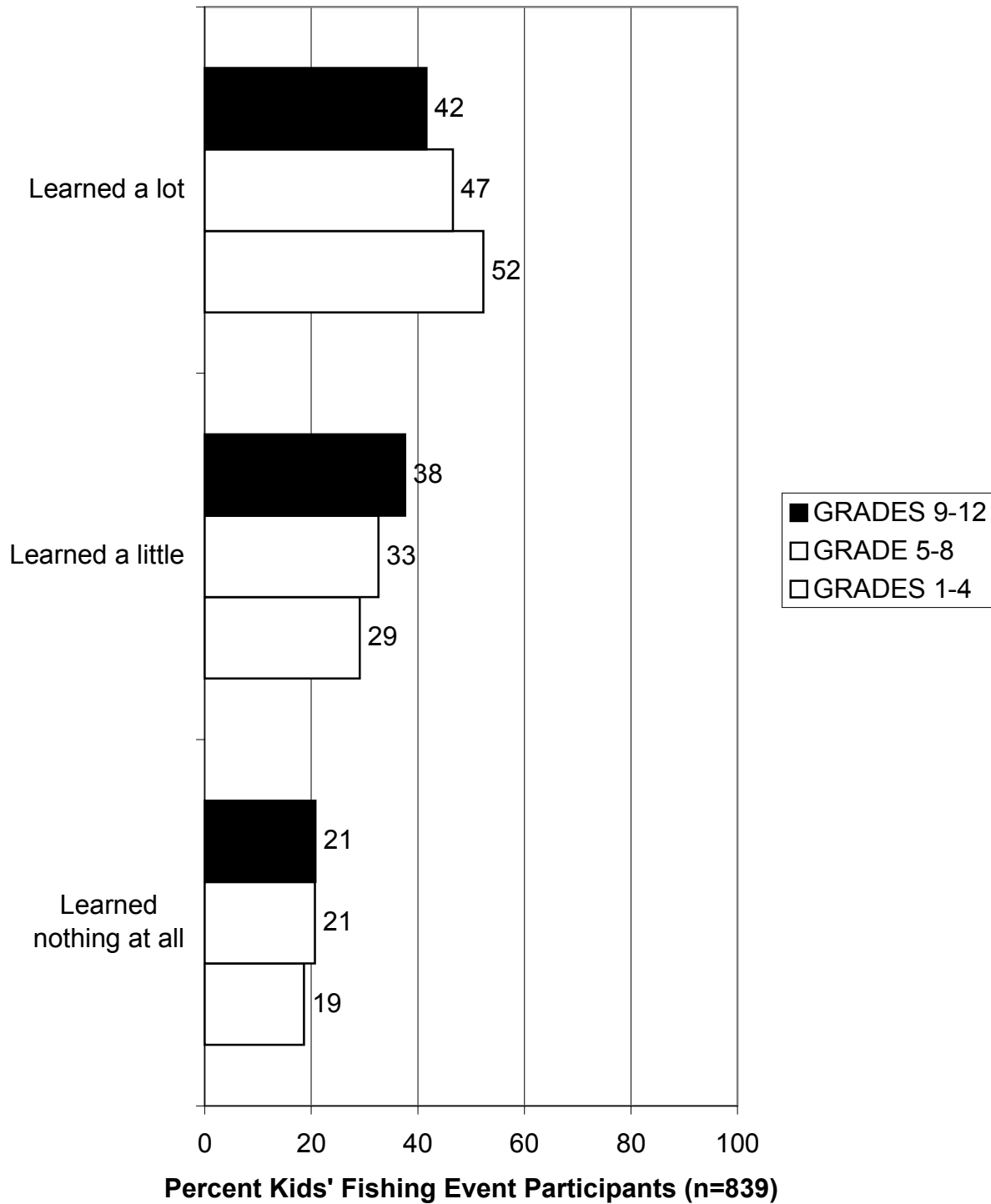
Q's 24-35. What would have made the event better?



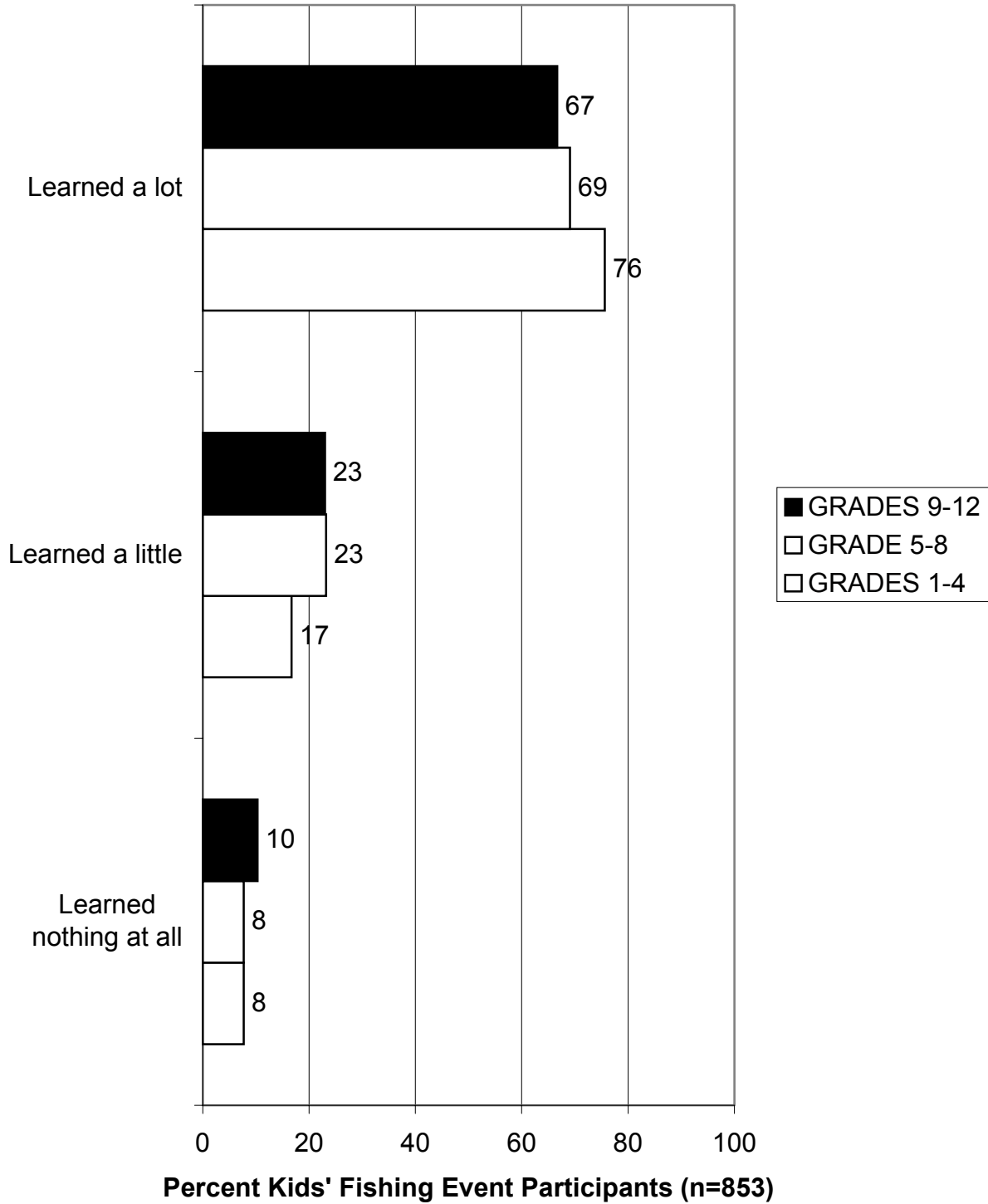
Q15. How much did you learn about fishing is a way to have fun?



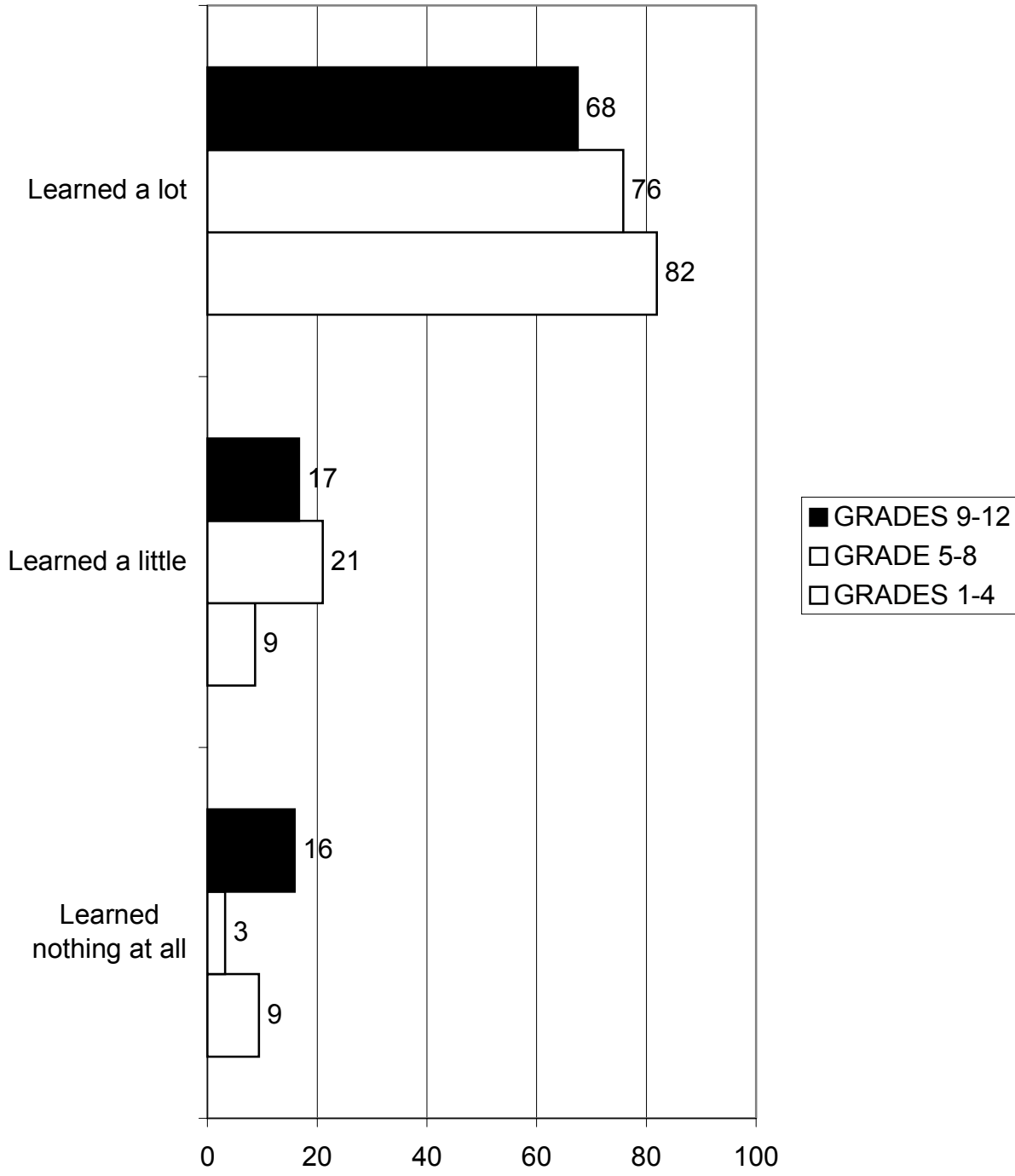
Q16. How much did you learn about where to go fishing after the event?



Q17. How much did you learn about fishing safely?

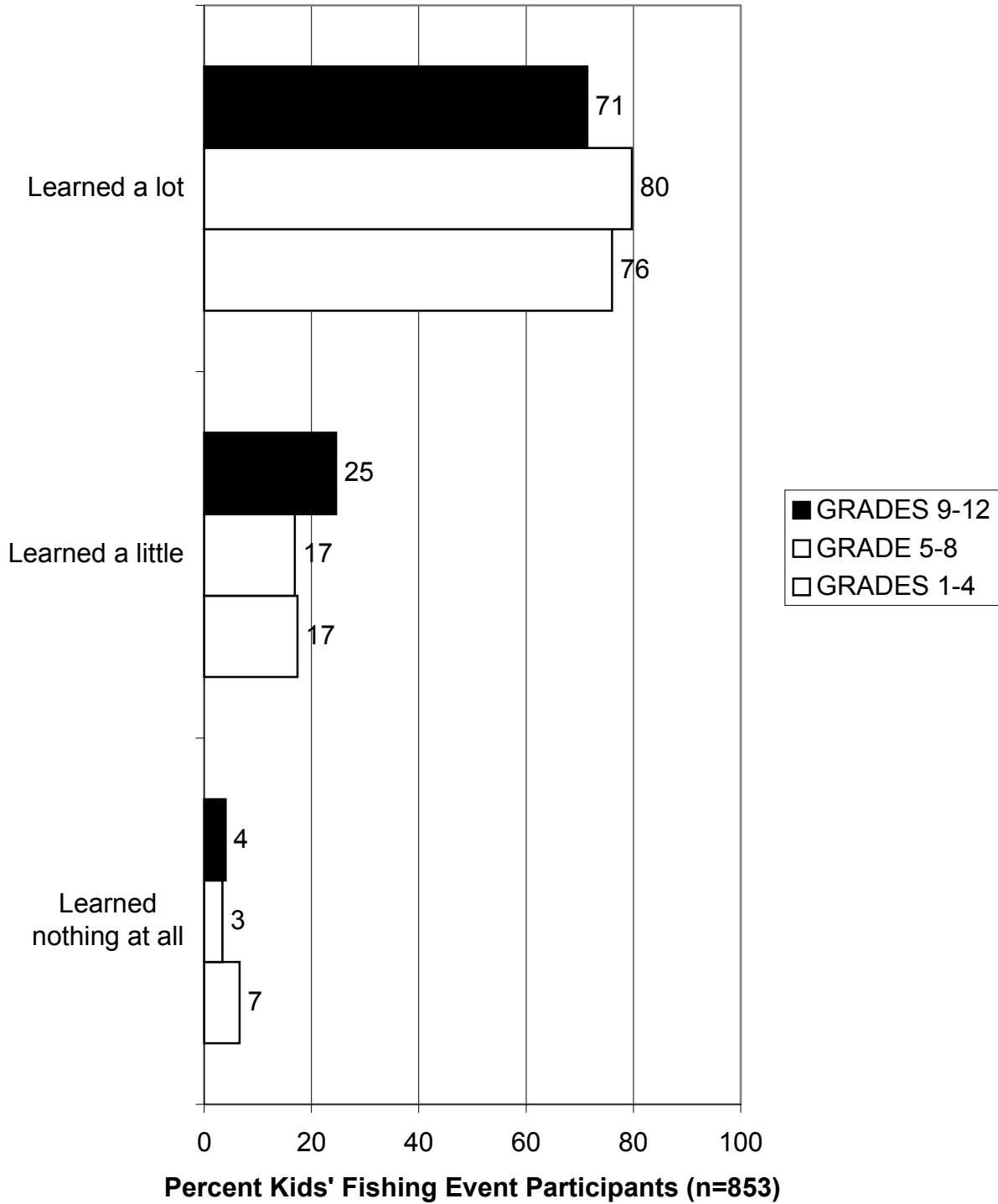


Q18. How much did you learn about following the rules of fishing?

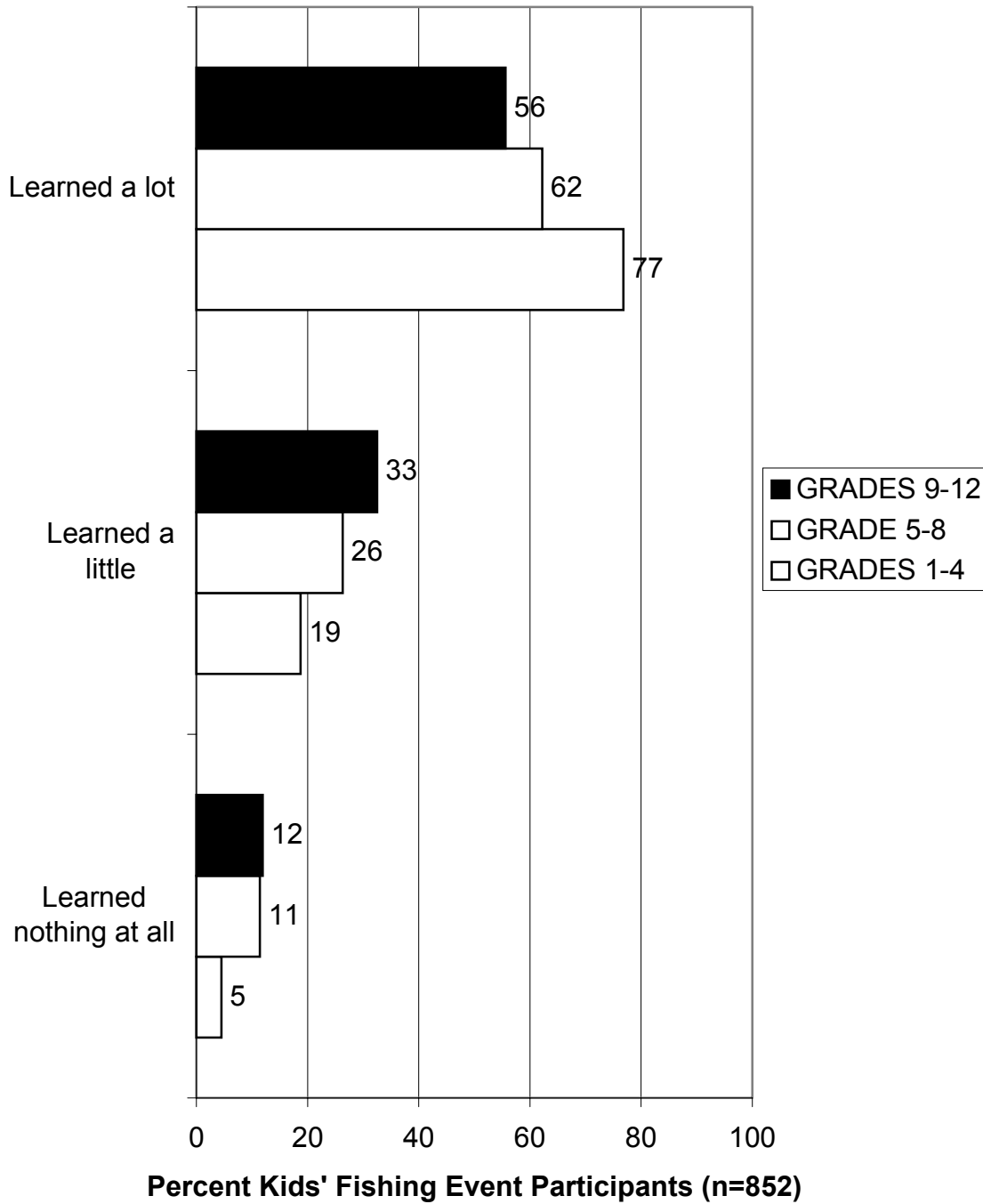


Percent Kids' Fishing Event Participants (n=851)

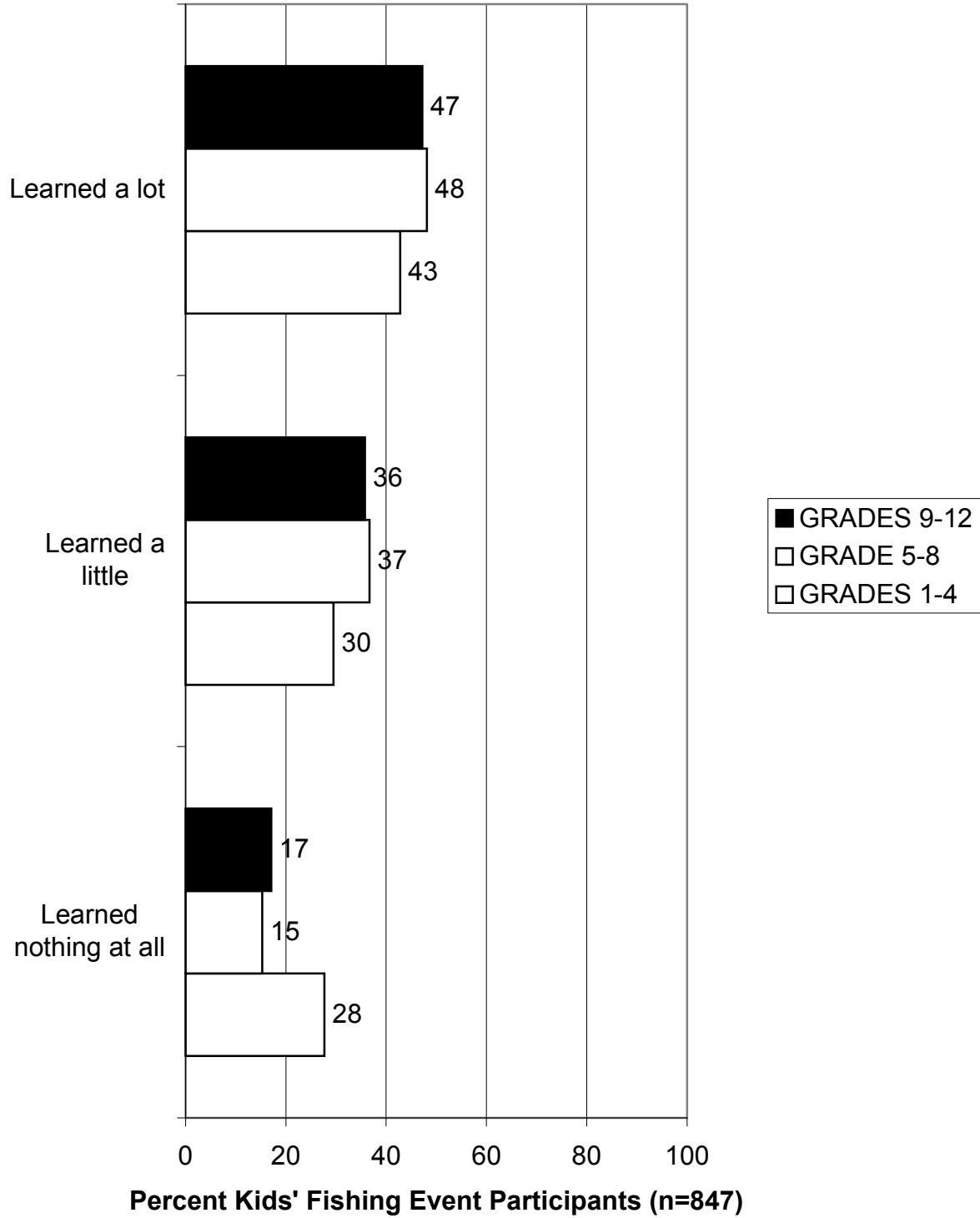
Q19. How much did you learn about respecting the environment while fishing?



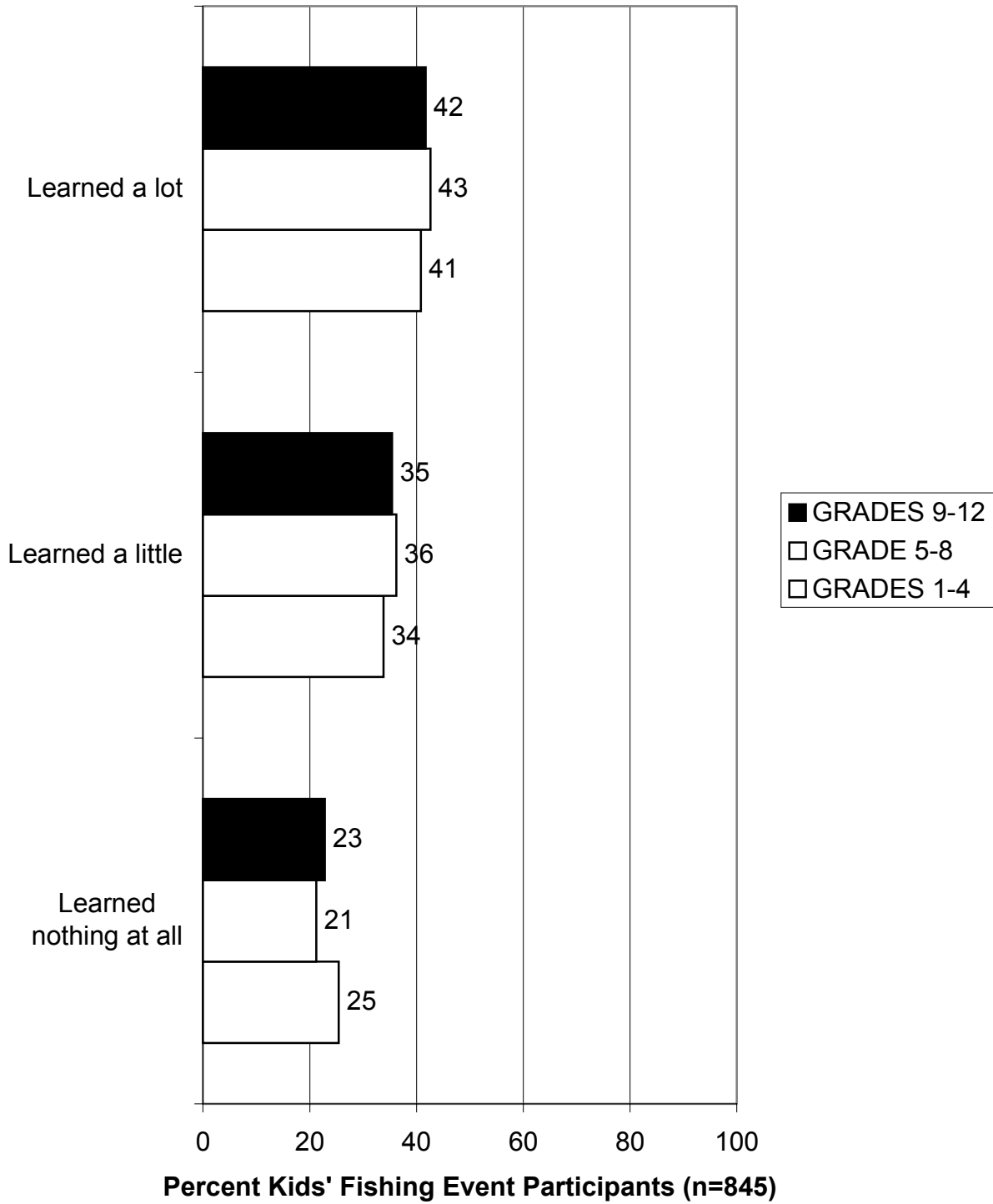
Q20. How much did you learn about catching fish?



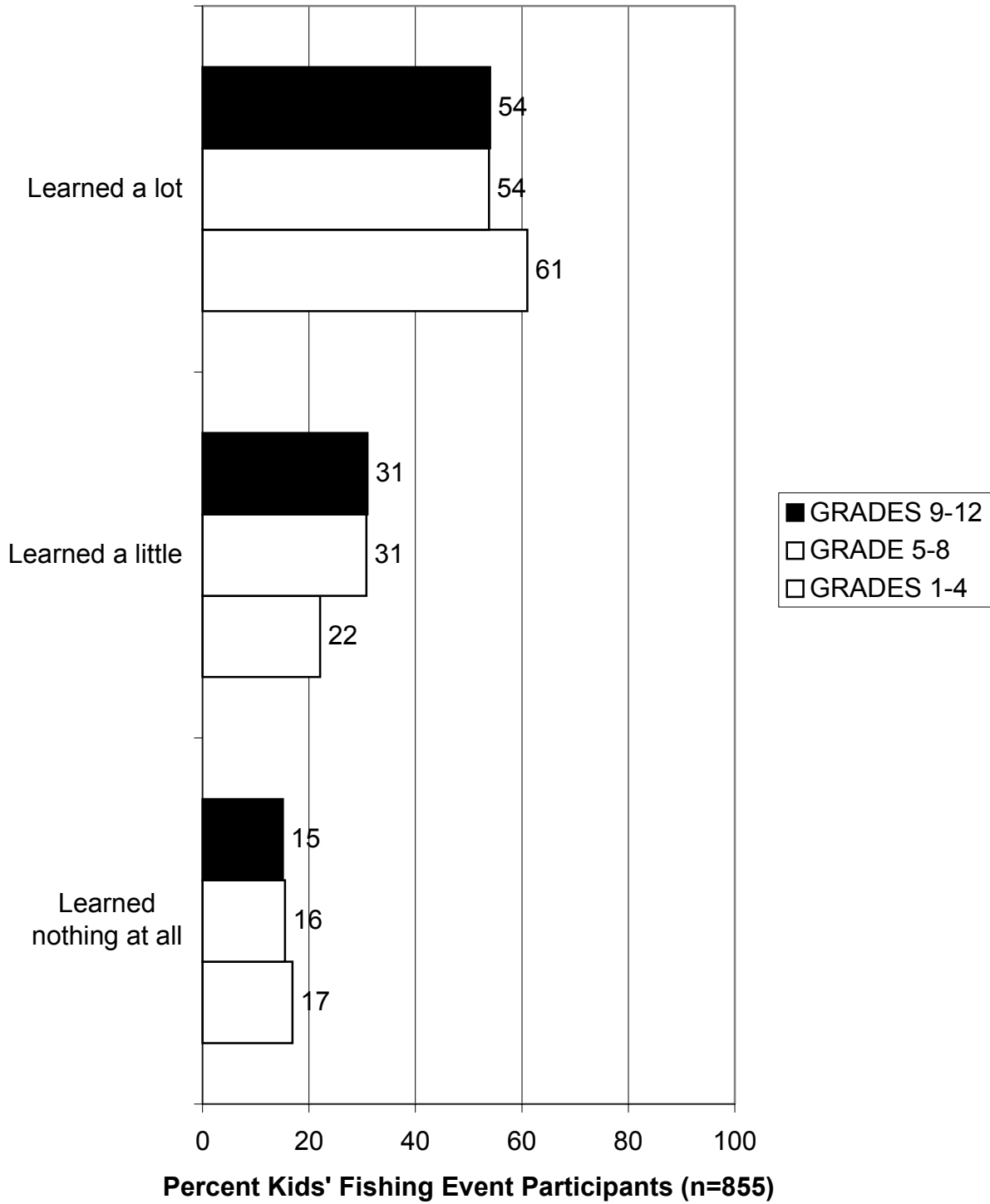
Q21. How much did you learn about removing a hook?



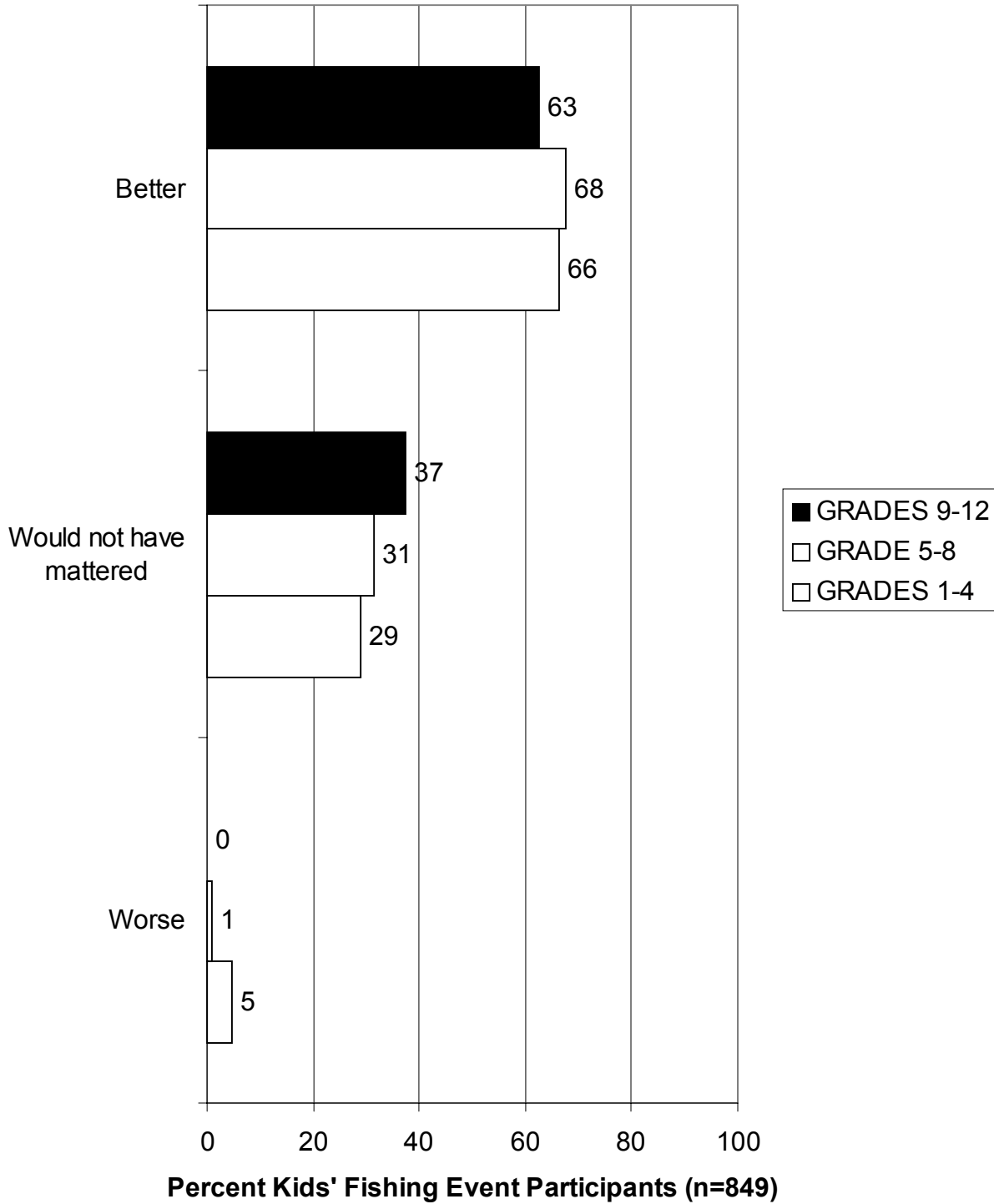
Q22. How much did you learn about identifying fish?



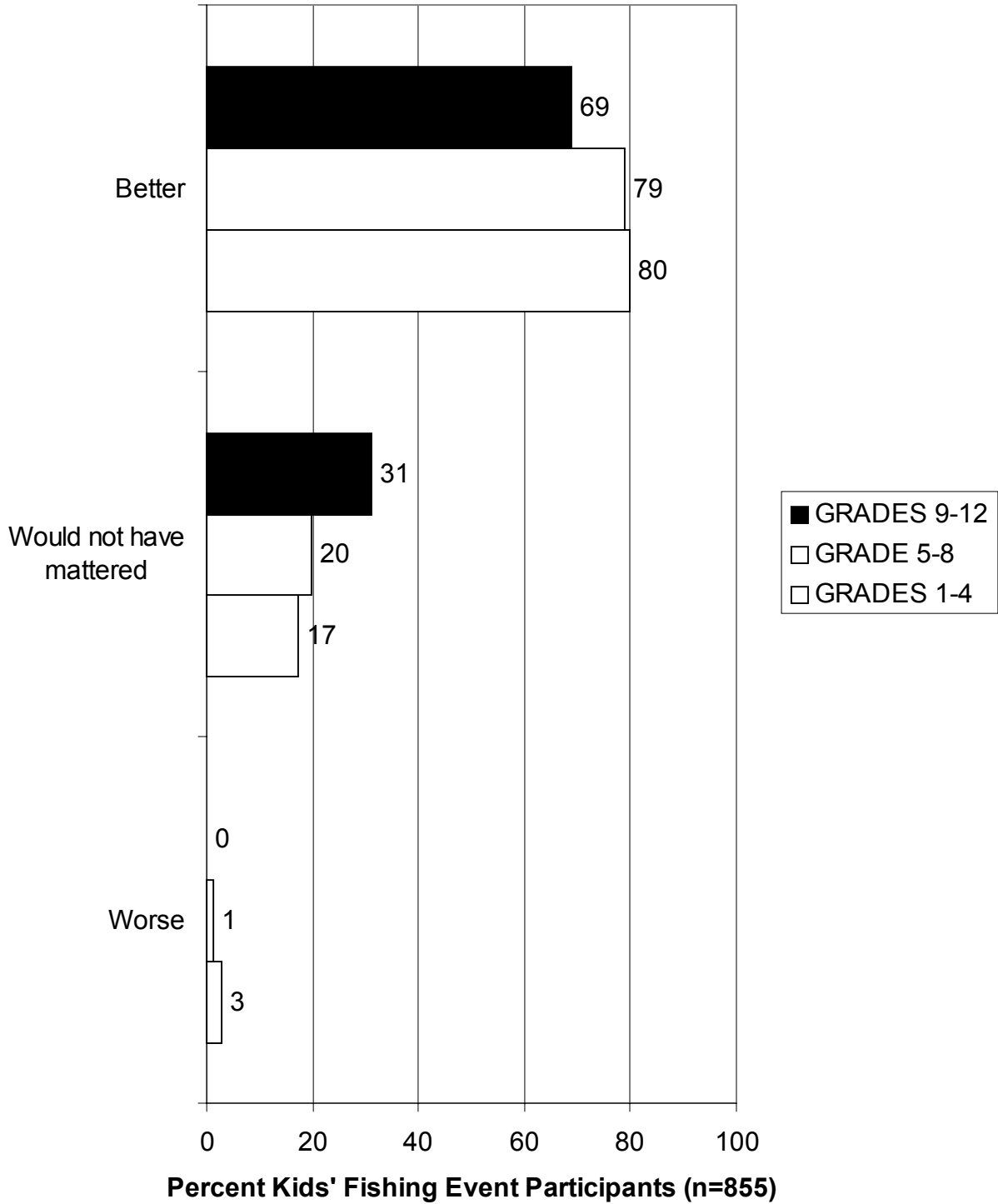
Q23. How much did you learn about handling a fish?



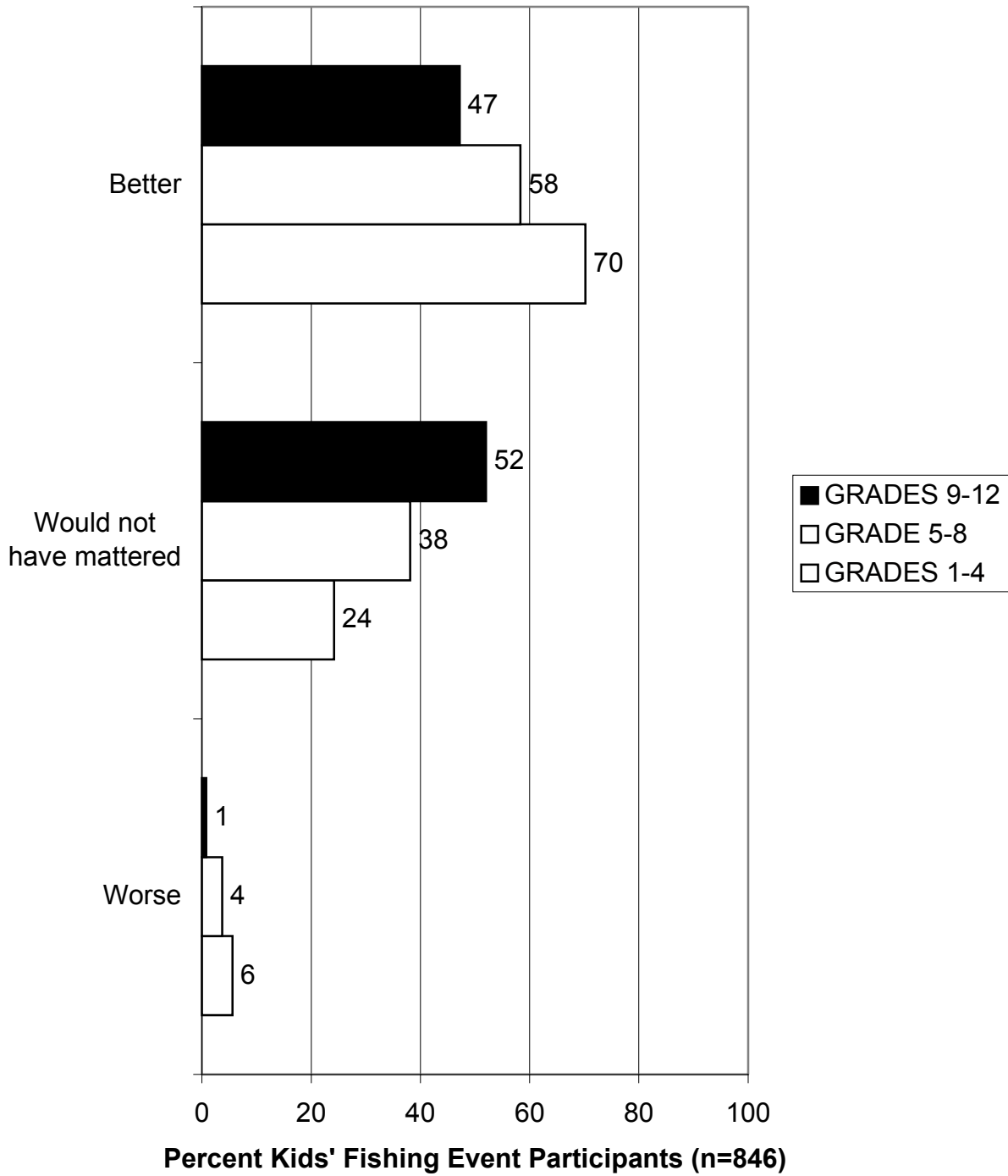
Q24. How would it have changed the event if you had caught more fish?



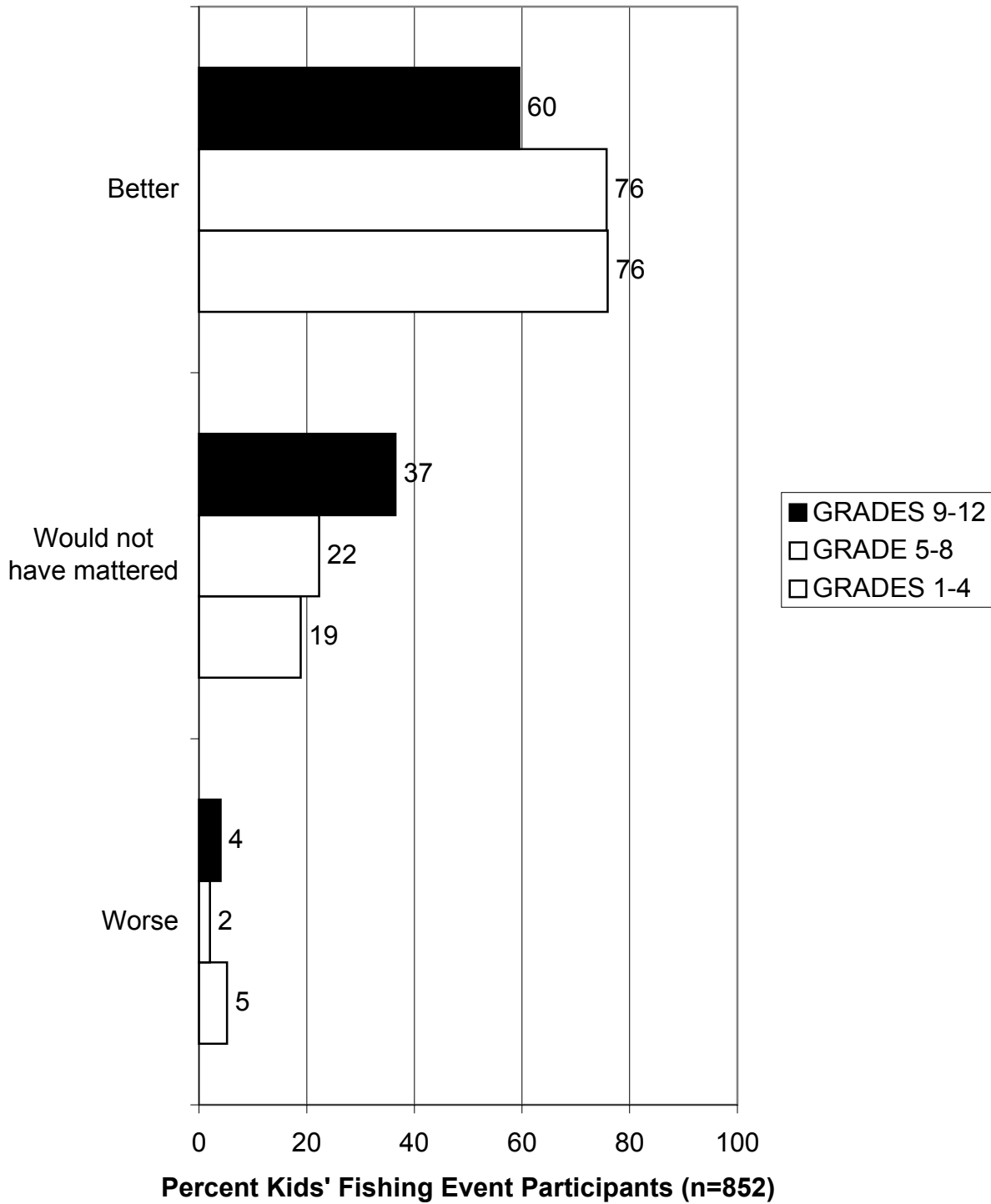
Q25. How would it have changed the event if you had caught a big fish?



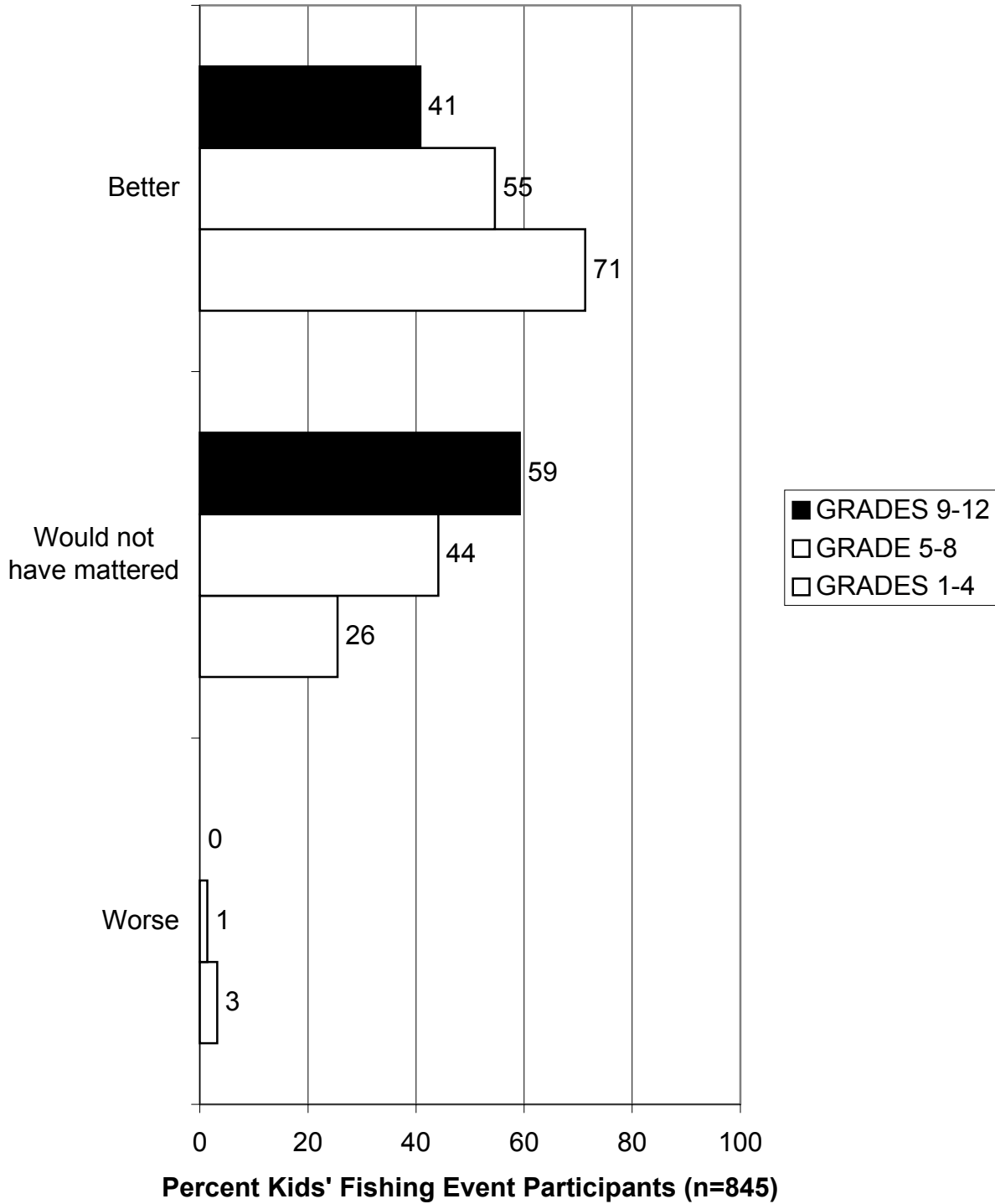
Q26. How would it have changed the event if you could have kept more of the fish you caught?



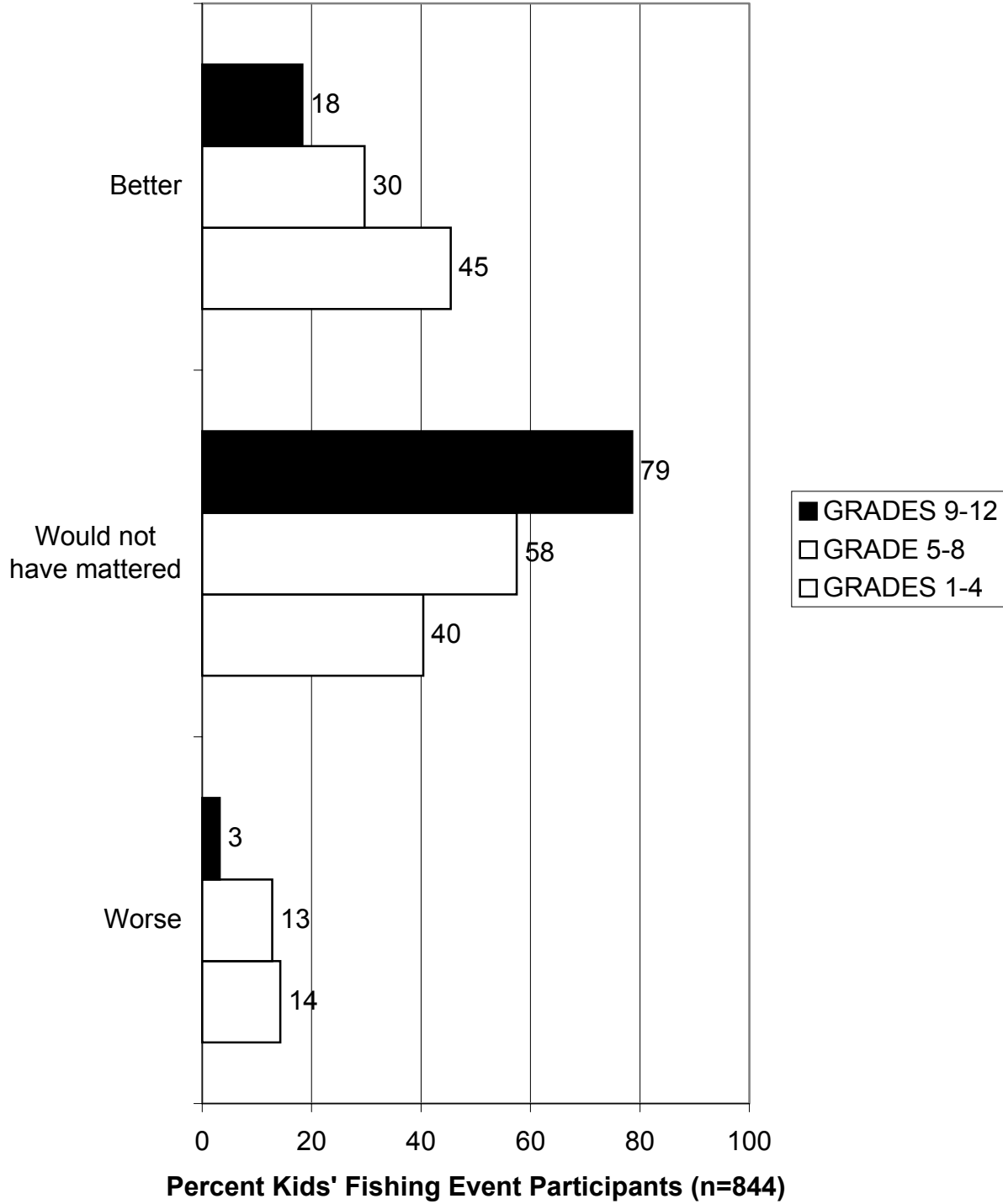
Q27. How would it have changed the event if you could have fished longer?



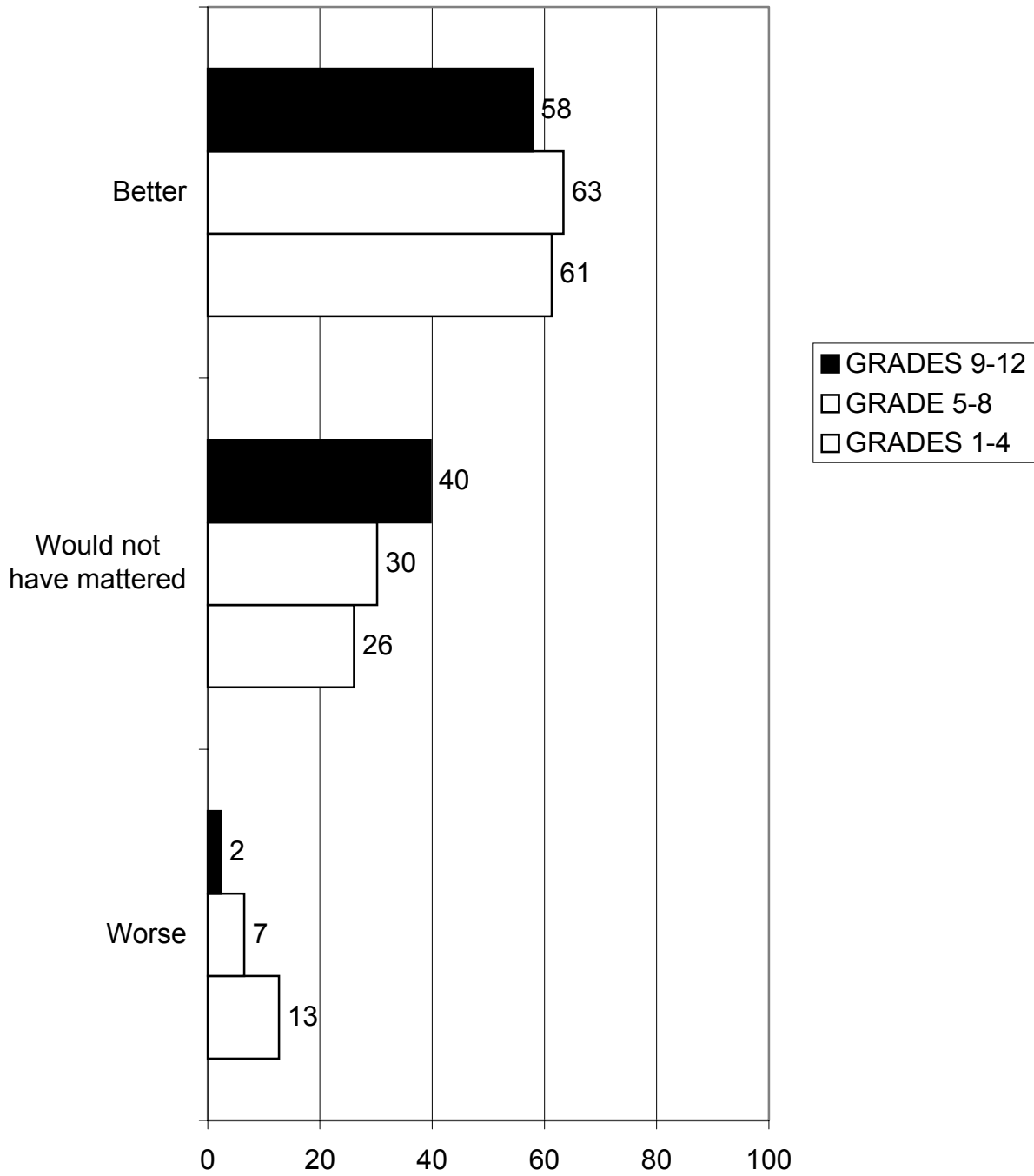
Q28. How would it have changed the event if the equipment had been better?



Q29. How would it have changed the event if you didn't have to touch live bait?

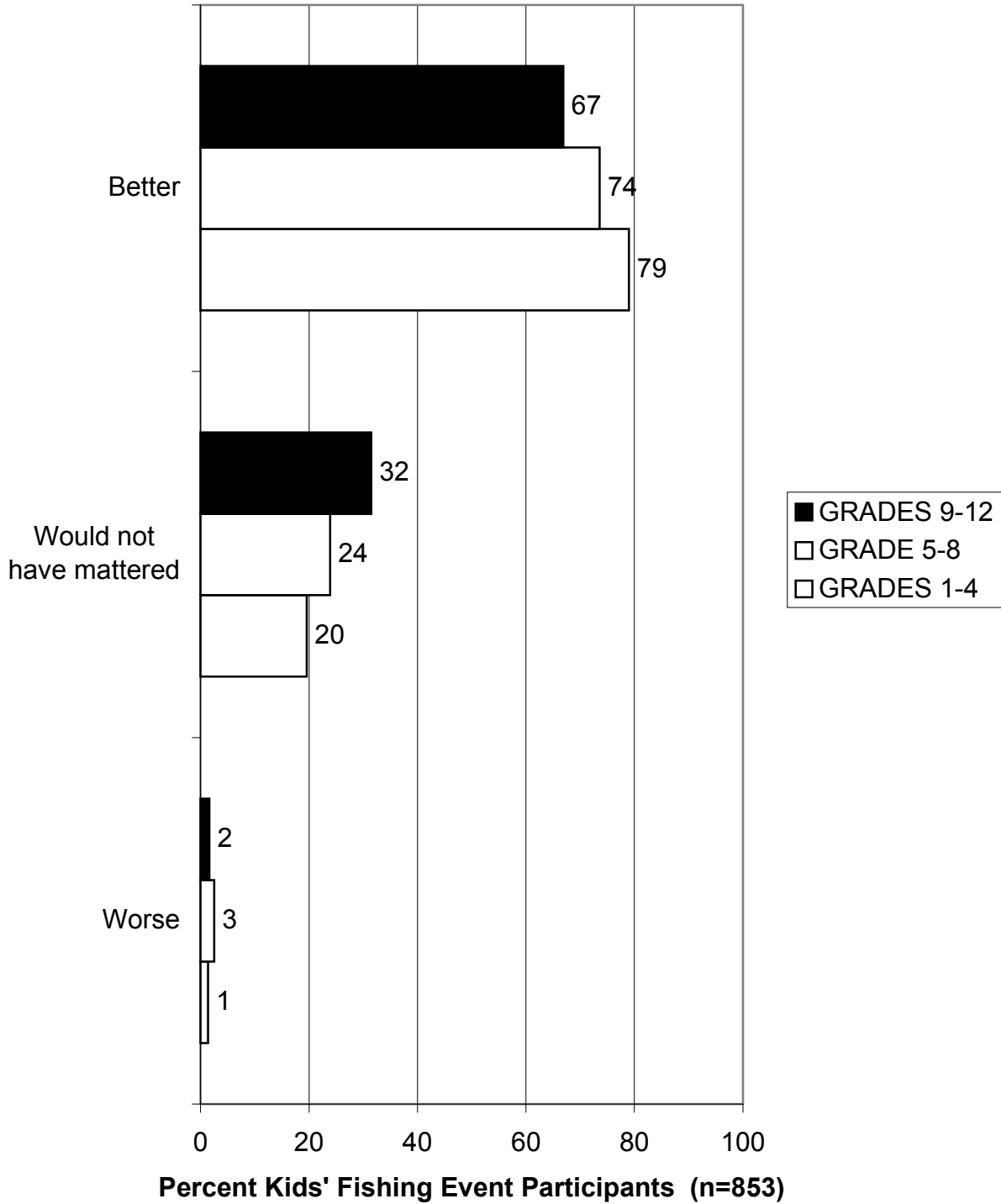


Q30. How would it have changed the event if there had been a contest to see who could catch the most fish or the biggest fish?

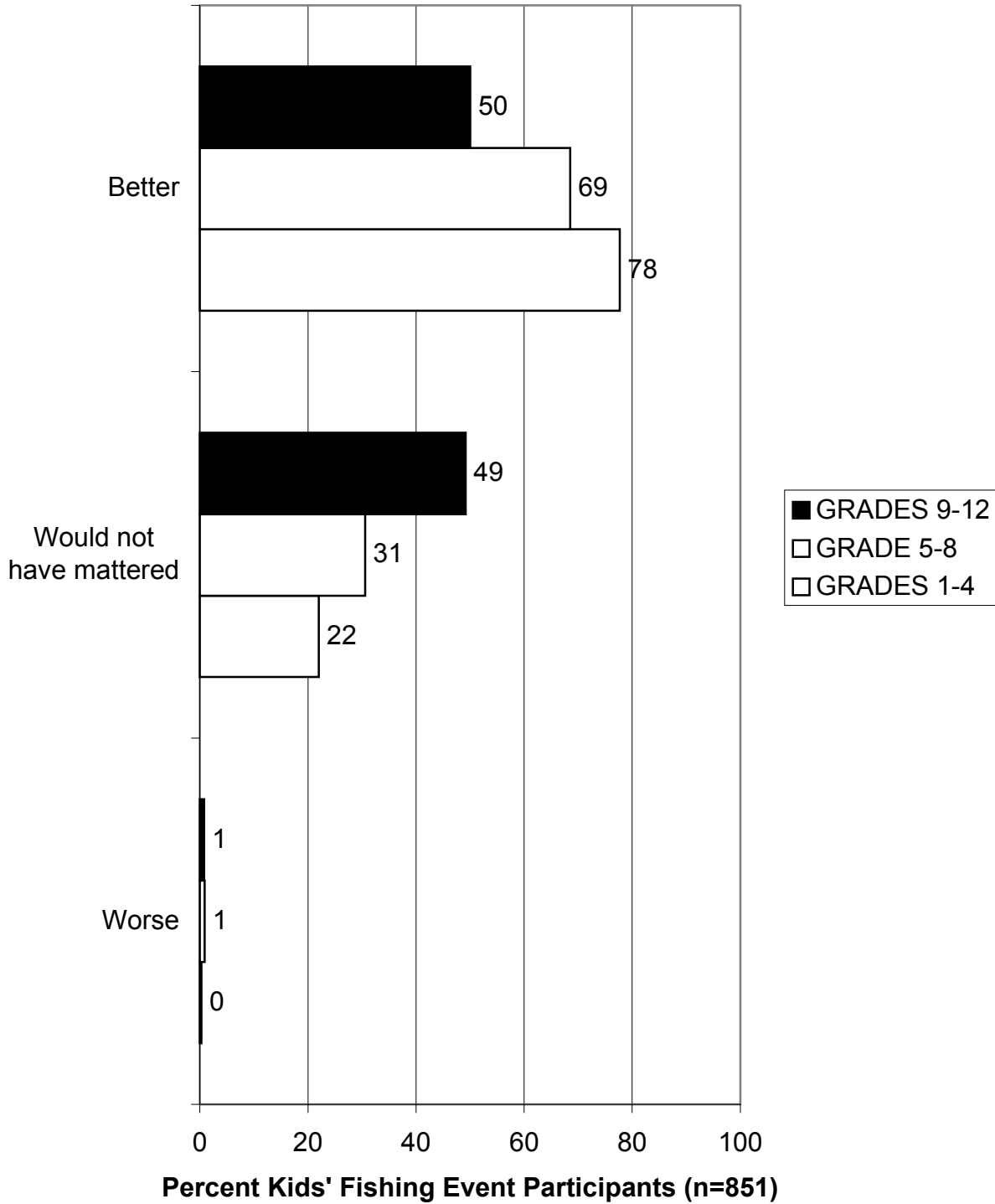


Percent Kids' Fishing Event Participants (n=844)

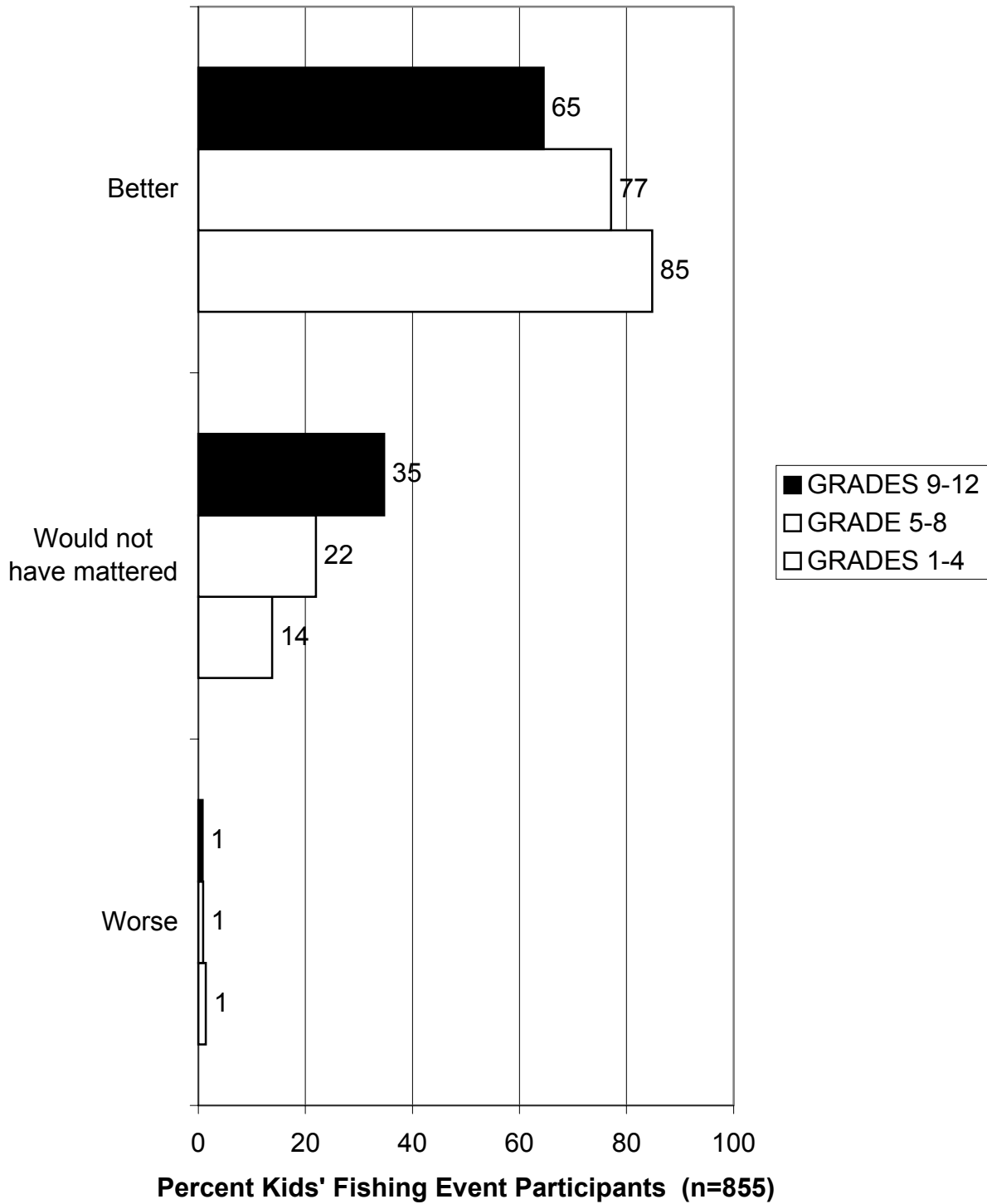
Q31. How would it have changed the event if there were prizes?



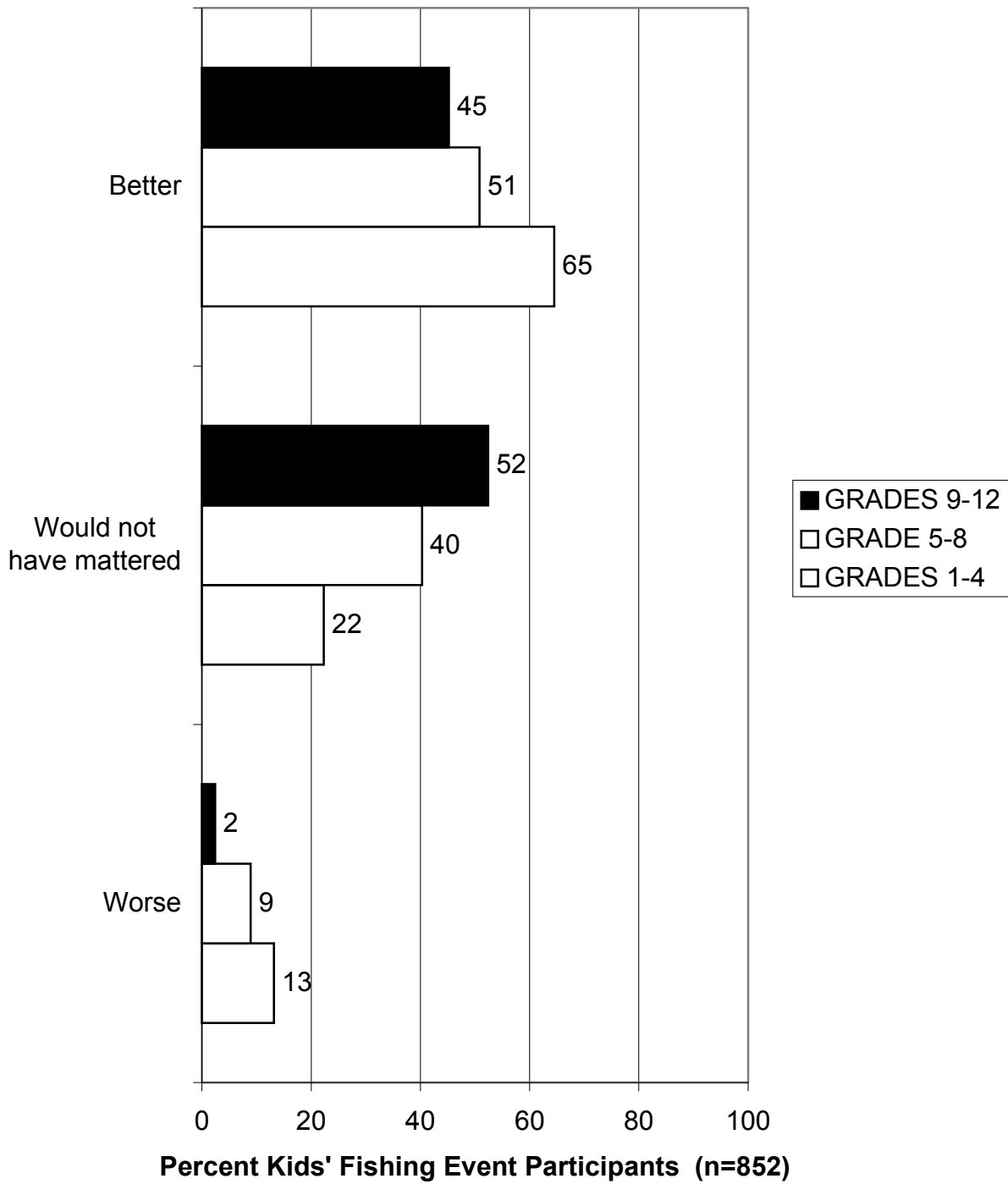
Q32. Would it have changed the event if you had received a certificate?



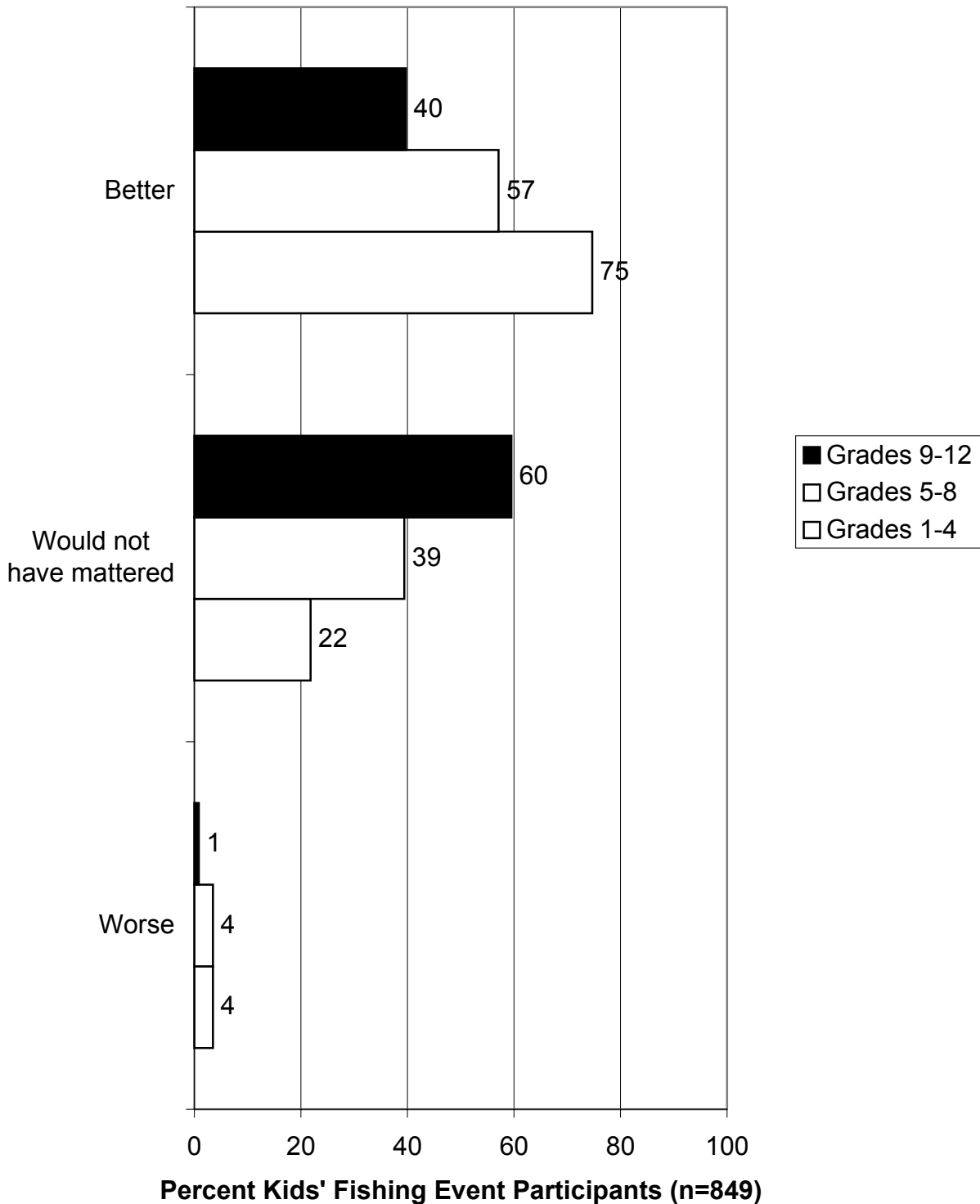
Q33. How would it have changed the event if you had received a patch, hat, video, or poster?

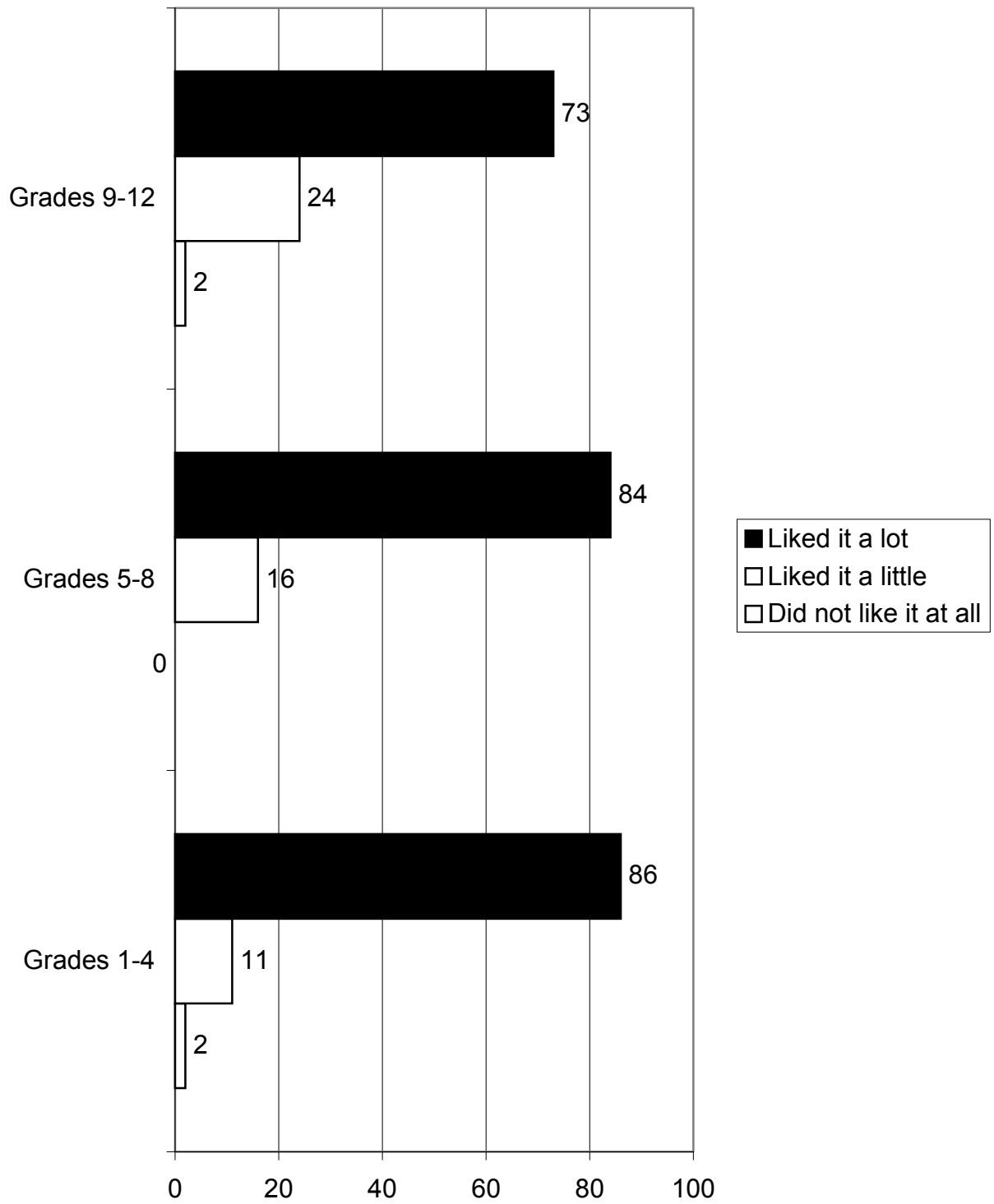


Q34. How would it have changed the event if you could have eaten more of the fish you caught?



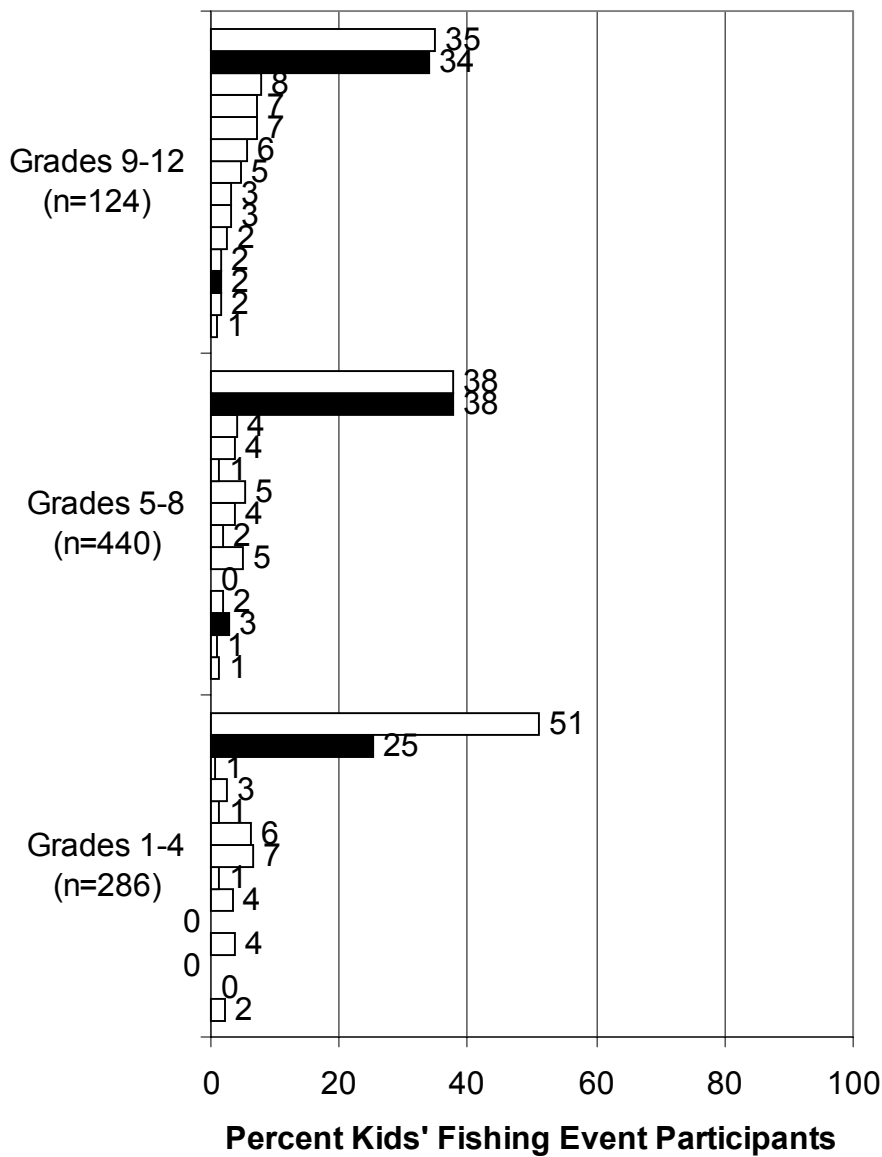
Q35. How would it have changed the event if you had been able to keep the fishing equipment?



Q8. How did you like the event?

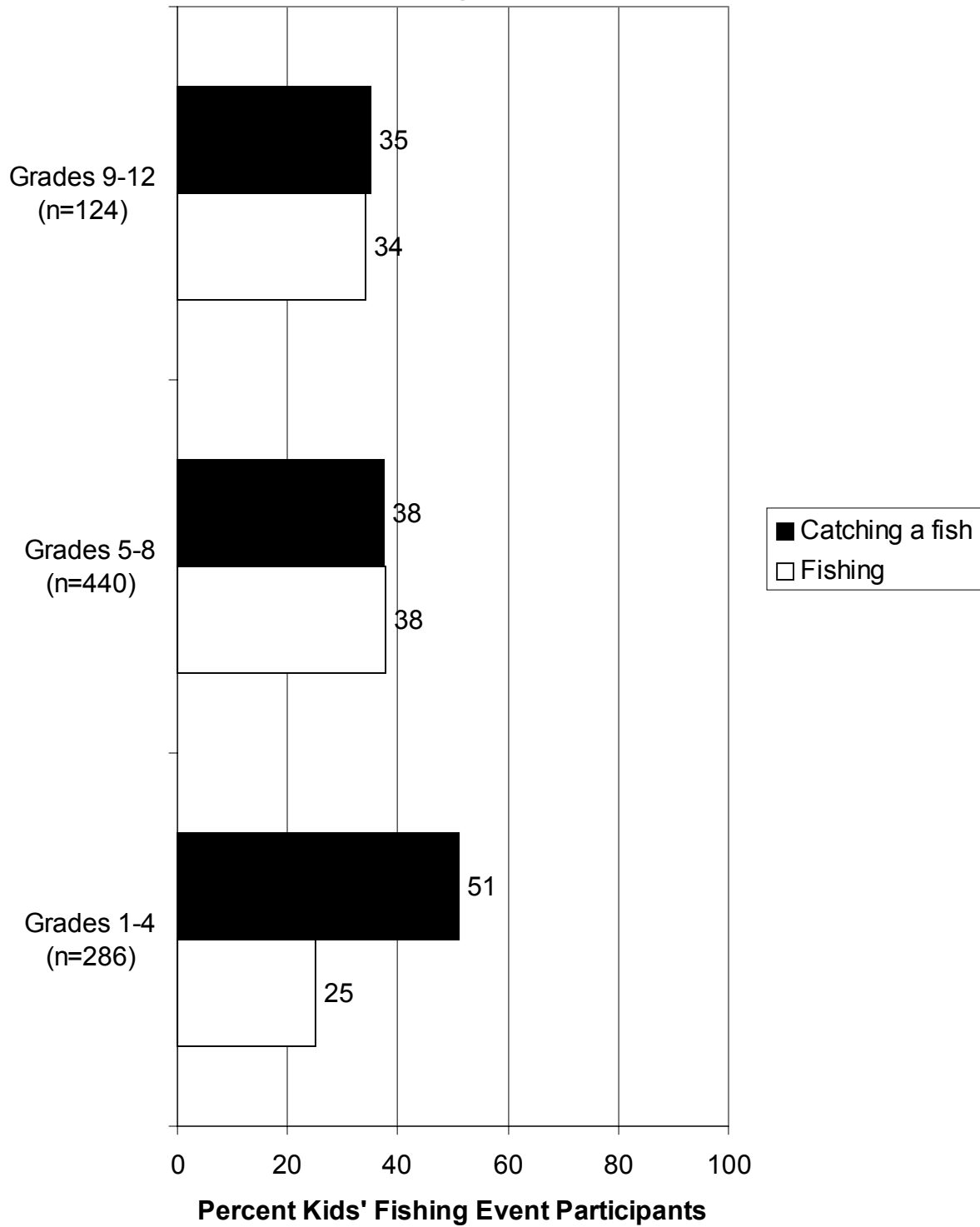
Percent Kids' Fishing Event Participants (n=861)

Q10 What did you like best about the event?

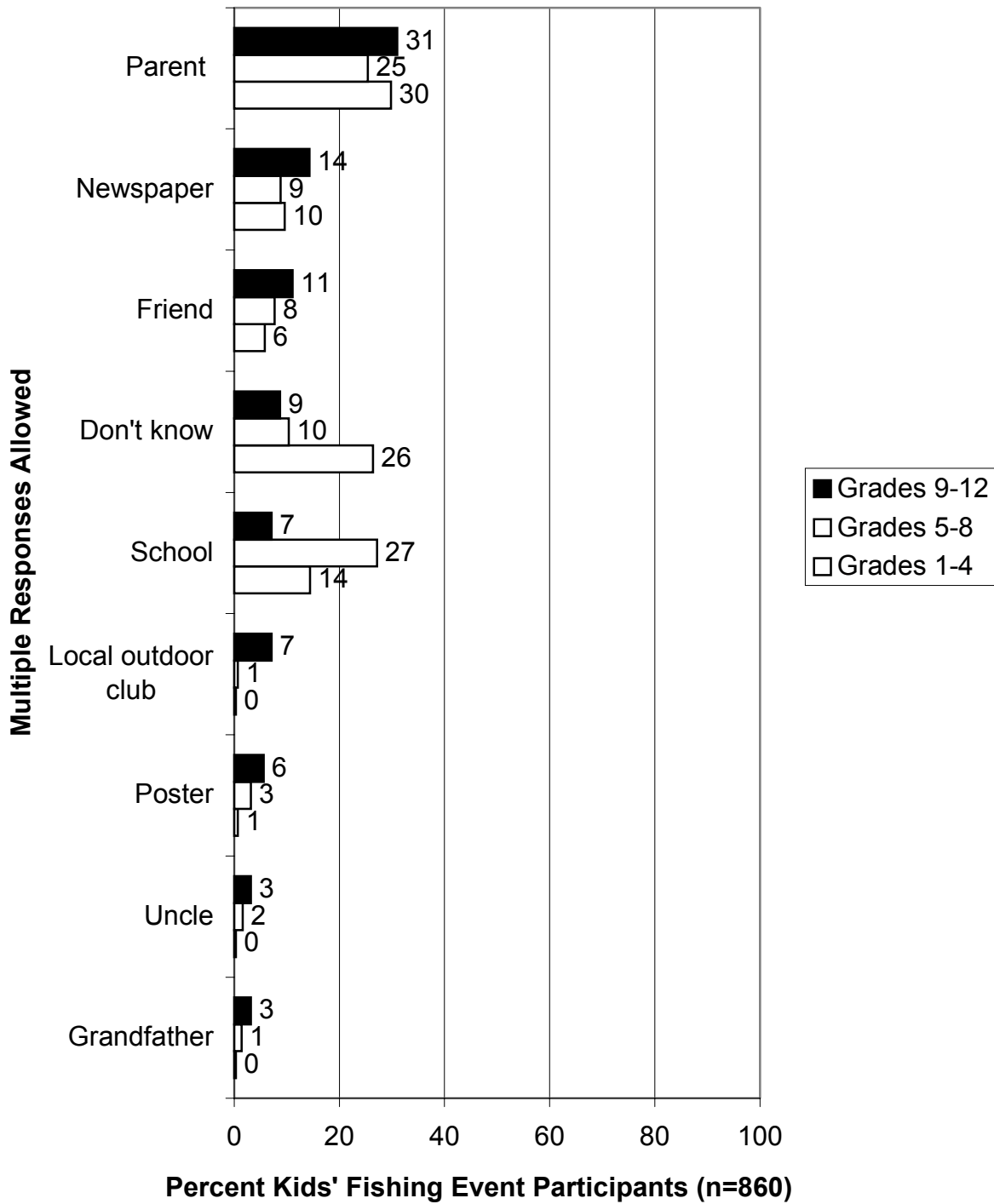


- | | | |
|---|--|--|
| <input type="checkbox"/> Getting a certificate | <input type="checkbox"/> Nothing | <input checked="" type="checkbox"/> Being with friends |
| <input type="checkbox"/> Fun | <input type="checkbox"/> Lots of fish | <input type="checkbox"/> Learning how to fish |
| <input type="checkbox"/> Enjoy nature | <input type="checkbox"/> Prizes | <input type="checkbox"/> Don't know |
| <input type="checkbox"/> People who ran the event | <input type="checkbox"/> Free stuff | <input type="checkbox"/> Being with family |
| <input checked="" type="checkbox"/> Fishing | <input type="checkbox"/> Catching a fish | |

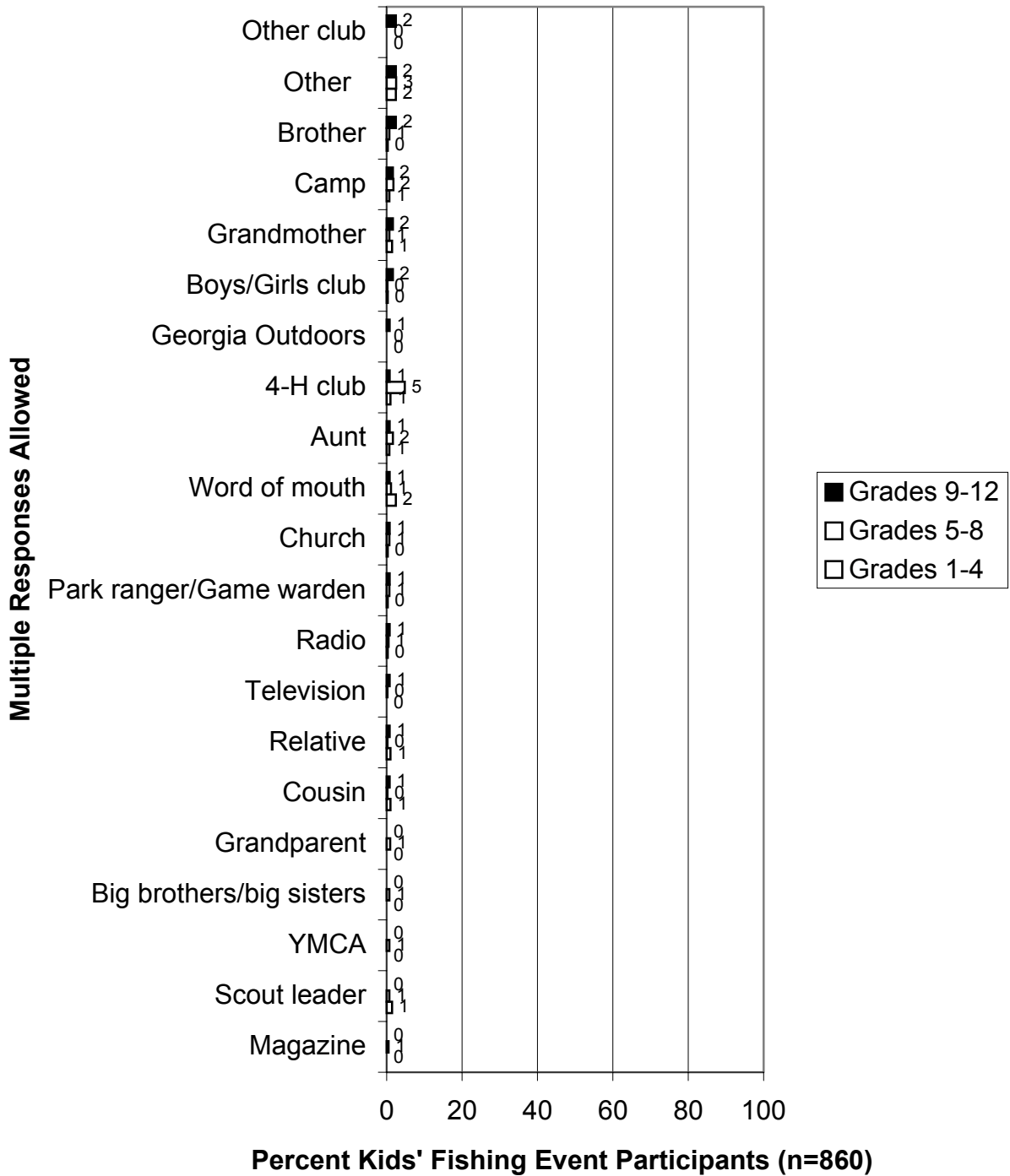
Q10. What did you like best about the Kids' Fishing Event ?



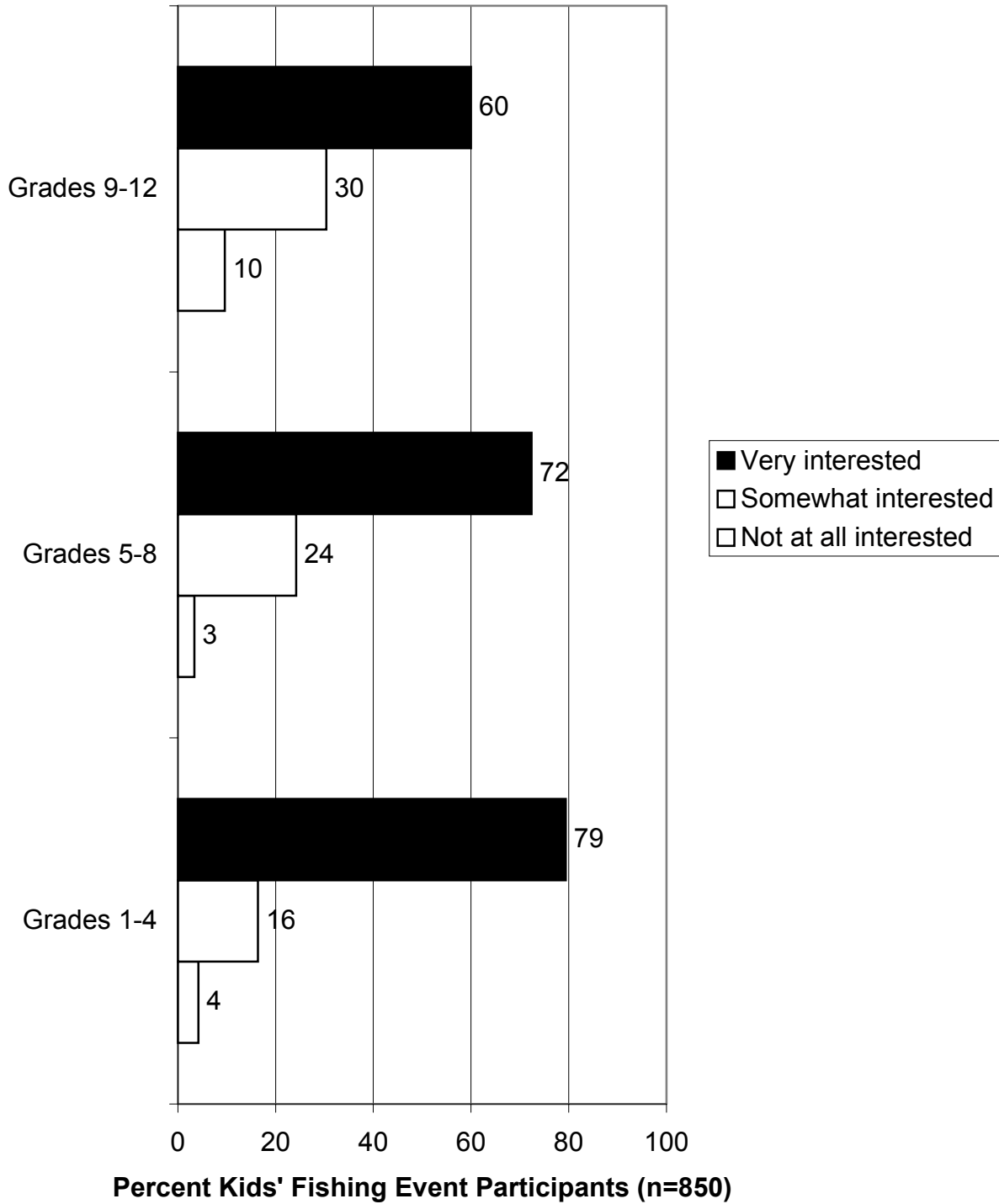
Q41. Where did you hear about the Kids Fishing Event that you went to? (By Grade)



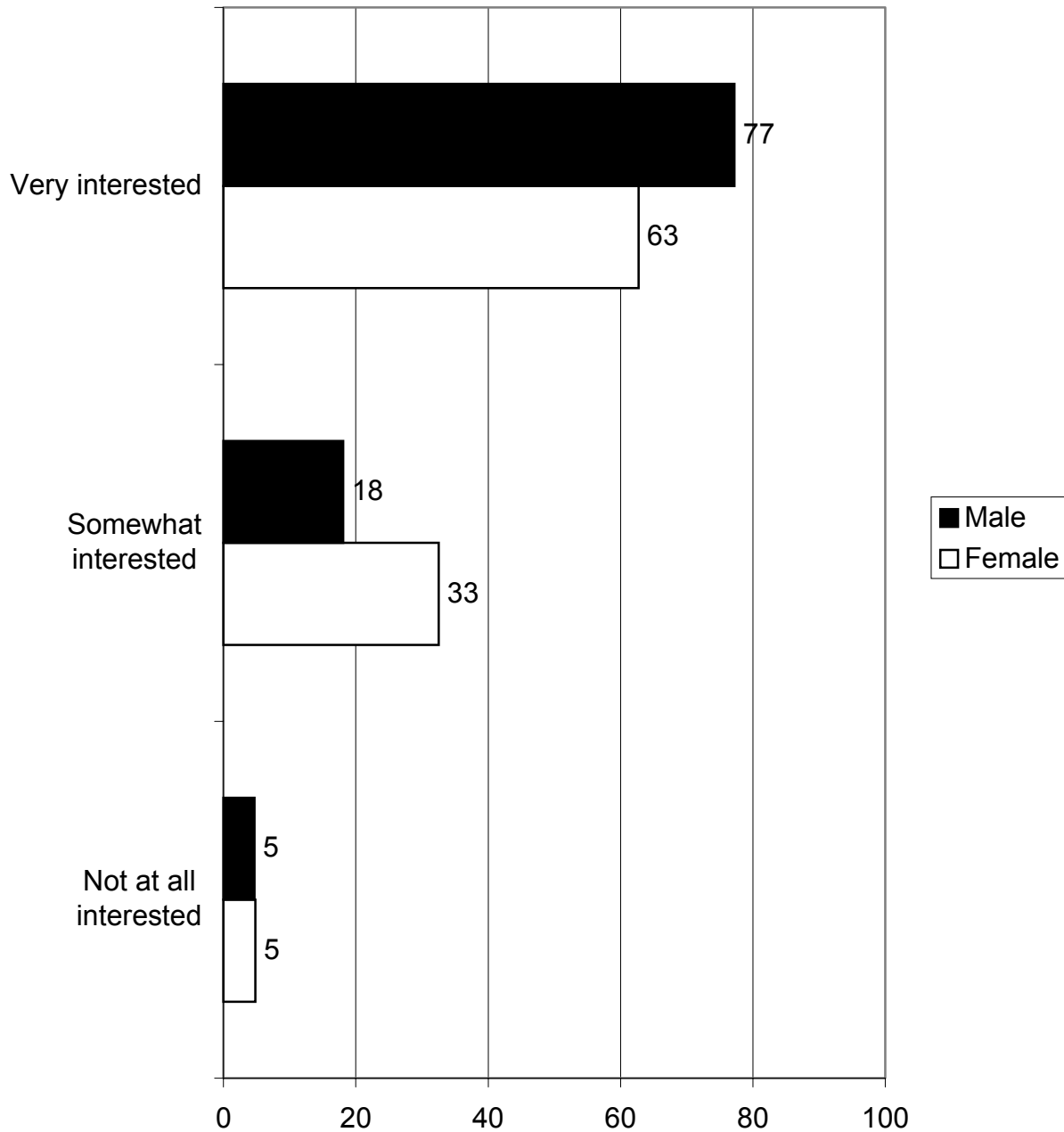
Q41. Where did you hear about the Kids' Fishing Event that you went to?



Q7. Would you say that you are very interested, somewhat interested, or not at all interested in going fishing? (By Grade)

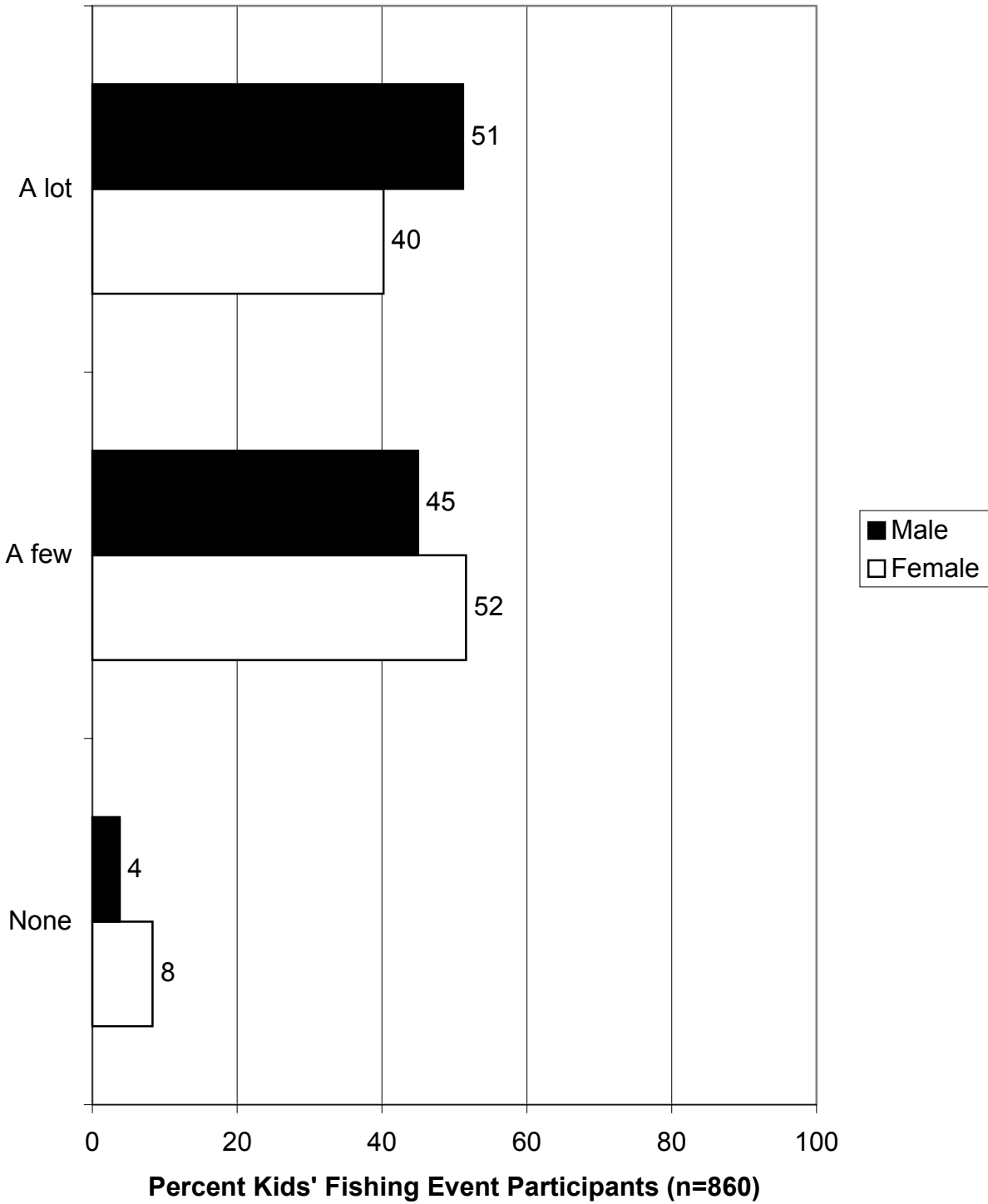


Q7. Would you say that you are very interested, somewhat interested, or not at all interested in going fishing? (By Gender)



Percent Kids' Fishing Event Participants (n=850)

Q74. Would you say that a lot, a few, or none of your friends fish? (By Gender)



Q64. Who do you usually go fishing with? (By Gender)

