

The Factors Hindering Many Hunter Education Graduates From Becoming Independent Hunters And How To Overcome These Hurdles

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Executive Summary

A significant portion of adults who complete Hunter Education (HE) programs do not subsequently purchase a hunting license in the state where the course was completed. We know a small percentage of these people take the course for reasons other than pursuing hunting—a finding again confirmed by this research. But for most of those who do not purchase a license despite a latent interest in hunting, the driving question is “what might be preventing them from trying?” The Outdoor Recreation Adoption Model (ORAM) suggests that those who do not advance beyond the interest stage in hunting lack the confidence in their knowledge or skills, lack social support to continue, or some combination of both. This project was designed to help R3 professionals better understand the factors hindering many hunter education graduates from becoming independent hunters and how to overcome these hurdles. This project was funded through a 2023 Multistate Conservation Grant awarded to the International Hunter Education Association (IHEA) with research conducted by Southwick Associates and DJ Case & Associates.

We interviewed and surveyed people from 21 participating states across the four AWFA regions who were identified using state HE graduates and license sales data. In phase one of the study, DJ Case conducted interviews with 39 people representing those who had and had not purchased a hunting license in their state following recent completion of a HE course. The interviews were designed to elicit a range of possible factors that were influencing individuals’ decisions to continue or not. The interview results helped to develop a questionnaire that was administered by Southwick Associates to a large sample of recent HE graduates drawn from state data.

A case of the “Haves” and “Have-Nots”

Our study confirms that adults enrolled in hunter education programs exist on a continuum of existing social support and hunting experience. In simplest terms, they can be classified as “Haves” and “Have-Nots”:

- “Haves” generally come from hunting families or are “adopted” into existing hunting groups, sometimes through marriage and sometimes through friend groups or work colleagues. They show a greater tendency than “Have-Nots” to be motivated to hunt to bond with family and friends.
- “Have-Nots” typically express less prior exposure to hunting, are more likely to identify multiple barriers to participation, and are less likely to say they are ready to hunt on their own. Not surprisingly, “Have-Nots” are much more likely to be among those who have not purchased a license, making them a priority audience for interventions designed to help them along the path depicted by the ORAM. Therefore, “Have-Nots” were more likely to have completed hunter education as adults. Also, compared to “Haves”, “Have-Nots” are more motivated to hunt to feel closer to nature and to learn something new.

It is also important to highlight that not all of those we classified as “Haves” are independent hunters. In this report, we present a model that further classifies the “Haves” into sub-segments based on the type of social support they have. In fact, some “Haves” who appear to have adopted hunting (i.e., exhibit retention) are contingent on others in their lives to provide opportunities and subsidize skill sets. In other words, these “Haves” would face a great risk of lapsing if their underlying hunting companions or access to hunting locations were removed (e.g., through divorce, relocation for job, etc.). This finding has implications for R3 efforts while also affirming and clarifying the role of social support in the adoption process.

Other major findings from our research include:

- Online hunter education courses are popular and well-liked by those who completed them; however, some graduates acknowledge they would have preferred a hands-on firearm component in retrospect.
- Fifty-four percent of “Have-Nots” said one of the reasons they signed up for HE was “to learn more about hunting”. This is a reminder that many adults enter with expectations that the HE course will cover aspects of how to hunt (in addition to firearm safety), though the course material focused on hunting skills are often limited.
- Indeed, and as seen in other recent research, there is a strong appetite for additional training related to hunting skills, especially among the “Have-Nots”. Approximately, six in ten “Have-Nots” were very interested in courses that cover how to field dress game, how to prepare game, how to scout, and how to track animals. All topics we asked about received some degree of interest among “Haves” and “Have-Nots”.
- There is considerably less enthusiasm among adult HE graduates for arranged mentoring opportunities outside of friends and known acquaintances, though a significant percentage of “Have-Nots” are still interested. Among “Have-Nots”, the most effective credentials for potential mentors were “reviews from other hunters” (42%) and “affiliation with state agency” (41%). The potential effectiveness of all types of mentor credentialing is lower among females and among adults over 55.
 - Existing programs such as Learnhunting.org need to be embraced and supported by the R3 community to help more “Have-Nots” obtain the support they need.
- Most respondents also expressed a strong interest in taking follow-up courses; 63% among “Have-Nots” and 51% among “Haves”.
 - As seen in other research, YouTube videos are the most preferred learning format among “Haves” (61%) and “Have-Nots” (72%). Producing and posting such videos in an easy-to-find format would be very useful. Agencies might consider teaming with Influencers who have the skills to attract audiences to produce videos that meet their needs.
- Interest levels for all learning formats was highest among males 25-45 years of age, however, we heard interest across age group and genders for in-person programs during the interviews, even among those who said time was constraint to their hunting

participation. A key to effective program offerings may be to tie skills development with opportunities for socializing and building relationships.

- Partnerships with organizations who already help hunters meet and network, such as Backcountry Hunters and Anglers, may become useful R3 tools.
- “Haves” and “Have-Nots” report similar motivations for wanting to take up hunting. The most frequently cited motivations for each were “to spend time outdoors”, “to obtain food” and “to bond with family and friends”. “Have-Nots” were more likely to include “to learn something new” among their top motivations for hunting.
- “Haves” reported relatively few barriers to hunting; 13% agreed that hunting was too expensive, marking the highest rated barrier among this group of respondents.
- A majority of “Have-Nots” (63%) agreed that finding a place to hunt was a barrier to their participation. Other barriers for “Have-Nots” included finding someone to go with (37%), too expensive (36%), and regulations are difficult to understand (34%).
- This project also provides another example of the need for states to standardize their customer records management systems, especially as it relates to HE graduates. We strongly encourage states to issue and/or link customer id numbers for those who receive certification so they may better track and communicate with these people, encourage them to take the next step, and let them know how and where they can receive additional training.

Additional Recommendations

1. Develop coordinated outreach approaches to follow-up with HE graduates to provide information and resources to advance their learning.
 - a. Ideally, these would be communications customized to the individual. CRM software systems such as those encouraged by R3 organizations such as the Council to Advance Hunting and the Shooting Sports and the Recreational Boating and Fishing Foundation would be very useful.
 - b. R3 programs could consider teaming up with local social media influencers to produce YouTube content that is both meaningful and attractive to HE graduates.
2. Gather and record customer feedback on their additional skill and lesson gaps at the close of HE courses to enable targeted messaging through CRM efforts. Considering that many respondents wanted to learn via YouTube videos, thoughtful organization and curation of existing videos, and the production of new videos should be high on the list of priorities. Agencies might then conduct follow-up contacts at later dates to see whether HE graduates had availed themselves of the skills offerings, and what their updated needs might be.
 - a. Ideally, gaps would be custom and direct with each individual and recorded to help direct future communications and offerings.

3. Have R3 programs and organizations high grade video content and direct people to appropriate resources.
4. Use the typology of social support in this report in conjunction with the [Journey Map Personas](#) (Case, Southwick and Wildlife Management Institute, 2023) to refine marketing efforts.
5. Recognizing that videos (e.g., YouTube) should be a primary focus, state and local hunting organizations should also be encouraged to sponsor one-day or evening how-to topics using the items of strong interest reported in these data. Such classes would be especially beneficial to “Have-Nots”.
 - a. Recognizing that many HE programs may not be able to share graduates’ contact information, HE programs could instead promote these events to recent graduates.
6. Offer follow-up firearm handling and range days for people who graduate from online-only HE courses.
7. Consider providing supplementary resources or resource recommendations to adult hunter education enrollees, even while their HE courses are underway, as people will be more likely to take advantage of such resources when their interest in hunting is high. Their interest is expected to decrease as time after graduation passes.
8. “Have-Nots” require additional support knowing where and how to access public land for hunting. States should continue to develop and promote public access to public and private lands for hunting and promote such opportunities to current and recent HE enrollees. For example, agencies might prioritize recent HE graduates for draw/lottery hunts.
9. When considering how to target recent HE graduates, consider using the typology of adult HE graduates in this report which ranks them on a continuum of having the most to least social support.

Please read the full report for details and greater insights.

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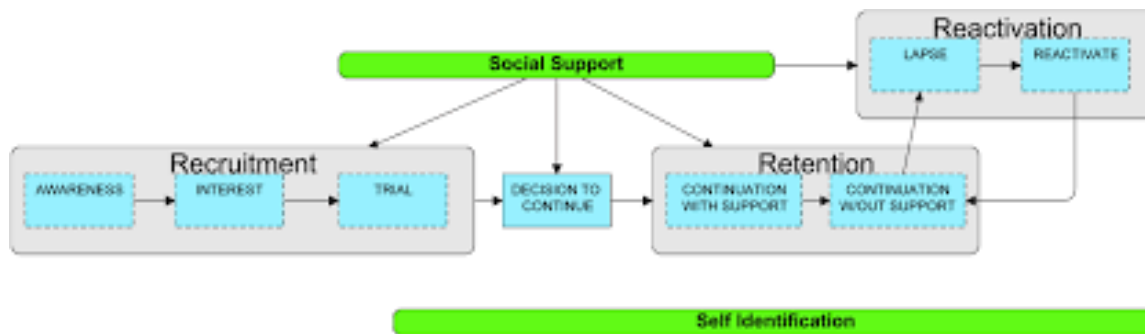
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Introduction

Each year, approximately 600,000 people graduate from hunter education programs. Past research has found that a significant proportion (39%) of hunter education graduates never purchase a hunting license¹. Why? We know that a small percentage of these graduates never intended to hunt and had other reasons for enrolling in the program. However, most adults enrolled in HE take the course having developed an interest in hunting, yet many of them will decide not to continue. The Outdoor Recreation Adoption Model (ORAM) provides a framework to help us hypothesize why many who intended to try hunting never do so (**Figure 1**).

Figure 1. The Outdoor Recreation Adoption Model.



ORAM posits that individuals pass through a series of decision stages as they develop interest in and try-on an activity (Byrne and Dunfee 2018). Each stage in the process can result in cessation or continuation based on several factors including available support to develop the necessary technical or social competencies which support identity development (Wentz and Seng 2000). We are also beginning to understand that patterns of recreation adoption is changing generationally (Southwick and Case, 2024) making it even more critical to understanding the needs of different audiences.

The objective of this study is to investigate what might be preventing some of these HE graduates from moving from interest to the trial phase of adoption. Conversely, what do those who continue along the adoption path have that others do not? Again, the ORAM model suggests that the difference between those who continue and those who do not likely lies in differences in social support.

This project builds on recent hunter education research for the Sportsmen’s Alliance Foundation¹ and Wildlife Management Institute mentoring research² to identify how states and NGOs’ mentoring programs can convert a higher percentage of graduates into confident, independent hunters and consistent license buyers. We used a combination of qualitative (interviews) and quantitative (email-based survey) methods to answer the research questions and provide valuable information back to the states. The research presented here was made possible by a Multi-State Conservation Grant awarded in 2023 to the International Hunter

¹ 2021 Multi-state Conservation Grant project F20AP00171. [Boosting hunting participation among hunter education graduates.](#)

²2022 Multi-State Conservation Grant F19AP00111. [Increasing Hunting Mentor and Mentee Numbers and Effectiveness.](#)

Education Association (IHEA). Southwick Associates and DJ Case & Associates were contracted to conduct qualitative interviews that identified major themes and areas of inquiry, which informed the development and fielding of an online questionnaire to gain this project's insights.

Data and Methods

Sampling Frame Identification

Data for this study were obtained by matching individuals from two sources,

- 1) Hunter education records 2020 – 2023 (2022 if 2023 was not available)
- 2) License sales data from 2021 – 2023 (2022 if 2023 was not available)

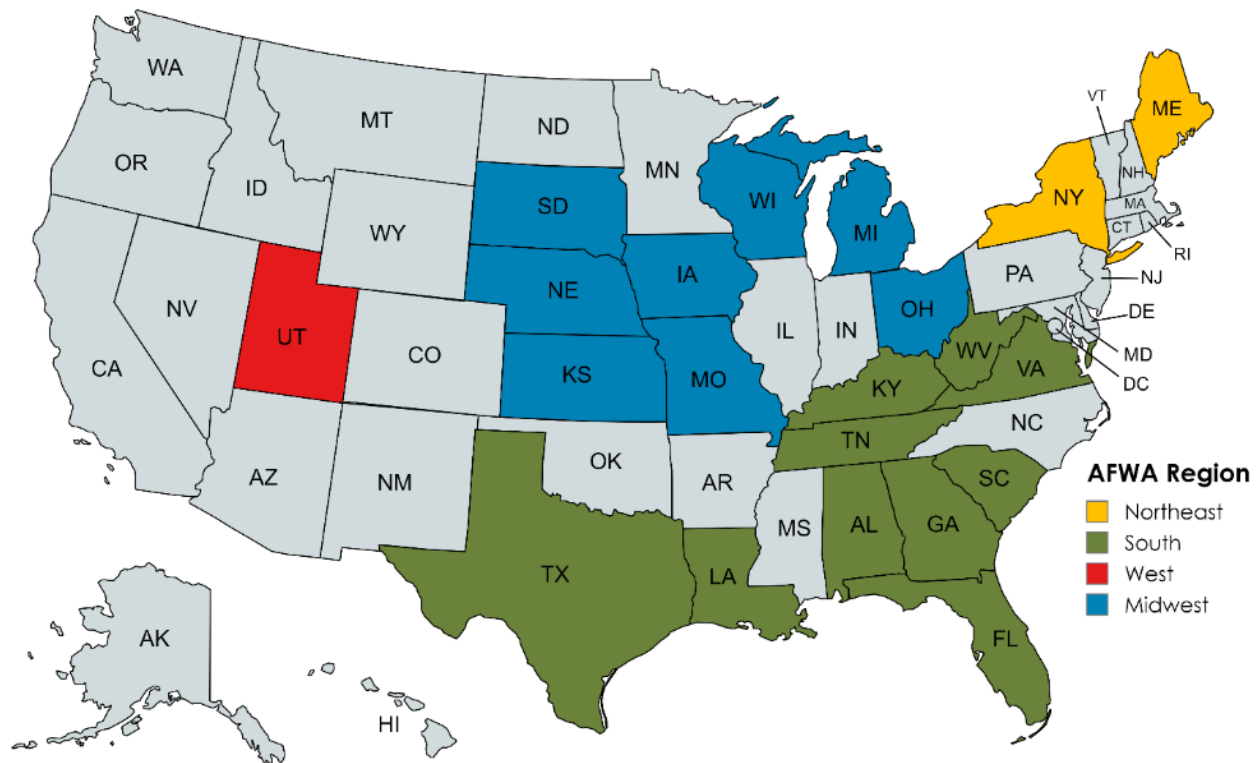
Drawing a representative sample from the population was not a straightforward exercise because information is collected inconsistently both within and among the states. For example, at least one state does not collect email addresses from hunter education attendees. Others do not issue a customer ID number when a person takes hunter education, so they only 'show up' when a license is purchased. Consequently, when a customer ID across both datasets was not available, the data were matched by name, birthday, and gender. While effective, up to 50% of samples were 'lost' in some states. Thus, the final outgoing sample was not a reflection of all individuals who had taken hunter education and whether they had purchased a license but was instead a function of the ability to match records across disparate datasets. The overall goal was to select 10,000 individuals per state, which was not achievable in all cases (**Table 1**).

Table 1. Outgoing sample and percent matched to a hunting license purchase, by state.

	Total Outgoing N	N with hunting license	N without hunting license	Overall percent identified hunted
Midwest				
Iowa	10,000	7,678	2,322	77%
Kansas	1,683	1,305	378	78%
Michigan	1,321	1,005	316	76%
Missouri	9,999	6,402	3,597	64%
Nebraska	4,007	2,340	1,667	58%
Ohio	10,000	7,526	2,474	75%
South Dakota	242	190	52	79%
Wisconsin	9,997	6,356	3,641	64%
Northeast				
Maine	518	364	154	70%
New York	15,000	11,498	3,502	77%
Southeast				
Alabama	2,836	2,572	264	91%
Florida	9,750	8,206	1,544	84%
Georgia	9,997	7,886	2,111	79%
Kentucky	2,190	1,751	439	80%
Louisiana	10,000	627	9,373	6%
South Carolina	548	525	23	96%
Tennessee	6,717	4,203	2,514	63%
Texas	10,000	6,273	3,727	63%
Virginia	3,123	2,370	753	76%
West Virginia	367	284	83	77%
West				
Utah	6,321	6,236	85	99%
Total	124,616	85,597	39,019	69%

Across the 21 participating states, 124,616 individuals qualified based on 1) an email on file whether they bought a hunting license³, or 2) taking hunter education and our ability to either match them as a license buyer or not. Participating states are shown in Figure 2.

Figure 2. Participating states in the IHEA retention without support survey, by AFWA region.



Qualitative Interviews & Highlights

We interviewed 39 people from nine states from cross referenced lists of state hunting license sales and hunter education certification. Individuals were recruited via email and scheduled via Calendly® to open interview appointments with DJ Case staff. Interviews took place on Zoom® and were recorded with permission. Based on interviews, we created a typology to describe the different types of people who emerge from hunter education courses based on the presence or absence of existing social support and enduring nature of that support.

Key Interview findings

The primary objective of conducting interviews was to develop topics for the questionnaire. But as is often the case, the qualitative results often provide interesting insights. While these results cannot be generalized to the study population, they are worthy of discussion. We highlight a few of these key findings below.

³ On the hunter education record, if we had an email on file and were unable to match them to a purchase, using any method, they were classified as not have a hunting license.

1. *The “Haves” and “Have-Nots”:*

“Haves” - Hunters who took HE with the pre- and post-support from a personal existing network of friends, relatives and/or neighbors who hunt.

Many of those who purchased a hunting license had ready-made hunting mentors and companions that basically took care of the details (e.g., equipment, property access, tactics, butchering, etc.) to ease the burden of entry into the activity. For these “Haves”, support was not something they had to seek out, it was offered from established hunters that had come into their lives. These connections seem to occur as result of marriage or work colleagues. In the case of marriage, wives and husbands make choices to share recreation time as a couple or a family unit, and most often, the husband is the established hunter who serves the role of mentor or guide for the novice wife. Alternatively, men walk into supportive hunting networks when they marry into a hunting family (in-laws) and are invited to try it out. In either case, people we interviewed with marital ties to hunting indicated they planned to continue hunting and most did not foresee a need for further skill development or support. People fitting this profile raise an interesting question about the degree to which some are truly “independent hunters”. Some may rely on their hunting partners to “subsidize” their skills (e.g., tracking, picking stand locations, field dressing, etc.) without having to develop them.

“Have-Nots” - Hunters who come from families or communities with limited or non-existent participation or interest in hunting and are unable to receive significant social support to hunt.

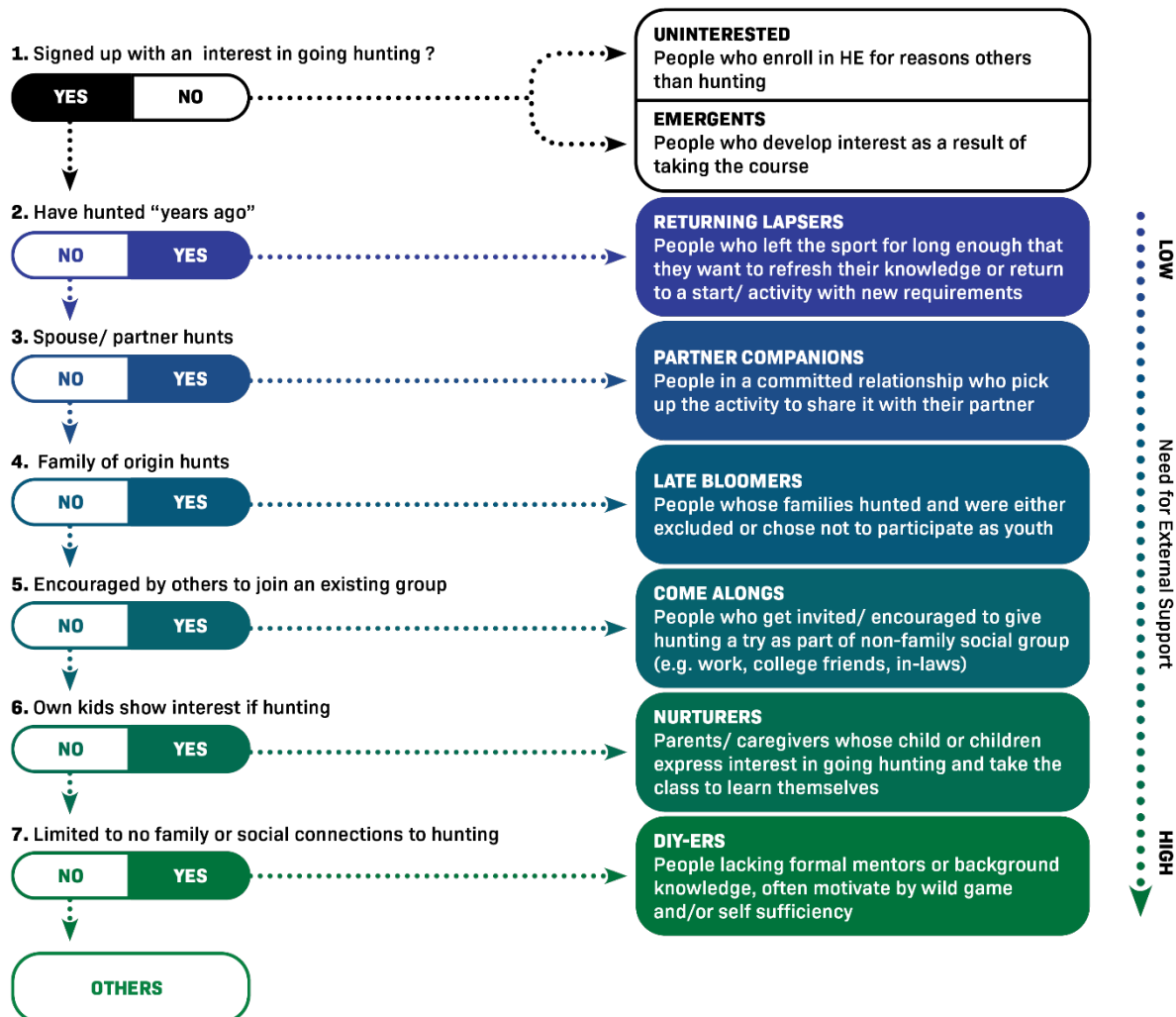
The “Have-Nots” appear to be comprised of adult-onset hunters who have developed an interest in hunting independent of any encouragement from family members who hunt or others in their social network that do so. Some “Have-Nots” we interviewed had made tentative forays into hunting, often alone, and with varying degrees of success (defined here as a positive experience). Other “Have-Nots” had not yet developed confidence to try hunting or make it a priority among their other time allocations. For many “Have-Nots”, knowing how and where to access public land was a common barrier. Interestingly, these people were often more worried about interfering with someone else’s hunt on public land than they were concerned about impacts of crowding on their own experience.

2. *A continuum of social support*

While “Haves” and “Have-Nots” are the simplest ways to think about existing social support among adult HE graduates, we developed the following typology to reflect a more nuanced categorization (**Figure 3**). We conceived the continuum as a sort of dichotomous key to classify and label our interview subjects. The model acknowledges that some portion of enrollees enter the course with non-hunting motivations.

The model also reflects that in some cases, and depending how states track license data, some portion of “new hunters” are actually reactivated long lapsed. This segment may require less intervention to continue because they typically enter as “Haves”.

Figure 3. A typology of adult Hunter Education graduates on a continuum of most to least social support as observed among interviews.



Other "Haves" can be characterized as "Partner Companions", "Late Bloomers" and "Come Alongs". All three of these sub-types have access to a network of committed hunters that can answer their questions and subsidize their emerging skill sets. In many cases, people fitting each of these descriptors have access to private land by virtue of their social network. While they may require less programmatic support than "Have-Nots", for many, their continuation in hunting is contingent on maintaining those relationships. For example, Partner companions may stop hunting following a divorce; "Late Bloomers" may be left without companions as older relatives age out; and "Come Alongs" are at risk of lapsing during job changes or relocation.

The last two categories in Figure 3 represent two kinds of "Have-Nots". "Nurturers" are parents (or other caregivers) of children who express an interest in hunting. They enroll in HE, often with their child, to support them. This group would benefit from access to all kinds of competency related hunting information. Likewise, "DIYers" represent adults who develop their own interest in hunting and are motivated to teach themselves. DIYers may be locavores, may

want to achieve a degree of self-sufficiency, or may be novel adventurers. People who fit this profile told us they got much of their information from YouTube and from agency websites.

3. Virtual Hunter Education is great, but...

Most of the people we interviewed took their Hunter Education course online. Everyone who did was complimentary of their experience. Specifically, people noted the convenience of being able to fit HE into their own schedules. They also noted ease of navigation and content as strengths. When pressed further about whether the course met their expectations, some mentioned they would have liked to receive hands-on firearm training (even though they signed up for an entirely online course).

“Safety is my number one thing. If I am going to be out there [hunting], I just need to be more comfortable that I am doing everything right. I don’t have that now, and it would be great to go to a range and have someone watch me”.

Another commented from the perspective of being an ethical hunter:

“I am familiar with firearms from the military, so I am comfortable with them, you know, but I would need practice before I’d feel good about trying to take a deer down. It would have been nice to include a practice session at a range or something”.

Quantitative Survey

The quantitative survey effort was led by Southwick Associates. The survey questionnaire was developed collaboratively with project partners and participating states (Appendix A). The states were also given the opportunity to ask state-specific questions, if desired. The final survey consisted of sections that addressed: 1) reasons for taking hunter education, 2) their background as hunters, 3) their interest in hunting, 4) outdoor skills/mentoring courses, 5) hunter education additions, and 6) demographics. The full survey can be found in Appendix A.

Between December 18, 2023 and January 17, 2024, individuals were contacted up to 6 times using the online platform Qualtrics®. After accounting for bounced and undeliverable emails (n = 4,702), a total of 12,418 responses were received, which resulted in a 10.3% response rate (**Table 2**).

Table 2. Number of respondents, by state and AFWA region.

	Incoming sample				Outgoing Percent ID'd as hunting
	Total Incoming N	N with hunting license	N without hunting license	Percent identified hunted	
Midwest					
Iowa	840	668	172	80%	77%
Kansas	283	212	71	75%	78%
Michigan	218	164	54	75%	76%
Missouri	705	446	259	63%	64%
Nebraska	215	133	82	62%	58%
Ohio	1,184	928	256	78%	75%
South Dakota	50	40	10	80%	79%
Wisconsin	902	522	380	58%	64%
Northeast					
Maine	62	48	14	77%	70%
New York	1,804	1,372	432	76%	77%
Southeast					
Alabama	204	162	42	79%	91%
Florida	763	608	155	80%	84%
Georgia	789	626	163	79%	79%
Kentucky	367	291	76	79%	80%
Louisiana	1,234	126	1,108	10%	6%
South Carolina	65	61	4	94%	96%
Tennessee	642	423	219	66%	63%
Texas	747	479	268	64%	63%
Virginia	188	147	41	78%	76%
West Virginia	44	35	9	80%	77%
West					
Utah	1,111	1,093	18	98%	99%
Grand Total	12,417	8,584	3,833	69%	69%

Cluster Analysis

We performed a K-means cluster analysis in SPSS® (v29) to segment respondents into groups we dubbed the “Haves” (58%) and “Have-Nots” (42%) as an extension of the focus group findings. Our model included six variables (survey in Appendix A):

- Q8. Years of experience (measured on a categorical 6-point scale)
- Q25. Self-rated firearm proficiency with a centerfire rifles (4-point scale)
- Q15. It was too difficult to find a place to hunt (5-point Likert scale)
- Q15. It was too difficult to find someone to go with (5-point Likert scale)
- Q15. I find it difficult to understand the hunting regulations (5-point Likert scale)
- Q15. I feel overwhelmed by all the aspects that go into hunting (5-point Likert scale).

We used pairwise deletion in the model to maximize the number of respondents that could be classified by the data. The cluster analysis converged after 14 iterations and differentiated among all six variables on cluster mean scores (**Table 3**). All six variables were significant in separating membership in the clusters (**Table 4**). We saved cluster assignment and cluster distances to the data set.

Table 3. Cluster center scores (categorical means) separating cluster membership.

Final Cluster Centers	Cluster	
	Haves	Have-Nots
How many total years of hunting experience do you have?	3 (3-5 years)	2 (1-2 years)
It was too difficult to find a place to hunt	2 (Somewhat Disagree)	4 (Somewhat Agree)
It was too difficult to find someone to go with	1 (Strongly Disagree)	3 (Neither Agree nor Disagree)
I find it difficult to understand the hunting regulations	1 (Strongly Disagree)	3 (Neither Agree nor Disagree)
I feel overwhelmed by all the aspects that go into hunting	1 (Strongly Disagree)	3 (Neither Agree nor Disagree)
Proficiency: Centerfire rifle (such as, .223, .270, 30-06)	3 (Used some: 4-10 times)	2 (Very limited use: 1-3 times)

Table 4. Cluster analysis of variance results for six predictor variables in model.

ANOVA Item	Cluster		Error		F	Sig
	Mean Square	df	Mean Square	df		
How many total years of hunting experience do you have?	1480.4	1	1.38	11032	1074.4	<.001
It was too difficult to find a place to hunt	10132.1	1	0.97	10201	10424.9	<.001
It was too difficult to find someone to go with	6749.4	1	0.91	10189	7448.1	<.001
I find it difficult to understand the hunting regulations	4552.2	1	0.99	10190	4602.8	<.001
I feel overwhelmed by all the aspects that go into hunting	3911.6	1	0.82	10179	4754.1	<.001
Proficiency: Centerfire rifle (such as, .223, .270, 30-06)	70.1	1	0.87	6986	80.3	<.001

This report provides results of Chi-square analysis that show how the “Haves” and “Have-Nots” differ on a whole suite of variables related to social support and hunting independence assessed on the questionnaire. All associations reported among variables in the Figures and Tables of this report are statistically significant at the $p < .05$ unless otherwise noted in text summaries. Because all questions were optional, samples sizes frequently varied between questions. We, therefore, provide sample sizes to provide the reader with an understanding of the strength of the data behind the conclusions.

Results

Demographics

Survey respondents exactly matched the survey population (72% male, 28% female) (**Figure 4**); however, respondents were slightly underrepresented for the 18 – 34 age classes, and slightly overrepresented in the older age classes.

By cluster group, the “Have-Nots” were more likely to be male (79% vs. 67%), which indicated males were likely than females to pick up hunting from a source other than family. The “Have-Nots” were also more likely to be 25 – 44 years old, which captures the millennial generation (**Figure 5**). Overall, 90% of respondents were White, 7% were Hispanic, and 3% were Black, and there were only slight differences between the cluster groups. Education was not similar between the groups, with 39% of “Have-Nots” reporting they had a Bachelor’s degree or higher compared to 34% of “Haves” (**Table 5**).

Figure 4. Comparison of the frequency of males and females among HE graduates classified as “Haves” or “Have-Nots”.

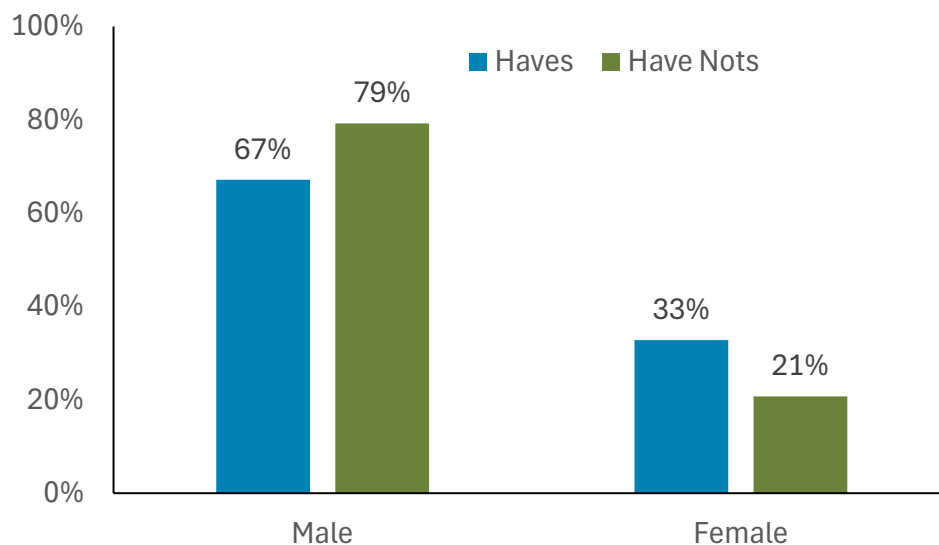


Figure 5. A comparison of the frequency of age categories among HE graduates classified as “Haves” or “Have-Nots”.

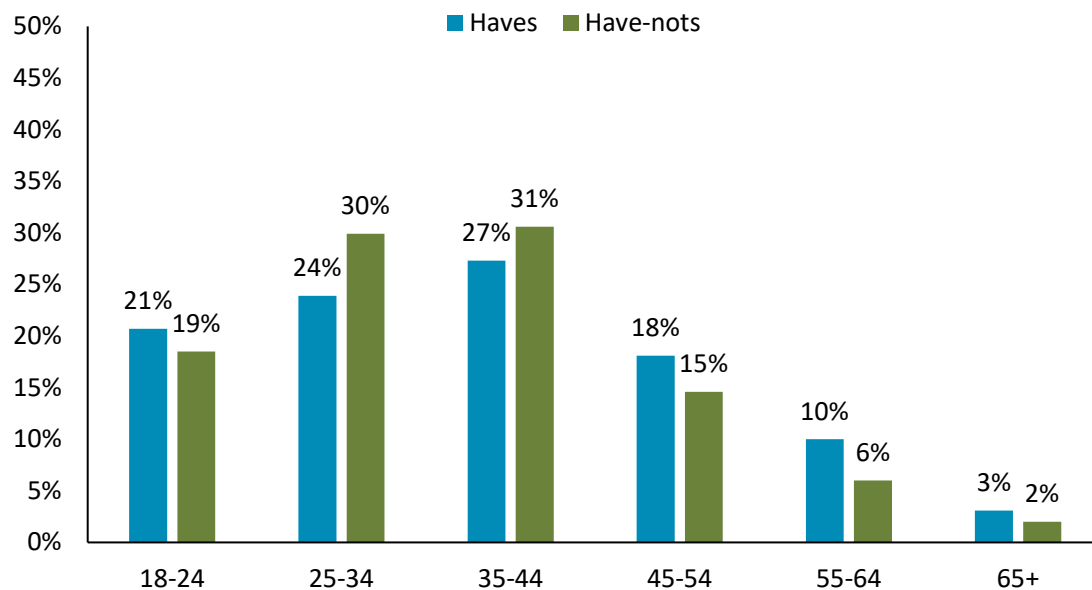


Table 5. Demographics of IHEA survey respondents, by “Haves” and “Have-Nots”. Totals for Gender, Age, and Education may not equal 100% due to rounding. Totals for Race/Ethnicity will not equal 100% because respondents can choose more than one category.

Gender	Study Group		Total
	“Haves”	“Have-Nots”	
Male	67%	79%	72%
Female	33%	21%	28%
Age Class			
18-24	21%	18%	20%
25-34	24%	30%	26%
35-44	27%	31%	29%
45-54	18%	15%	17%
55-64	7%	4%	6%
65+	3%	2%	3%
Race/Ethnicity			
White	92%	88%	90%
Spanish/Hispanic	6%	8%	7%
Black or African American	2%	3%	3%
Asian	1%	3%	2%
Native Alaskan or Native American	2%	3%	3%
Pacific Islander	0%	0%	0%
Prefer not to say	4%	5%	4%
Other	2%	3%	2%
Education			
Some high school or less	3%	3%	3%
High school diploma or GED	22%	19%	21%
Some college, but no degree	22%	21%	22%
Associates or technical degree	16%	15%	15%
Bachelor’s degree	22%	25%	23%
Grad or professional degree	12%	15%	14%
Prefer not to say	2%	2%	2%

Taking Hunter Education

A majority of respondents to the survey reported that they completed their HE courses since 2020. “Haves” were more likely to report they took HE as children, while “Have-Nots” were more likely to have completed the course as adults (**Figure 6**).

Most respondents said they took their HE entirely online (**Figure 7**). There was no difference in course frequency among “Haves” and “Have-Nots”. Only 37% of respondents indicated that their course included a hands-on firearm handling component.

Almost all respondents took HE to fulfill their state’s requirements to legally obtain a hunting license (Figure 8). Ninety-two percent of graduates said they intended to go hunting after completing the course, 3% said “No” and 5% were unsure. The second most commonly selected reason for signing up for the course was “to learn more about hunting”; checked by 54% of “Have-Nots” and 45% of “Haves” (**Table 6**).

Figure 6. Distribution of responses among “Haves” and “Have-Nots” of when they took HE (Note: Respondents could check multiple options so responses within categories do not sum to 100%).

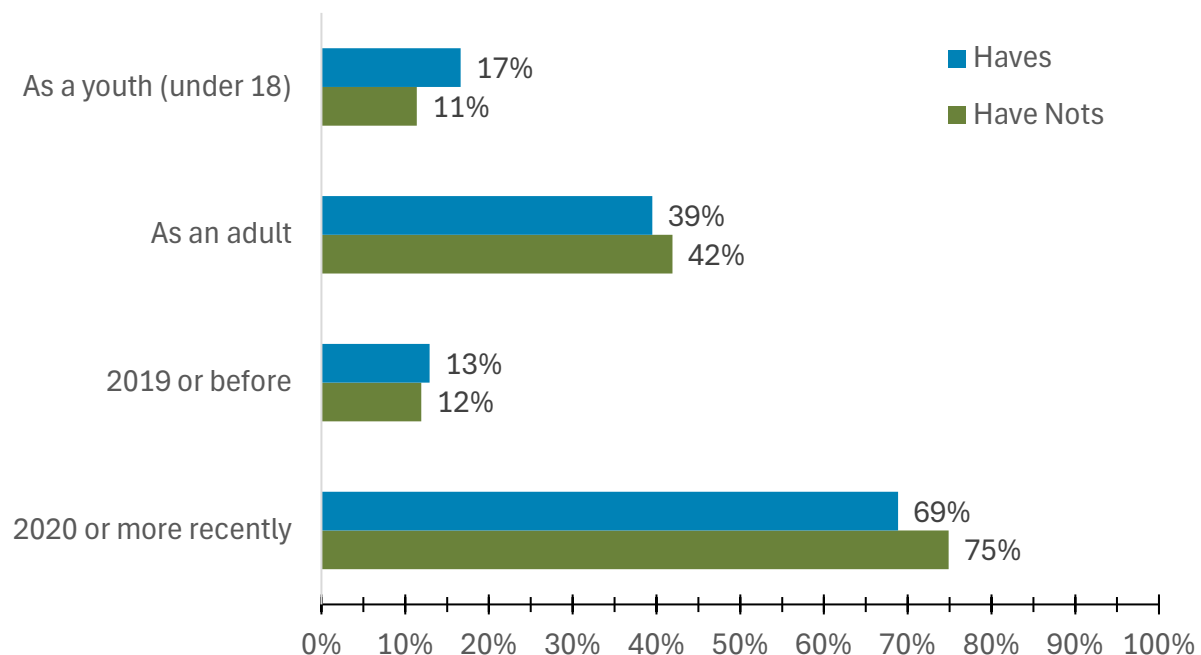


Figure 7. The percentage of respondents who took various hunter education course formats.

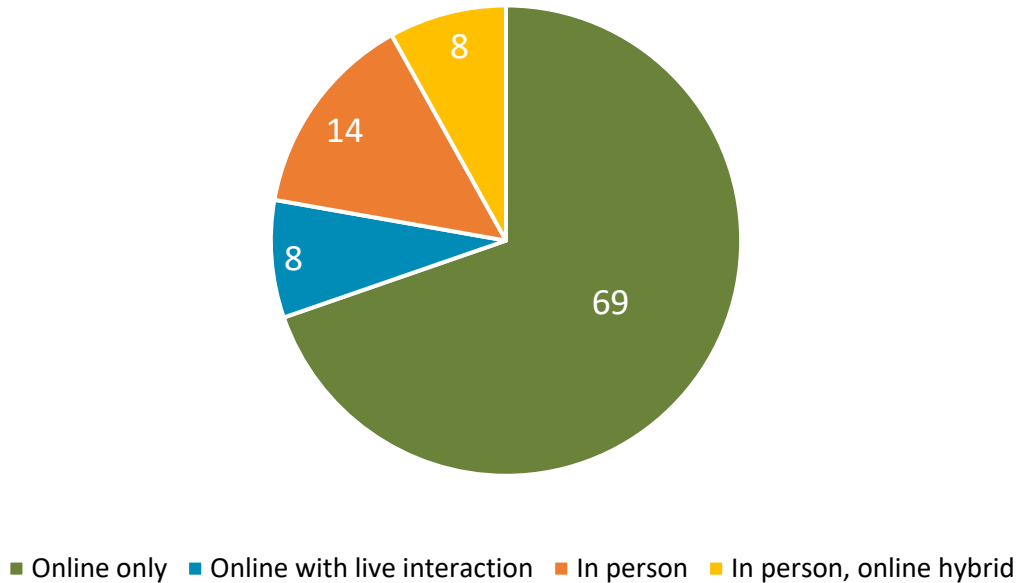


Table 6. A comparison of reasons for taking Hunter Education between “Haves” and “Have-Nots”.

	Haves	Have Nots
It is a requirement to legally hunt or buy a hunting license in my state	90%	88%
It is a requirement to legally hunt or buy a hunting license in another state	17%	16%
I needed the class to obtain a firearm or concealed carry permit	6%	6%
To learn more about firearm safety	33%	34%
To learn more about hunting	45%	54%
A family member wanted me to take it	14%	12%
I joined or supported a friend/family member	9%	9%
To earn additional preference points for big game draws	2%	2%
I wanted hands-on experience with a firearm	5%	7%
Other	4%	4%
Total	6,237	4,530

Experience Differences

One of the clearest and perhaps most obvious distinguishing features between “Haves” and “Have-Nots” is found in their total years of hunting experience. “Haves” were significantly more likely to have hunted as youth or as adults prior to taking Hunter Education (**Figure 8**). Thirty-nine percent of “Haves” hunted as children; 17% said they hunted before HE as adults. Based on interview results, we suspect many in this latter category represented reactivated long-term lapsed. Very few of the respondents in either the “Haves” or the “Have-Nots” had participated in the past on an apprentice license. A plurality of the “Have-Nots” (45%) had no hunting experience prior to taking the HE course.

We also considered how experience prior to taking HE affected intention to hunt after the course among “Haves” and “Have-Nots” (**Table 7**). Of note, 29% of “Have-Nots” without prior hunting experience still have not hunted despite their intention to do so.

“Haves” also reported significantly more years of hunting experience than did the “Have-Nots” (**Table 8**). In fact, 65% of “Have-Nots” have two or fewer years of experience, with 20% reporting none. Only 7% of “Haves” had zero years of experience, while 22% had more than 10 years. Females indicated less hunting experience than males, and the difference was particularly pronounced among “Have-Nots” (**Table 9**); 74% of “Have-Not” females had 2 or fewer years of experience.

Figure 8. A comparison of the frequency of prior types of hunting experience between “Haves” and “Have-Nots”.

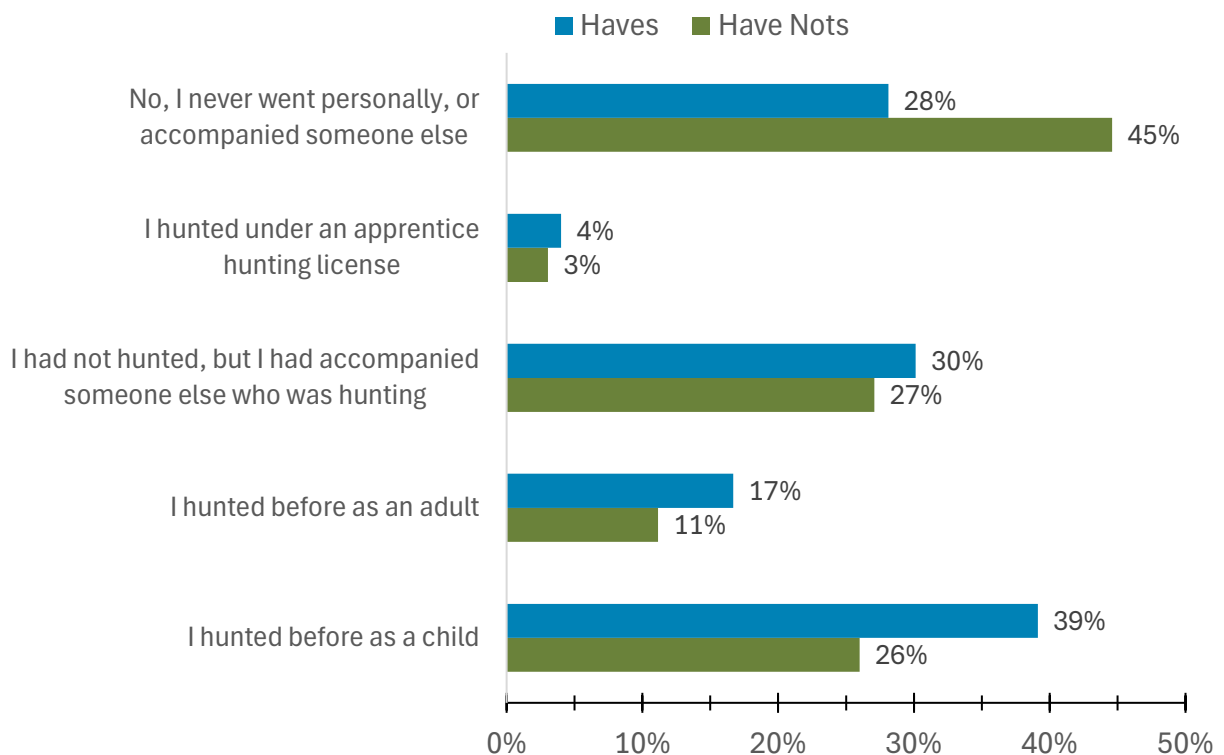


Table 7. A comparison of intention to hunt between “Haves” and “Have-Nots” based on their hunting experience prior to taking Hunter Education.

Hunted After	Haves			Have Nots		
	Hunted Before	Accompanied	Never Hunted	Hunted Before	Accompanied	Never Hunted
		Hunters Before	nor Accompanied		Hunters Before	nor Accompanied
I hunted alone after hunter ed and intend to go again	59%	38%	41%	52%	36%	38%
I hunted with a mentor after hunter ed and intend to go again	34%	62%	57%	35%	54%	45%
I hunted after hunter ed but do not intend to go again	1%	1%	1%	1%	1%	1%
I hunted before I took hunter ed and intend to go again	43%	8%	1%	35%	7%	1%
I did not go hunting before or after hunter ed	3%	10%	14%	8%	17%	29%
I went hunting before I took hunter ed but do not intend to go again	1%	0%	0%	1%	1%	0%
Total:	2,826	1,565	1,727	1,441	1,015	1,954

Table 8. A comparison of the years of hunting experience between “Haves” and “Have-Nots”.

Hunted Before	Haves	Have Nots
I have never been hunting	7%	19%
1 - 2 years	31%	46%
3 - 5 years	31%	22%
6 - 10 years	10%	5%
More than 10 years	21%	8%
Total	6,232	4,525

Table 9. A comparison of current years of hunting experience between “Haves” and “Have-Nots” by gender.

Hunted Before	Haves		Have Nots	
	Male	Female	Male	Female
I have never been hunting	5%	12%	17%	26%
1 - 2 years	28%	40%	44%	48%
3 - 5 years	31%	30%	25%	20%
6 - 10 years	10%	8%	5%	3%
More than 10 years	26%	11%	9%	3%
Total	3,399	1,663	2,911	762

Most of the survey respondents told us they are ready to hunt independently (**Table 10**) and most also said they had friends or family they could go with (**Table 11**). Regardless of existing social support, most survey respondents said they were ready to hunt without assistance. However, “Have-Nots” were nearly twice as likely as “Haves” to check “No” on this question. Thirty-four percent of “Have-Nots” said they were not ready to hunt independently, indicating the need for post-graduation educational resources.

Table 10. Self-reported readiness to hunt independently among “Haves” and “Have-Nots”.

Ready to hunt without assistance	Haves	Have Nots
Yes	82%	66%
No	18%	34%
Total	5,152	3,765

Table 11. Percentage of “Haves” and “Have-Nots” reporting having options for hunting companions among friends and family.

Family/Friends to hunt with	Haves	Have Nots
Yes	97%	81%
No	3%	19%
Total	4,910	3,568

Motivational Profiles

“Haves” and “Have-Nots” exhibited similar motivational profiles for why they wanted to take up hunting. “Haves” showed a greater tendency than “Have-Nots” to be motivated to bond with family and friends. Other differences include that “Have-Nots” are more motivated than “Haves” to feel closer to nature and to learn something new (**Figure 9**).

A majority (57%) of “Have-Nots” are also motivated to hunt to become more self-sufficient, and this tendency was true among both men and women. Among “Have-Nots”, men were particularly likely (63%) to report being motivated by trying to learn something new (**Table 12**).

As a general tendency, the frequency with which respondents checked all motivations declined with age for “Haves” and “Have-Nots” (**Table 13**), suggesting that older respondents are less motivated overall to hunt. “Have-Nots” in the 18–34-year-old category were particularly motivated by self-sufficiency. On the other hand, 18–34-year-old “Haves” were highly motivated by social bonding with others.

Figure 9. A comparison of motivations to take up hunting between “Haves” and “Have-Nots”.

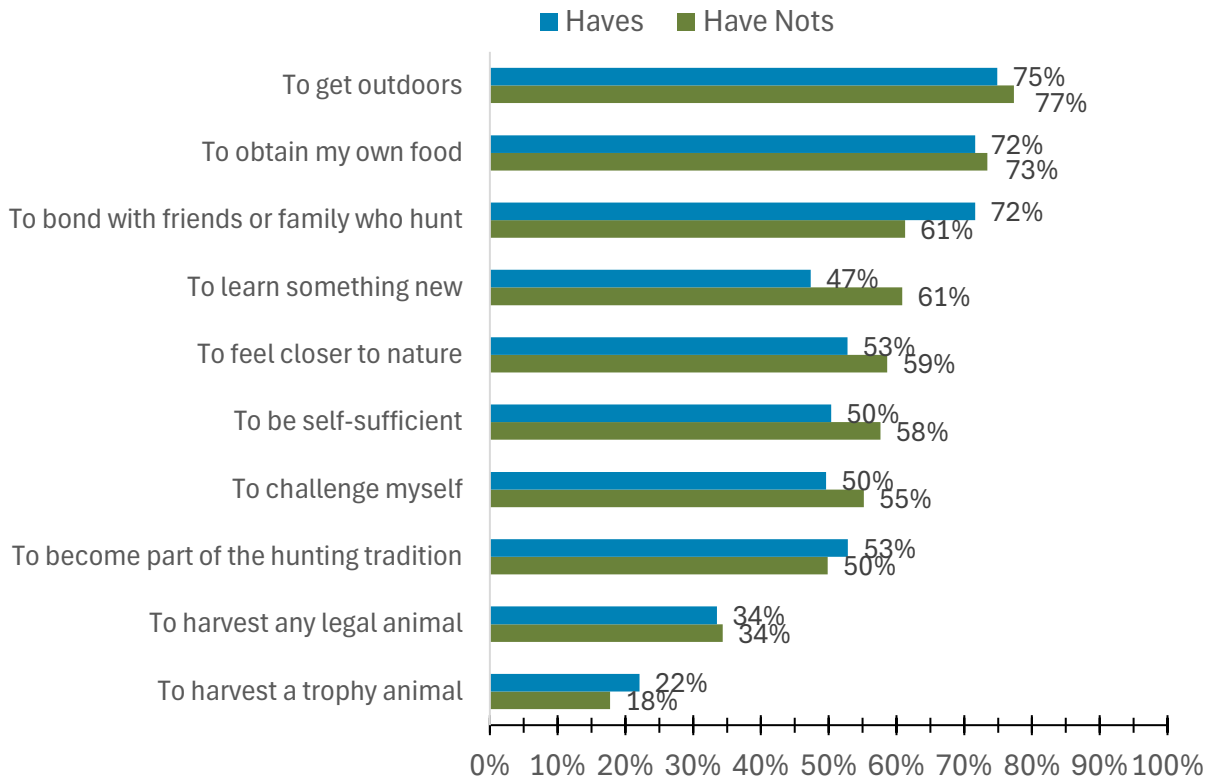


Table 12. A comparison of hunting motivations between “Haves” and “Have-Nots” by gender.

Why Hunt	Haves		Have Nots	
	Male	Female	Male	Female
To get outdoors	80%	67%	83%	67%
To harvest any legal animal	38%	27%	38%	26%
To obtain my own food	75%	68%	76%	69%
To be self-sufficient	54%	46%	61%	54%
To feel closer to nature	59%	43%	65%	45%
To harvest a trophy animal	24%	16%	18%	13%
To bond with friends or family who hunt	70%	76%	59%	70%
To challenge myself	54%	44%	60%	46%
To become part of the hunting tradition	57%	47%	54%	38%
To learn something new	48%	49%	64%	55%
Other	3%	2%	3%	3%
Total	3,402	1,663	2,909	762

Table 13. A comparison of hunting motivations between “Haves” and “Have-Nots” by age categories.

Why Hunt	Haves			Have Nots		
	18-34	35-54	55+	18-34	35-54	55+
To get outdoors	81%	71%	63%	81%	75%	63%
To harvest any legal animal	37%	31%	30%	38%	32%	21%
To obtain my own food	74%	73%	54%	76%	74%	53%
To be self-sufficient	52%	52%	35%	60%	58%	35%
To feel closer to nature	58%	50%	43%	63%	55%	46%
To harvest a trophy animal	31%	16%	12%	23%	14%	7%
To bond with friends or family who hunt	77%	68%	63%	65%	58%	56%
To challenge myself	53%	49%	38%	57%	55%	40%
To become part of the hunting tradition	61%	48%	40%	56%	45%	38%
To learn something new	53%	45%	34%	65%	59%	39%
Other	2%	4%	3%	3%	3%	4%
Total	2,734	2,848	625	2,167	2,046	289

There were no practical differences between “Haves” and “Have-Nots” in the species they intended to pursue their first year after taking HE, so we collapsed those findings into **Table 14**. Big game species were identified most frequently (86%) with turkey and small game running a distant second and third.

Table 14. Species respondents intended to hunt their first season (n=10,647).

Species	Percent
Big game (deer, elk, moose, pronghorn)	86%
Turkey	37%
Small game (rabbits, squirrel)	35%
Waterfowl (ducks, geese)	24%
Predators (coyotes, mountain lion, wolves, bobcat)	17%
Feral swine (hogs)	17%
Pheasant	16%
Furbearers (raccoon, muskrat, beaver, foxes)	7%
Black bear	6%
Other	4%
Forest grouse (ruffed, blue, spruce)	4%
Alligator	3%
Prairie grouse (sharptailed, prairie chicken)	2%

Barriers to hunting

Both “Haves” and “Have-Nots” agreed with surprisingly few reasons commonly cited as barriers to hunting (**Table 15**). In fact, a very high percentage of “Haves” disagreed that any of the posed barriers were constraints to their hunting. The most frequently (15%) cited barrier among “Haves” was that hunting was too expensive.

Finding a place to hunt was by far the most significant barrier cited by “Have-Nots” at 63%. Lack of social networks with existing hunting groups makes it difficult to gain entry on private land and in our interviews numerous participants talked about how to identify public land opportunities.

A second tier of barriers emerged about approximately one-third of the “Have-Nots”. These included “no one to go with” (37%), “cost” (36%), and “understanding regulations” (34%).

Table 15. Percentage of agreement or disagreement that various reason present barriers to participation between “Haves” and “Have-Nots”.

	Haves (n=5,865)			Have Nots (n=4,158)		
	Disagree	Neither	Agree	Disagree	Neither	Agree
I did not take hunter ed to go hunting, but for another reason	86%	7%	7%	77%	12%	11%
It was too difficult to find a place to hunt	84%	9%	8%	14%	23%	63%
It was too difficult physically	94%	5%	2%	76%	19%	6%
It was too difficult to find someone to go with	92%	6%	2%	35%	28%	37%
I do not wish to kill an animal	88%	9%	3%	73%	22%	6%
It was too expensive	72%	15%	13%	34%	31%	36%
It required too much equipment that I did not have	87%	9%	4%	48%	28%	25%
I did not feel safe	97%	2%	1%	80%	15%	5%
I find it difficult to understand the hunting regulations	90%	6%	4%	42%	24%	34%
I feel overwhelmed by all the aspects that go into hunting	93%	5%	2%	49%	26%	25%
I have no place to store the required gear	94%	4%	2%	69%	20%	11%
I do not know what to do with my harvest if I am successful	92%	4%	4%	61%	16%	23%

Firearms competence

We asked survey respondents to tell us how frequently they have used a variety of calibers commonly used for hunting, as well as different types of archery equipment. In addition to frequency of practice, we also asked them to rate their own proficiency. We focused on shooting skills because it is such a core competency for hunting independently. In general, “Haves” reported more frequent use of, and higher self-rated competency across all firearm and archery types than did “Have-Nots” (**Table 16**). Having said that, competency ratings were relatively high even among “Have-Nots” for centerfire and rimfire rifles. Respondents in each category were much less familiar and confident in their skills with archery equipment and muzzleloaders.

Table 16. Self-rated proficiency with various hunting weapons among “Haves” and “Have-Nots”.

Firearm Proficiency	Haves					Have Nots				
	Total	Novice	Intermediate	Advanced	Expert	Total	Novice	Intermediate	Advanced	Expert
Rimfire rifle (.17, .22)	3,936	14%	32%	36%	18%	2,727	18%	36%	32%	13%
Centerfire rifle (such as .223, .270, 30-06)	4,110	13%	32%	36%	19%	2,770	18%	36%	33%	13%
Handgun	3,686	17%	36%	32%	15%	2,622	23%	37%	28%	12%
Shotgun	4,450	16%	33%	34%	17%	3,160	23%	38%	27%	12%
Muzzleloader	1,541	42%	32%	18%	8%	820	52%	31%	12%	5%
Airgun	2,190	22%	33%	30%	16%	1,603	28%	35%	26%	11%
Crossbow	1,851	30%	38%	22%	11%	1,047	40%	38%	16%	6%
Compound bow	2,603	31%	36%	20%	12%	1,865	42%	34%	18%	7%
Traditional/Recurve bow	1,428	48%	34%	13%	6%	1,062	59%	30%	8%	3%

Interest in additional learning

The survey results indicate relatively high interest among all survey respondents for additional learning modules that build core hunting skills. The findings reinforce what we heard in interviews where people told us they were interested in both online and in-person events. These findings reinforce what has been noted in past HE research (Southwick 2021; Southwick and Case 2022). Most survey respondents were very or extremely interested in taking courses that addressed how to process and cook game, how to track game, how to field dress game, and how to scout for game (**Table 17**). Interest in these topics were especially strong among “Have-Nots” (**Table 18**).

Table 17. Interest in course topics among all respondents (n=9,636).

Course topic add-on	Not at all interested	Slightly interested	Moderately interested	Very interested	Extremely interested
How to process and cook the game I harvest	14%	12%	20%	28%	26%
How to process and cook the game I harvest	14%	12%	20%	28%	26%
How to field dress game	14%	13%	21%	26%	25%
How to find/scout for game	13%	13%	23%	27%	24%
Hunting techniques (e.g., game calling)	11%	14%	24%	28%	23%
Hunting regulations	10%	16%	28%	28%	18%
Hands on firearm and/or archery training	20%	17%	24%	22%	18%
Hunting etiquette (e.g., safe distance between hunters)	17%	18%	26%	22%	17%
Learning who to contact for questions or issues	17%	18%	28%	22%	15%
Elements to consider before taking an animal	16%	17%	28%	24%	15%
How to prepare for a hunt	18%	18%	27%	23%	15%
Hands on tree stand and other non-firearm safety training	25%	21%	26%	16%	13%
What gear to buy	23%	19%	27%	19%	12%

Table 18. Interest levels in various course topics among “Haves” and “Have-Nots”. The category “Very Interested” herein is the sum of “Extremely” and “Very Interested” from the original Likert; “Some Interest” the sum of “Slightly” and “Moderately Interested”; and “Not Interested” the same as “Not At All Interested”.

Classes	Haves (n=5,620)			Have Nots (n=4,016)		
	Not Interested	Some Interest	Very Interested	Not Interested	Some Interest	Very Interested
How to process and cook the game I harvest	18%	34%	49%	8%	31%	61%
How to track game (Before and after a shot is taken)	15%	36%	49%	6%	34%	60%
How to field dress game	19%	37%	45%	8%	32%	60%
How to find/scout for game	17%	38%	45%	7%	34%	59%
Hunting techniques (e.g., game calling)	15%	39%	46%	6%	36%	57%
Hunting regulations	13%	43%	44%	6%	45%	49%
Elements to consider before taking an animal	21%	43%	36%	10%	46%	44%
Learning who to contact for questions or issues	22%	45%	33%	10%	46%	44%
How to prepare for a hunt	23%	43%	34%	10%	46%	44%
Hunting etiquette (e.g., safe distance between hunters)	21%	42%	37%	10%	46%	44%
Hands on firearm and/or archery training	24%	39%	37%	15%	42%	43%
What gear to buy	28%	44%	28%	15%	50%	36%
Hands on tree stand and other non-firearm safety training	29%	44%	27%	19%	49%	32%

We also asked survey respondents to indicate the likelihood of their participation in future learning or networking opportunities using different approaches (**Table 19**). Overall, many participants suggested that what they learned in HE was insufficient, and they are interested in learning more about hunting. The most popular option among both “Haves” and “Have-Nots” for additional learning was to receive recommendations on reputable YouTube videos. This finding again reinforces interview results where DIYers, in particular, developed interest and pursued how-to information using YouTube. “Have-Nots” were statistically more likely than “Haves” to be interested in learning formats.

There also appears strong interest in in-person courses. Half of the “Haves” (51%) and 63% of the “Have-Nots” said they were likely to attend such courses.

The most unlikely choices for additional information were contacting the course instructor and contacting fellow course participants. Despite this response, providing a means for communications post-HE graduation could still be beneficial. Material and outreach offered by state agencies appear to be well received by “Haves” and “Have-Nots”.

There are subtle differences in programmatic preferences by age groups for both “Haves” and “Have-Nots”. **Table 20** shows the mean scores on likelihood of participating across options,

where -1 is unlikely and 1 is likely. Strength of likelihood is color coded. Older “Have-Nots” were most likely to prefer agency produced video content. “Have-Nots” aged 18-34 and 35–55 year-olds were most likely to engage with YouTube videos.

Table 19. The likelihood of participation in selecting programmatic options for additional learning among “Haves” and “Have-Nots”.

Programs	Haves (n=5,374)			Have Nots (n=3,858)		
	Unlikely	Neither	Likely	Unlikely	Neither	Likely
Contact hunter ed participants for help after the class	53%	19%	26%	42%	21%	36%
An online forum (such as a Facebook group) with other hunter ed students or hunters	42%	15%	39%	30%	16%	51%
Contact the instructor for help after the class	47%	19%	32%	34%	21%	43%
Access to state agency video training on various hunting topics	30%	15%	52%	18%	14%	64%
Follow-up classes on advanced topics	30%	17%	51%	18%	17%	63%
Recommendations on reputable YouTube or other videos to watch	22%	12%	62%	11%	10%	73%
Sign up for an email list or blog that covers hunting topics	40%	17%	40%	31%	18%	48%
Join an organization focused on hunting	36%	21%	40%	23%	22%	51%
Sign up for a group that helps to find hunting partners	55%	19%	24%	33%	21%	44%
Go hunting with a fellow hunter ed participant if asked	43%	18%	37%	27%	19%	53%
Local get-together with other hunters of all experiences	39%	18%	39%	26%	19%	53%
A field course/seminar where experts would teach hunting techniques	31%	17%	50%	16%	15%	66%

Table 20. Mean score rating of likelihood of participating in select program options for learning more about hunting among “Haves” and “Have-Nots” by age category (note- negative scores indicate unlikely to participate, positive scores indicate likely.)

Programs	Haves			Have Nots		
	18-34 (n=2265)	35-54 (n=2542)	55+ (n=567)	18-34 (n=1816)	35-54 (n=1789)	55+ (n=253)
Contact hunter ed participants for help after the class	-0.28	-0.28	-0.25	-0.10	-0.03	0.01
An online forum (such as a Facebook group) with other hunter ed students or hunters	-0.01	-0.02	-0.15	0.23	0.20	0.14
Contact the instructor for help after the class	-0.19	-0.14	-0.11	0.06	0.13	0.19
Access to state agency video training on various hunting topics	0.16	0.26	0.33	0.42	0.49	0.59
Follow-up classes on advanced topics	0.15	0.25	0.23	0.41	0.48	0.50
Recommendations on reputable YouTube or other videos to watch	0.43	0.39	0.35	0.65	0.61	0.50
Sign up for an email list or blog that covers hunting topics	-0.04	0.03	-0.01	0.11	0.22	0.15
Join an organization focused on hunting	0.10	0.03	-0.09	0.30	0.28	0.12
Sign up for a group that helps to find hunting partners	-0.25	-0.34	-0.43	0.12	0.10	0.02
Go hunting with a fellow hunter ed participant if asked	0.00	-0.09	-0.17	0.31	0.24	0.15
Local get-together with other hunters of all experiences	0.06	-0.02	-0.13	0.32	0.25	0.15
A field course/seminar where experts would teach hunting techniques	0.21	0.19	0.09	0.49	0.53	0.43

Building Social Support

Survey respondents were also asked about their willingness to exchange contact information with fellow hunter education course participants and instructors. Most participants said they **would not** be willing to do so (**Table 21**), though the percentages are still significantly high enough to consider offering this service. Keeping with results on many of the survey questions, “Have-Nots” (45%) have the greatest need for more support and were, therefore, more willing to exchange their contact information than were “Haves” (30%). The degree to which respondents were willing to exchange information varied by age (**Table 22**) and gender (**Table 23**). Willingness to exchange contact information declined with age, notably among 55 and older participants. Among “Have-Nots”, about half (49%) of men were willing to exchange contact information with class peers but only one-third of women were.

Table 21. Willingness to exchange contact information with fellow HE students and instructors among “Haves” and “Have-Nots”.

Exchange contact info	Exchange contact info	
	Haves	Have Nots
Yes	30%	45%
No	70%	55%
Total	5,477	3,939

Table 22. Differences in willingness to exchange contact information by age category among “Haves” and “Have-Nots”.

Exchange contact info	Haves			Have Nots		
	18-34	35-54	55+	18-34	35-54	55+
Yes	33%	29%	24%	45%	46%	36%
No	67%	71%	76%	55%	54%	64%
Total	2,328	2,576	573	1,851	1,830	258

Table 23. Differences in willingness to exchange contact information by gender among “Haves” and “Have-Nots”.

Exchange contact info	Haves		Have Nots	
	Male	Female	Male	Female
Yes	35%	24%	49%	35%
No	65%	76%	51%	65%
Total	3,393	1,661	2,901	761

Among those respondents who were willing to exchange contact information, “Haves” and “Have-Nots” had similar preferences for communication channels (**Table 24**); email was preferred over cell phones or social media. There were notably differences in channel preference by age (**Table 25**). In general, preference for email contact increased with age. Meanwhile, those willing to exchange information among 18–34 year-olds showed a strong preference for cell phones.

Table 24. Preferred means of communicating with hunter education participants among “Haves” and “Have-Nots”.

Way to exchange info with other participants	Haves	Have Nots
Cell phone	53%	53%
Social media	38%	38%
Email	57%	62%
Total	1,615	1,712

Table 25. Differences in the preferred means of communicating with HE participants among “Haves” and “Have-Nots” by age category.

Way to exchange info with other participants	Haves			Have Nots		
	18-34	35-54	55+	18-34	35-54	55+
Cell phone	65%	45%	32%	62%	46%	33%
Social media	42%	35%	31%	41%	37%	21%
Email	44%	67%	77%	52%	70%	79%
Total	756	731	128	810	816	86

Viability of Mentor Programs

The need for and importance of mentors - formal and informal - in the adoption process has long been recognized. Increasingly, R3 programs have attempted to connect people who may not be well connected to hunters in their lives with mentors. We asked respondents under what conditions would various credentialed mentors be acceptable (**Table 26**). Not surprisingly, the top choice among respondents was relying on a family member or friend to go hunting with. Personal recommendations of a mentor made by family, or friends were also selected by about two of three respondents. Programs matching new hunters with strangers garnered substantially less interest, even with qualifications added. For example, official government background checks satisfied only 16% of “Haves” and 22% of “Have-Nots”. Resumes noting mentor experience performed lower than background checks. Online reviews from others who have hunted with a mentor or state agency affiliate moved about four in ten of “Have-Nots” to be willing to hunt with someone else.

It was to be expected that women are less interested than men when it comes to being paired with a mentor outside of familial or friend networks (**Table 27**).

Table 26. Percentage of “Haves” and “Have-Nots” who said they would go hunting with a mentor under various circumstances.

Credentials	Haves	Have Nots
Personal relationship (family member, friend, or acquaintance)	82%	81%
Resume or document listing their hunting experience and relevant skills	12%	17%
Official government background check	16%	22%
Liability insurance certificate	6%	8%
Reviews from others who have been hunting with the person	33%	42%
A personal recommendation from your friend(s)/family	63%	67%
Affiliation with a state wildlife agency	29%	41%
Affiliation with a non-profit group (such as, Ducks Unlimited, National Deer Association)	21%	29%
I would be unwilling to go hunting with another hunter	8%	5%
Other	2%	3%
Total	5,129	3,718

Table 27. Differences in willingness to go hunting with a mentor by gender.

Credentials	“Haves”		“Have-Nots”	
	Male	Female	Male	Female
Personal relationship (family member, friend, or acquaintance)	84%	81%	82%	81%
Resume or document listing their hunting experience and relevant skills	14%	10%	19%	13%
Official government background check	15%	19%	21%	28%
Liability insurance certificate	6%	7%	7%	10%
Reviews from others who have been hunting with the person	35%	29%	45%	37%
A personal recommendation from your friend(s)/family	67%	57%	70%	59%
Affiliation with a state wildlife agency	30%	27%	42%	40%
Affiliation with a non-profit group (such as, DU, NDA)	24%	18%	31%	25%
I would be unwilling to go hunting with another hunter	7%	11%	5%	7%
Other	3%	2%	3%	3%
Total	3,291	1,611	2,821	738

Discussion

Creating an enduring hunter requires more than just taking a hunter safety class and buying some equipment. Most active hunters were exposed to hunting at a young age by their family. Further, whether someone continues hunting over time is very dependent on support networks. While there is interest from adults to start hunting, and states are putting great effort into adult learn-to-hunt programs, hunting is, by definition, a ““Haves” vs. “Have-Nots”” proposition. People who grow up in a hunting family, who have access to equipment and mentors are the hunting “Haves”. People trying to get into hunting without such support must overcome a host of challenges and put much greater individual effort into being successful. These are essentially the “Have-Nots”; this group needs greater attention from the R3 community if they are to become and remain committed, life-long hunters.

To create more independent hunters, we need to answer important questions: Are we creating hunters dependent upon others to hunt? When can we expect new hunters to become independent hunters? How can we properly budget for a mentoring effort without understanding how long mentoring is required to attain R3 goals of creating independent, confident hunters? Past research shows a primary reason people do not continue an activity is due to lack of social support. As identified in this new research, there are other factors involved in the adoption process – beyond being a “Have” or “Have-Not”. These findings show there is an opportunity to provide a scale within social support and improve the ORAM model to include other mechanisms (and different scales). Without these data, it will be difficult to address the exact mechanisms affecting permanent adoption. Future research should address these next steps.

The answers to these questions will enable states to properly evaluate current mentoring and education efforts and help the R3 community create life-long, independent hunters and consistent license buyers, many of whom could assist future recruitment efforts by passing on their new-found passion for hunting to others. The results of this study are meant to assist the ongoing effort to develop reliable answers and solutions.

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Appendix A. Survey instrument used for IHEA research.

Start of Block: Intro

This National study is being conducted by Southwick Associates and the International Hunter Education Association, on behalf of the \${e://Field/Agency_Name}. As a recent hunter education graduate, you are among a small group of people selected to participate in a brief survey about hunter education and hunting. We are very interested in your opinion, even if you are an experienced hunter and have taken more than one hunter education course. Since this is a National study, some of the answer options may not be applicable to your state.

Your contact information has been provided under strict confidentiality and security conditions. You will not receive solicitations for completing this survey and we will never pass along your information or response for any reason. Your responses will be kept strictly confidential and will not be shared with anyone outside of the research team.

The survey takes less than 10 minutes to complete, and you must be at least 18 years old to participate. Are you at least 18?

- Yes
- No, I am **under 18**

1. You said you were under 18. Is this correct?

- Yes
- No

End of Block: Intro

Start of Block: Hunter education background

2. When have you taken a hunter education course? We know some people take hunter education more than once, so please select all that apply.

- 2020 or more recently
- 2019 or before
- As an adult
- As a youth (under 18)
- I have never taken hunter education

3. When you took your **most recent** hunter education class was it ...

- Entirely online with no live interactions (no live discussions, video submissions, or lectures)
- Entirely online with some live interactions (some live discussions or lectures)
- Entirely in-person
- A mixture of online (no live interaction) and in-person
- A home study course, where you were mailed a packet of information

4. Did your hunter education course include a hands-on firearm handling component?

- Yes
- No

5. From the following list of possible reasons, which ones describe why you decided to take a hunter education course. Please select all that apply.

- It is a requirement to legally hunt or buy a hunting license in **my** state
- It is a requirement to legally hunt or buy a hunting license in **another** state
- I needed the class to obtain a firearm or concealed carry permit
- To learn more about firearm safety
- To learn more about hunting
- A family member wanted me to take it
- I joined or supported a friend/family member
- To earn additional preference points for big game draws
- I wanted **hands-on** experience with a firearm
- Other (please list): _____

6. After completing hunter education, did you intend to go hunting?

- Yes
- No
- Still wasn't sure

End of Block: HE background

Start of Block: Hunting Background

7. Had you ever been hunting **before** you took hunter education? Please select all that apply.
- I hunted before as a child
 - I hunted before as an adult
 - I had not hunted, but I had accompanied someone else who was hunting
 - I hunted under an 'apprentice' hunting license
 - No, I never went personally, or accompanied someone else
8. How many **total** years of hunting experience do you have?
- I have never been hunting
 - 1 – 2 years
 - 3 – 5 years
 - 6 – 10 years
 - More than 10 years
9. Why did you want to start hunting? Please select all that apply.
- To get outdoors
 - To harvest any legal animal
 - To obtain my own food
 - To be self-sufficient
 - To feel closer to nature
 - To harvest a trophy animal
 - To bond with friends or family who hunt
 - To challenge myself
 - To become part of the hunting tradition
 - To learn something new
 - Other (please list): _____
10. What species did you intend to hunt within the first year following hunter education? Please select all that apply.
- Small game (rabbits, squirrel)
 - Big game (deer, elk, moose, pronghorn)
 - Forest grouse (ruffed, blue, spruce)
 - Prairie grouse (sharp-tailed, prairie chicken)
 - Pheasant
 - Black bear
 - Waterfowl (ducks, geese)
 - Turkey
 - Feral swine (hogs)
 - Alligator
 - Predators (coyotes, mountain lion, wolves, bobcat)
 - Furbearers (raccoon, muskrat, beaver, foxes)
 - Other (please list): _____

11. Which statements best characterize your hunting participation **after** taking your **most recent** hunter education course? Please select all that apply.
- I hunted **alone** after hunter education and intend to go again
 - I hunted **with a mentor** after hunter education and intend to go again
 - I hunted **after** hunter education but **do not** intend to go again
 - I hunted **before** I took hunter education and **intend** to go again
 - I **did not** go hunting **before or after** hunter education
 - I **went** hunting **before** I took hunter education but **do not** intend to go again
12. **Not** including hunter education, how many hunting or outdoor-skills related classes have you taken from 2020 to 2023? Classes could include one-day or multi-day topics that are hunting, or outdoor-related.
- 0
 - 1
 - 2 - 5
 - More than 5
13. For the outdoor skills classes (**not** hunter education) you have taken, were they affiliated with ... Please select all that apply.
- State fish and wildlife agency
 - A non-governmental hunting or outdoor group
 - A private company, like a privately owned shooting range, or private individual
 - Online classes through a University or continuing education
 - Other (please list): _____
14. What's the likelihood you will take any type of hunting or outdoor skills-related class in the next year?
- Very unlikely
 - Unlikely
 - Neither
 - Likely
 - Very likely

End of Block: Hunting Background

Start of Block: Hunting interest

15. How strongly do you agree or disagree with the following statements regarding your experience or perceptions of hunting?

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I did not take hunter education to go hunting, but for another reason	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was too difficult to find the animals I was hunting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was too difficult to find a place to hunt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was too difficult physically	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was too difficult to find someone to go with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not wish to kill an animal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was too expensive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It required too much equipment that I did not have	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did not feel safe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it difficult to understand the hunting regulations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel overwhelmed by all the aspects that go into hunting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have no place to store the required gear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not know what to do with my harvest if I am successful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please list):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. You said you did not feel safe. In a few words, could you please tell us why?

17. Please rate your level of interest in learning more about the following aspects of hunting.

	Not at all interested	Slightly interested	Moderately interested	Very interested	Extremely interested
Hands on firearm and/or archery training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hands on tree stand and other non-firearm safety training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What gear to buy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to prepare for a hunt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to find/scout for game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunting techniques (e.g., game calling)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunting etiquette (e.g., safe distance between hunters)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elements to consider before taking an animal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to field dress game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to track game (Before and after a shot is taken)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to process and cook the game I harvest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning who to contact for questions or issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunting regulations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. Do you have friends or family that you can contact to answer hunting-related questions?

- Yes
- No

19. Do you have friends or family that you can hunt with?

- Yes
- No

20. What, if anything would change your interest or willingness to go hunting in the future?

End of Block: Hunting interest

Start of Block: Hunter education programs

21. How likely or unlikely would you be to use the following additions to a hunter education program if they were offered:

	Very unlikely	Unlikely	Neither	Likely	Very likely	Already available
Contact hunter education participants for help after the class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An online forum (such as a Facebook group) with other hunter education students or hunters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contact the instructor for help after the class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to state agency video training on various hunting topics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Follow-up classes on advanced topics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recommendations on reputable YouTube or other videos to watch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sign up for an email list or blog that covers hunting topics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Join an organization focused on hunting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sign up for a group that helps to find hunting partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go hunting with a fellow hunter education participant if asked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local get-together with other hunters of all experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A field course/seminar where experts would teach hunting techniques	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. Would you be willing to exchange your contact information with other hunter education participants to communicate about hunting?

- Yes
- No

23. What is your preferred way of exchanging information with other hunter education participants.

Please select all that apply.

- Cell phone
- Social media
- Email

24. Which of the following characteristics or credentials of another hunter would increase your willingness to go hunting with them? Please select up to 5.

- Personal relationship (family member, friend, or acquaintance)
- Resume or document listing their hunting experience and relevant skills
- Official government background check
- Liability insurance certificate
- Reviews from others who have been hunting with the person
- A personal recommendation from your friend(s)/family
- Affiliation with a state wildlife agency
- Affiliation with a non-profit group (such as, Ducks Unlimited, National Deer Association)
- I would be unwilling to go hunting with another hunter
- Other (please list): _____

25. Please tell us how frequently you have used the following hunting equipment:

	Never used	Very limited use (1-3 times)	Used some (4-10 times)	Used extensively (more than 10 times)
Rimfire rifle (.17, .22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Centerfire rifle (such as, .223, .270, 30-06)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Handgun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shotgun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muzzleloader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Airgun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Crossbow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compound bow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Traditional/Recurve bow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. Please rate your level of proficiency using the following types of hunting equipment:

	Novice	Intermediate	Advanced	Expert
Rimfire rifle (.17, .22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Centerfire rifle (such as, .223, .270, 30-06)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Handgun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shotgun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muzzleloader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Airgun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Crossbow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compound bow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Traditional/Recurve bow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. In thinking about hunter education, the other outdoor classes you may have taken, and your level of experience, do you feel like you are ready to hunt by yourself without additional assistance from another person?

- Yes
- No

End of Block: HE programs

Start of Block: South Carolina

28. Did you take hunter education as part of, or in order to, participate in a larger program, such as a SCDNR shooting sport, Camp Wildwood or other conservation based education program?

- Yes
- No

29. Was this program offered through SCDNR?

- Yes
- No
- I don't know

End of Block: South Carolina

Start of Block: Demographics

30. Have you moved to a different state since completing hunter education?
- Yes
 - No
31. Since moving, have you continued hunting, or plan to continue hunting?
- Yes
 - No
32. What is your gender?
- Male
 - Female
 - I prefer to self-identify
 - Prefer not to say
33. Are you of Spanish/Hispanic origin?
- Yes
 - No
34. Are you ... (Please select all that apply)
- White
 - Black or African American
 - Native Alaskan or Native American
 - Asian
 - Pacific Islander
 - Other
 - Prefer not to say
35. What is the highest level of education you have completed?
- Some high school or less
 - High school diploma or GED
 - Some college, but no degree
 - Associates or technical degree
 - Bachelor's degree
 - Graduate or professional degree (MA, MS, MBA, PhD, JD, MD, DDS etc.)
 - Prefer not to say
36. What year were you born? Please enter all 4 digits.
-

End of Block: Demographics
