

The Relationship between E-cigarette Information Seeking and Trusted Sources of Information on E-cigarettes and Respective Use

Patrick Daly,¹ Mirandy Li, BS,² Ty-Runet Bryant, MPH,² Michael D. Celestin, Jr., Ph.D.²

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Introduction

- Electronic cigarette (e-cigarette) use can lead to nicotine addiction, acute lung and respiratory illness, and death^{1,2}
- In 2018, e-cigarette use rose to 3.2% among US adults, and 7.6% among adults aged 18-24 years old³
- A better understanding of factors related to decisions about the use of e-cigarettes is warranted
- Health information seeking behavior correlates with improvements in exercising and eating habits,⁴ and trust in health providers and government agencies correlates with improvements in other health behaviors⁵
- Previous research on health information seeking and e-cigarette use identified it as a predictor of use among non-smokers,⁶ though not the type of information sought nor the source of information
- This study examined the relationship between e-cigarette use and e-cigarette information seeking behavior and trust in sources of information on e-cigarettes.

Methods

- Design:** Cross-sectional analysis of data from the Health Information National Trends Survey (HINTS) Federal Drug Administration (FDA) Cycle 2 (2017)
- Participants:** Participants included 1,736 civilian, non-institutionalized, US residents 18 and older, surveyed using a one-time mail questionnaire.
- Measures:**
 - Outcome Measure:** Do you now use an e-cigarette every day, some days, or not at all?
 - Predictive Measures:**
 - Have you ever looked for information on electronic cigarettes from any source? (Yes or No) If yes,
 - What kinds of information on electronic cigarettes have you ever looked for from any source? (i.e., health effects, quitting or reducing smoking, list of chemicals, cost/coupons, instructions/tutorials, where to buy products, how to get free samples, and reviews/ratings of brands)
 - In general, how much would you trust information about the health effects of electronic cigarettes from each of the following? (i.e., health providers, family or friends, government health agencies (e.g., FDA, NIH, or CDC), health organizations or groups (e.g., American Cancer Society), religious organizations and leaders, tobacco companies, and electronic cigarette companies)
- Analysis:** Chi-square analysis determined differences between current e-cigarette users and non-users

Results

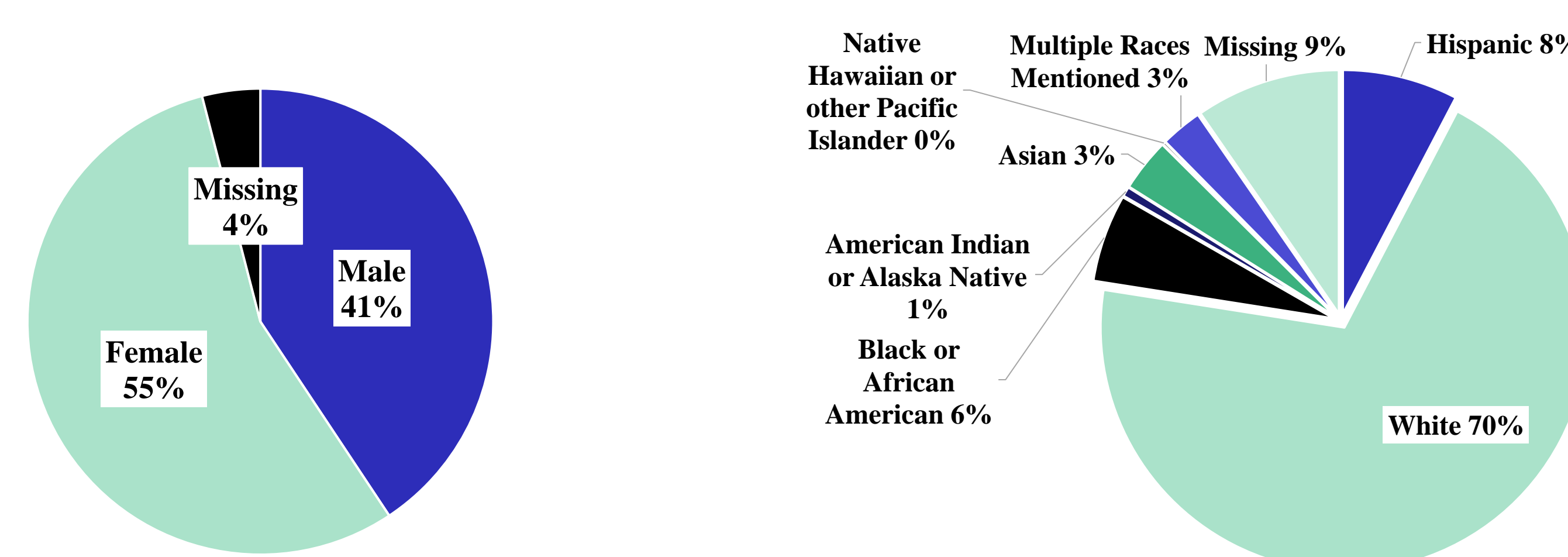


Figure 1. Gender

Figure 2. Race

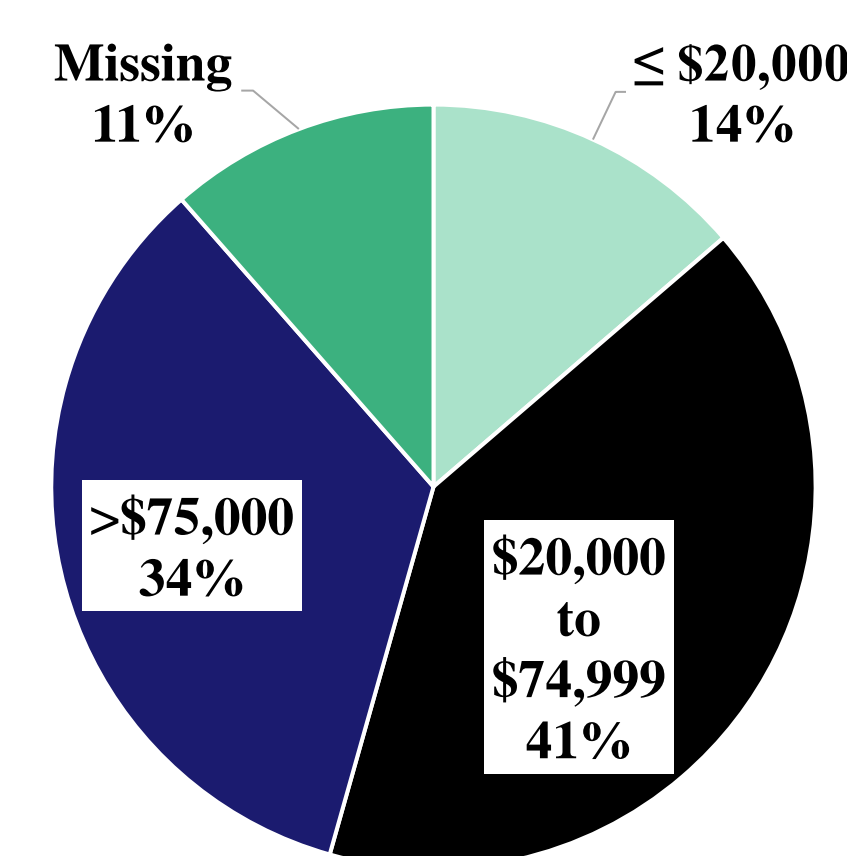


Figure 3. Income

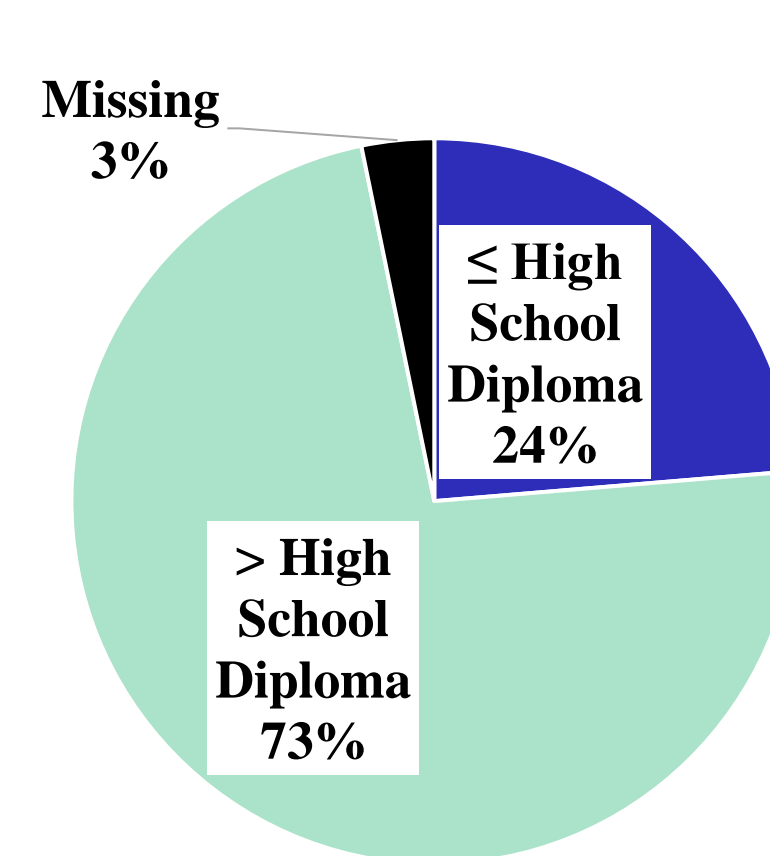


Figure 4. Education

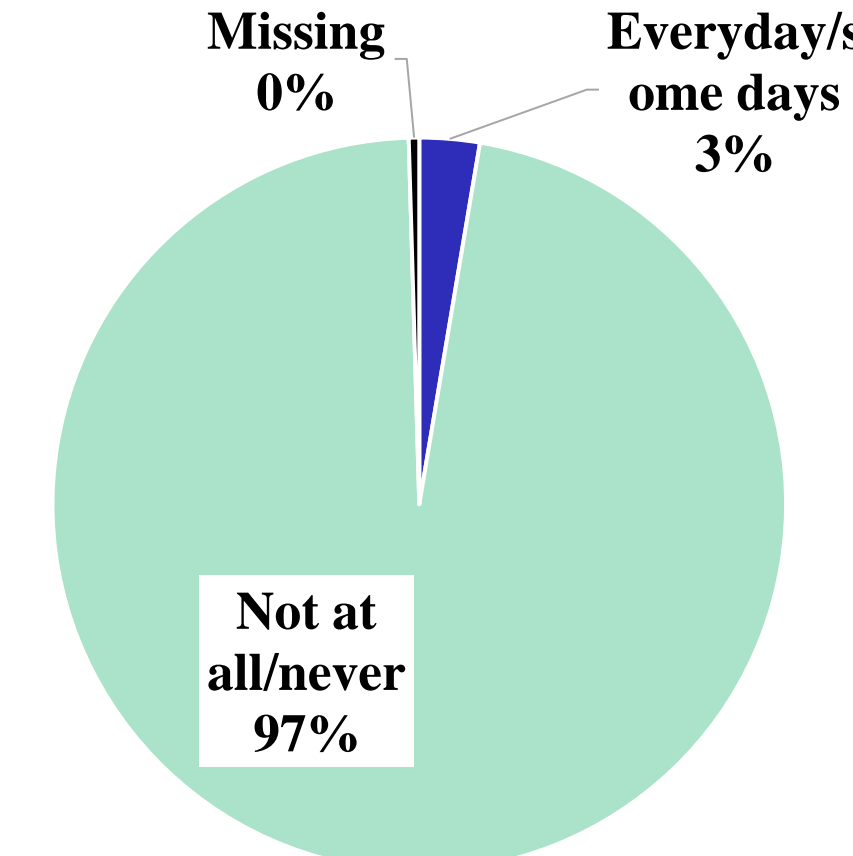


Figure 5. E-Cigarette Use

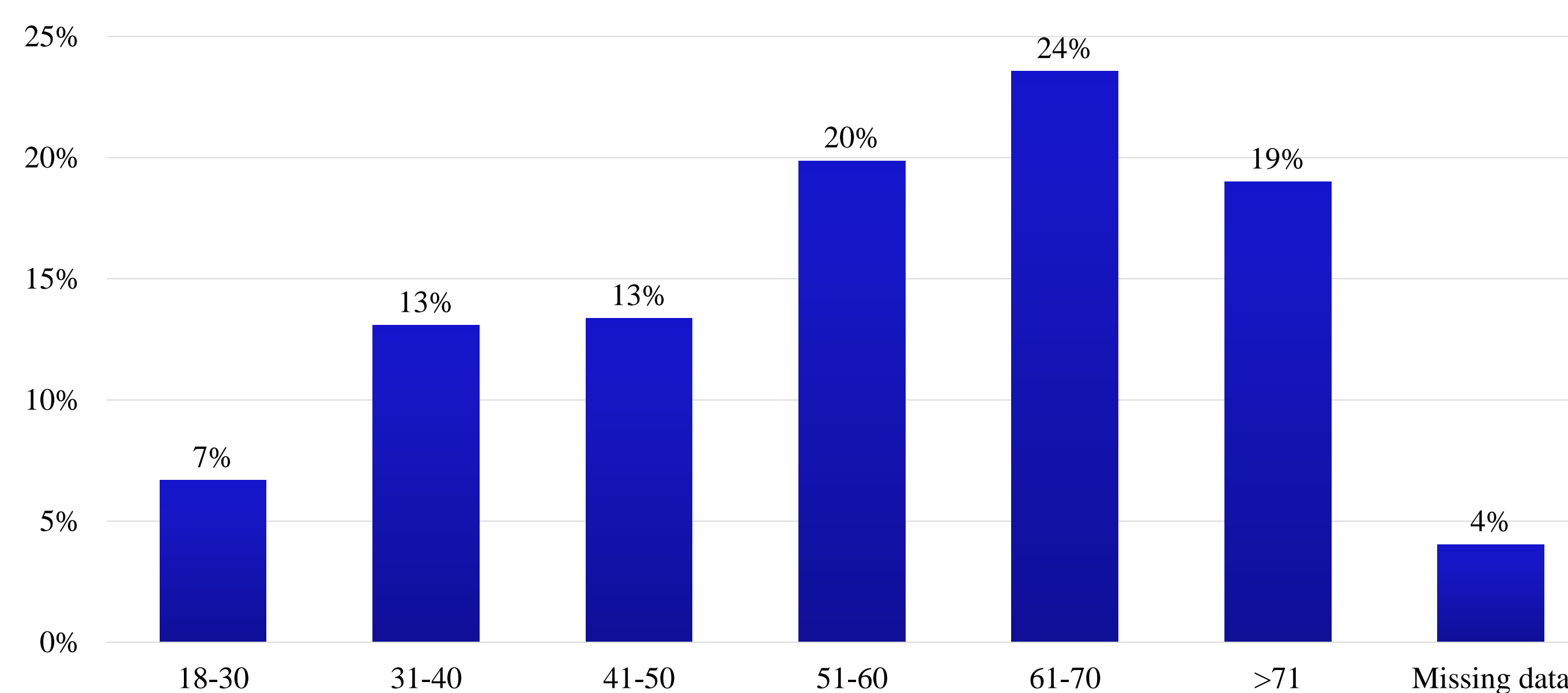


Figure 7. Age of Participants

Results(Cont.)

Table 1. E-cig information seeking between users and non-users

Have you ever looked for information on e-cigarettes from any source?	Current E-Cigarette User	E-Cigarette Non-Users	p-value
Yes	40	161	p<0.001*
No	5	1534	

Table 2. Type of information sought between users and non-users

What kinds of information on e-cigarettes have you ever looked for from any source?	Current E-Cigarette User	E-Cigarette Non-Users	p-value
Health Effects			
Selected	27	121	p=.436
Not Selected	11	36	
Using e-cigarettes to quit or reduce smoking			
Selected	26	81	p=0.061
Not Selected	12	76	
List of chemicals in electronic cigarettes			
Selected	15	64	p=.884
Not selected	23	93	
Cost/Coupons			
Selected	17	41	p<0.05
Not Selected	21	116	
Instructions/Tutorials			
Selected	10	13	p<0.002
Not Selected	28	144	
Where to buy			
Selected	18	40	p<0.01
Not Selected	20	117	
How to get free samples			
Selected	7	16	p=.158
Not selected	32	141	
Reviews/Ratings of brands			
Selected	13	33	p=.086
Not selected	25	124	

Table 3. Trust in sources between users and non-users

How much would you trust information about the health effects of e-cigarettes from each of the following?	Current E-Cigarette User	E-Cigarette Non-Users	p-value
A doctor/pharmacist/health care provider			
A lot/Some	37	1396	P=.576
Not at all/A little	8	242	
Family or friends			
A lot/some	19	719	p=.782
Not at all/a little	26	904	
Government health agencies			
A Lot/Some	28	1227	P<.05
Not at all/A little	17	407	
Health organizations or groups			
A Lot/Some	30	1242	p=.134
Not at all/A little	15	385	
Religious organizations and leaders			
A Lot/Some	9	420	p=.376
Not at all/A little	36	1205	
Tobacco companies			
A Lot/Some	8	460	p=.112
Not at all/A little	27	1176	
Electronic cigarette companies			
A Lot/Some	14	153	p<0.001
Not at all/A little	31	1485	

Discussion/Conclusions

- Previous research has found e-cigarette information seeking behavior to be associated with use;⁵ these results provide greater insight into the specific types of information that users are seeking relative to nonusers
- These results can inform targeted prevention and cessation interventions to discourage e-cigarette use
- With e cigarette users demonstrating both less trust in government agencies, and more trust in e-cigarette companies, addressing this misplacement of trust would aid users in accessing more reliable information

References

- [1]Blagev DP, Harris D, Dunn AC, Guidry DW, Grissom CK, Lanspa MJ. Clinical presentation, treatment, and short-term outcomes of lung injury associated with e-cigarettes or vaping: a prospective observational cohort study. *Lancet*. 2019;394(10214):2073-2083. doi:10.1016/S0140-6736(19)32679-0
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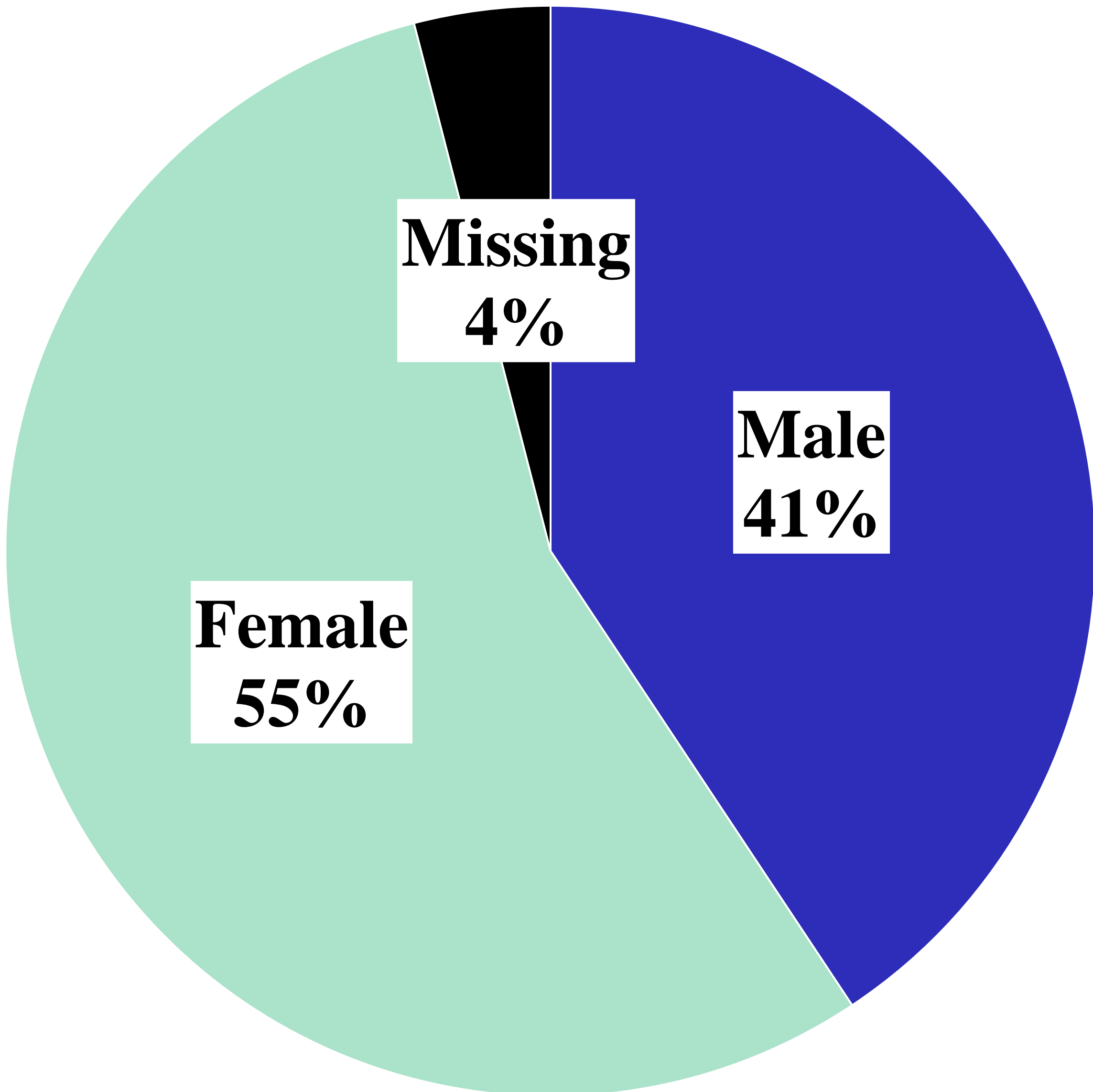


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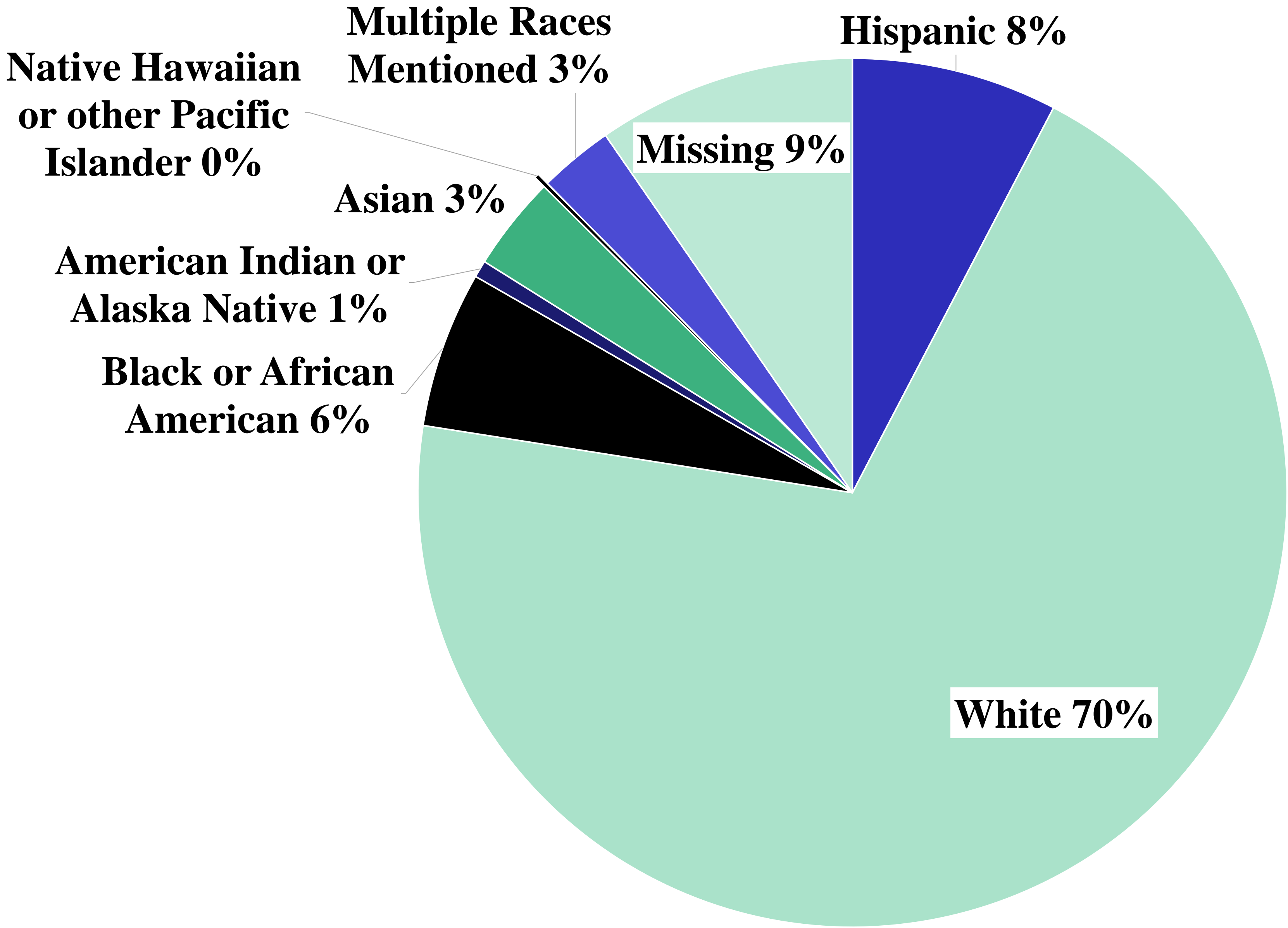


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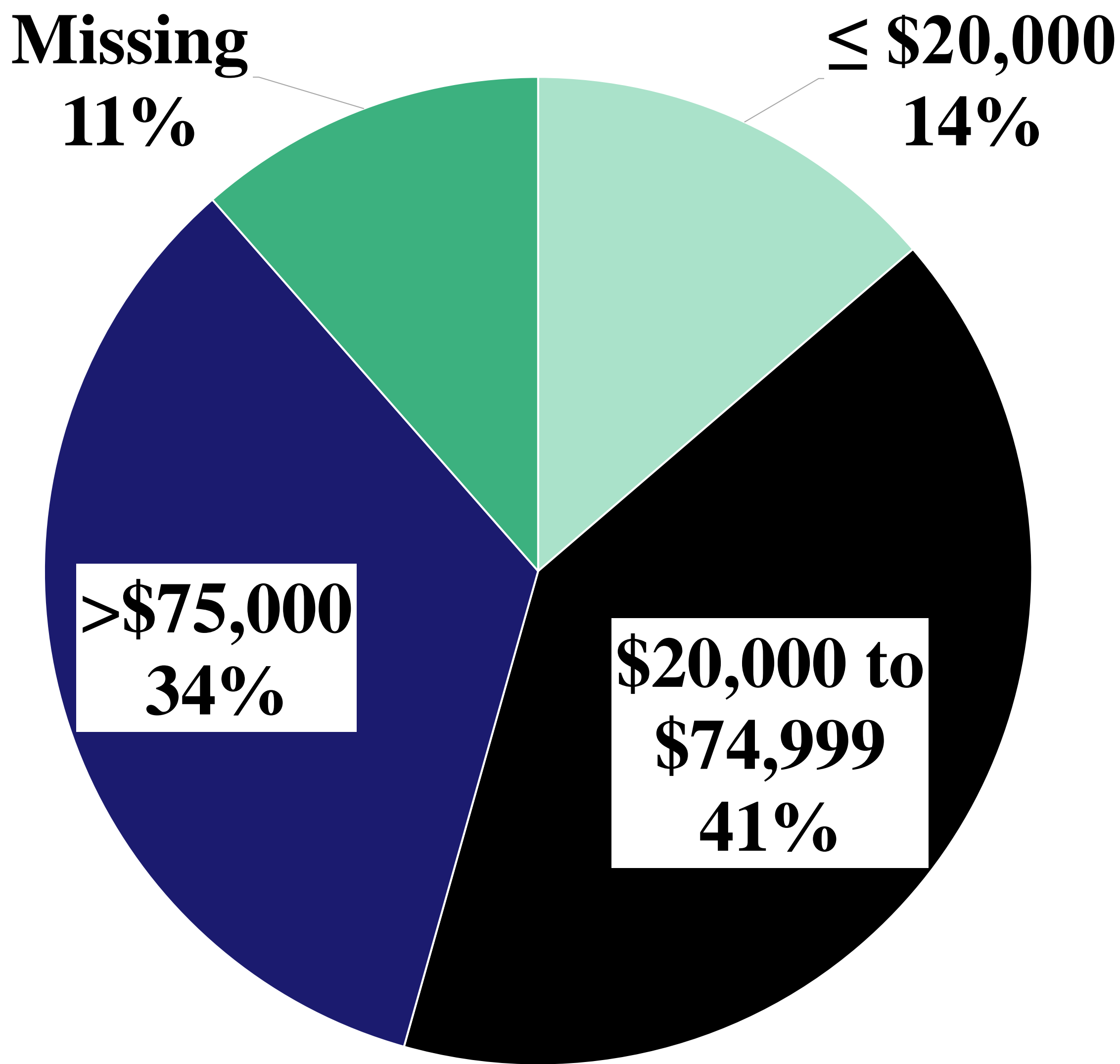


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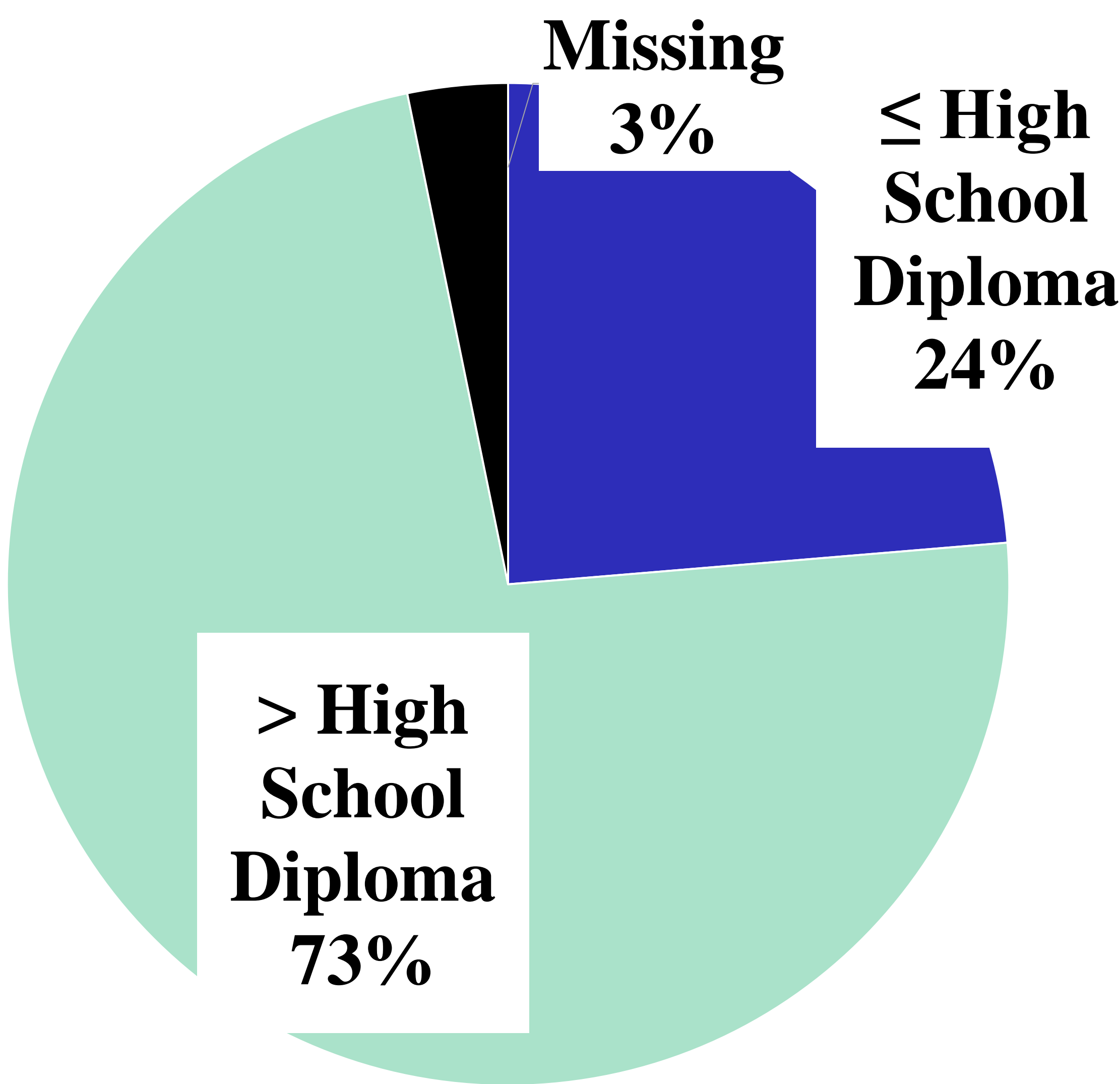


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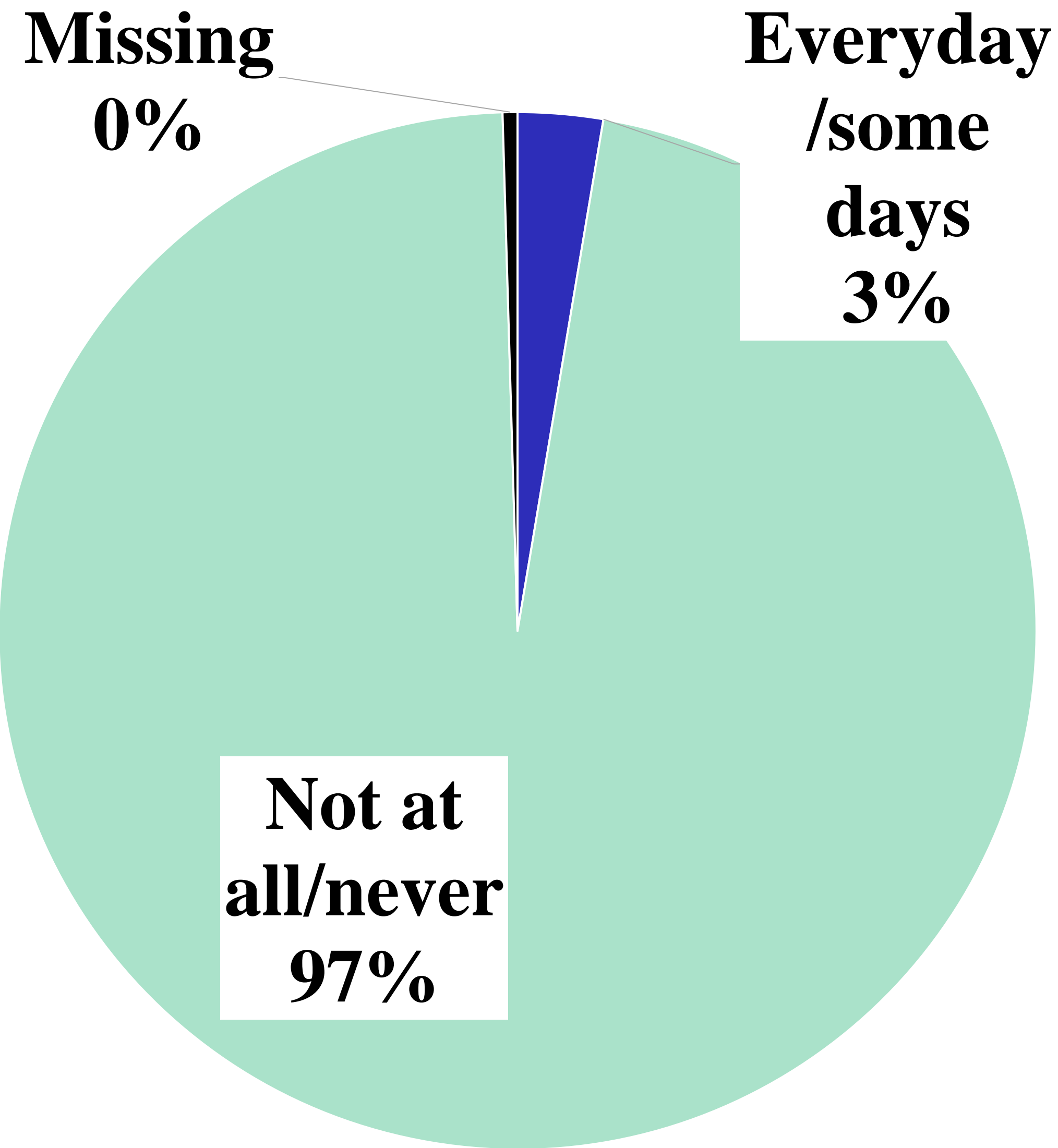


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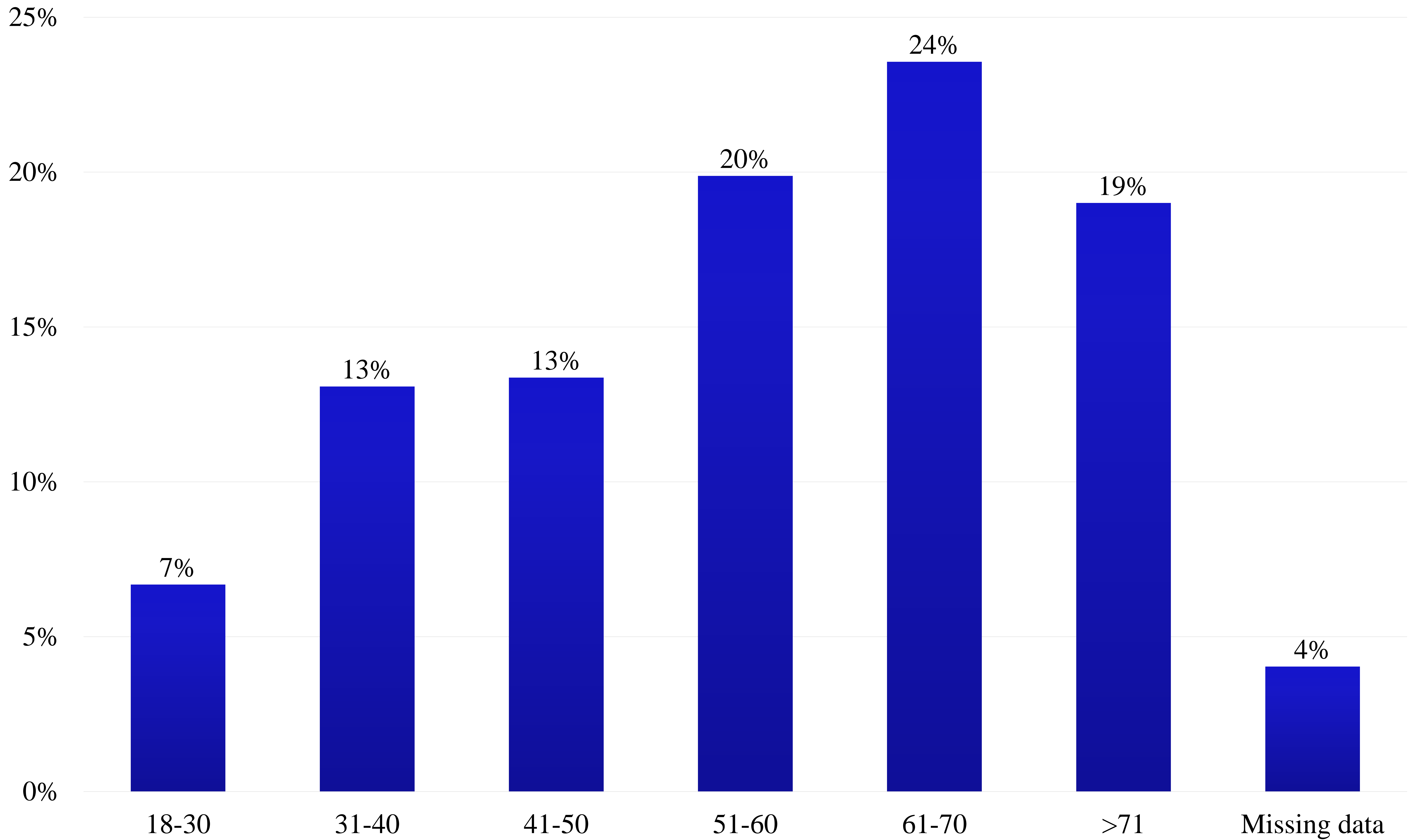


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