



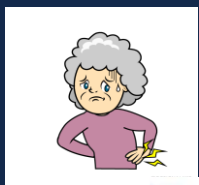
OPTIMUM: Dietary Supplements and Natural Product Use for Chronic Pain in a Low Back Pain Cohort

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What is OPTIMUM?

- A group-based pain management program for patients with chronic low-back pain
- Modeled on the Mindfulness-Based Stress Reduction Program
 - 8-week program + 12 month follow up
- Ask participants about pain medication use within study
- Added survey to comprehensively capture dietary supplement and natural product use
 - During Month 1



Participant has chronic low back pain



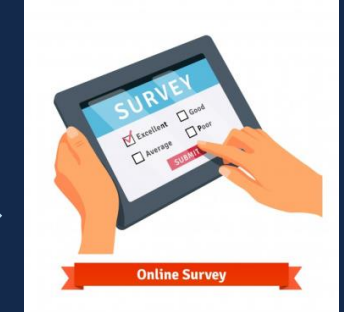
Participant comes across the study through a flyer/provider recommendation



Participant is interested and consents to take part in the study



Participant undergoes screening procedures and is eligible

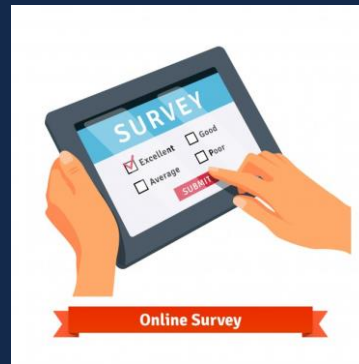


Participant completes baseline surveys

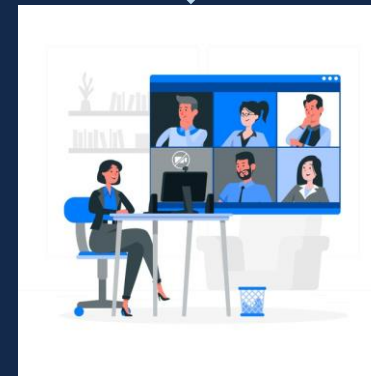
By chance



Participant responds to the study team periodically and stays in the study for 12 months. Also gets compensated for their time



Participant completes surveys monthly, after 8 weeks, 6 months and 12 months



Participant gets group pain management program for 8 weeks



Participant gets usual primary care by provider



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What are DSNPs?

- **Dietary Supplements** -
“products taken by mouth that contain a "dietary ingredient” (fda.gov)
- **Natural Products** -
Cannabidiol (CBD), Cannabis, Kratom, or any other natural substance used by patients not classified as a dietary supplement





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What are DSNPs?



Topical (e.g., creams)



DS (pills, capsules, teas)



CBD/Cannabis



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Why Collect DSNP Use?

- DSNPs marketed and recommended for pain treatment
- Little known about prevalence of use in patients for low back pain





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Why Collect DSNP Use?

- Understand the relationship between pain medication use and DSNP use



- Examine characteristics of participants utilizing DSNPs for their pain





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Methods



1. Complete Interview: Phone or on Zoom
2. Retrieve Label: Participant takes photo of product via phone
 - Sent via text or email
 - View label on zoom call
3. Verify Label
 - NIH Dietary Supplement Label Database
 - Google Search

The screenshot displays the NIH Dietary Supplement Label Database interface. At the top, the NIH logo and 'National Institutes of Health Office of Dietary Supplements' are visible, along with navigation links for 'About | Glossary | Contact'. The main heading is 'Dietary Supplement Label Database'. Below this is a navigation bar with 'Home', 'Search', 'Browse', 'Resources', and 'API Guide'. The 'Products' section is highlighted in a dark blue bar. The main content area shows a search result for 'Vitamin D3-5000 IU'. On the left, a sidebar lists navigation options: 'Product Overview', 'General Information', 'Product Classification', 'Label Information', 'Supplement Facts', 'Label Statements', and 'Brand Information'. The main product page features a 'Product: Vitamin D3-5000 IU' heading, a product image, and a 'VIEW FULL SIZE' button. Below the image is an export option: 'Export all information on this page as: Zip of CSV files | XLSX | JSON'. The 'Product Overview' section is partially visible at the bottom.

Importance of Novel Interviewing Strategy

- **Gold Standard-** View and record supplements during a home visit interview.
- New technologies make valid data capture possible without a home visit.
- Additional technology could streamline the process and integrate with the EHR.



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Interview Questions

Other than medications, what have you used to manage your pain in the past 30 days?

Have you taken any topical products for chronic pain, such as capsaicin, arnica, lavender, or castor oil?

Have you taken any vitamin supplements like Vitamin B or Vitamin D?

Have you used any CBD or natural cannabis products? Are you using Kratom?

Have you taken any products containing herbal or botanical ingredients like ginkgo or ginseng? Botanicals may also include medicinal teas.

Topicals (Cream, Roll On Gel)



Kratom, CBD, Cannabis



Vitamins and Minerals





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Preliminary Results



Our Interview Sample

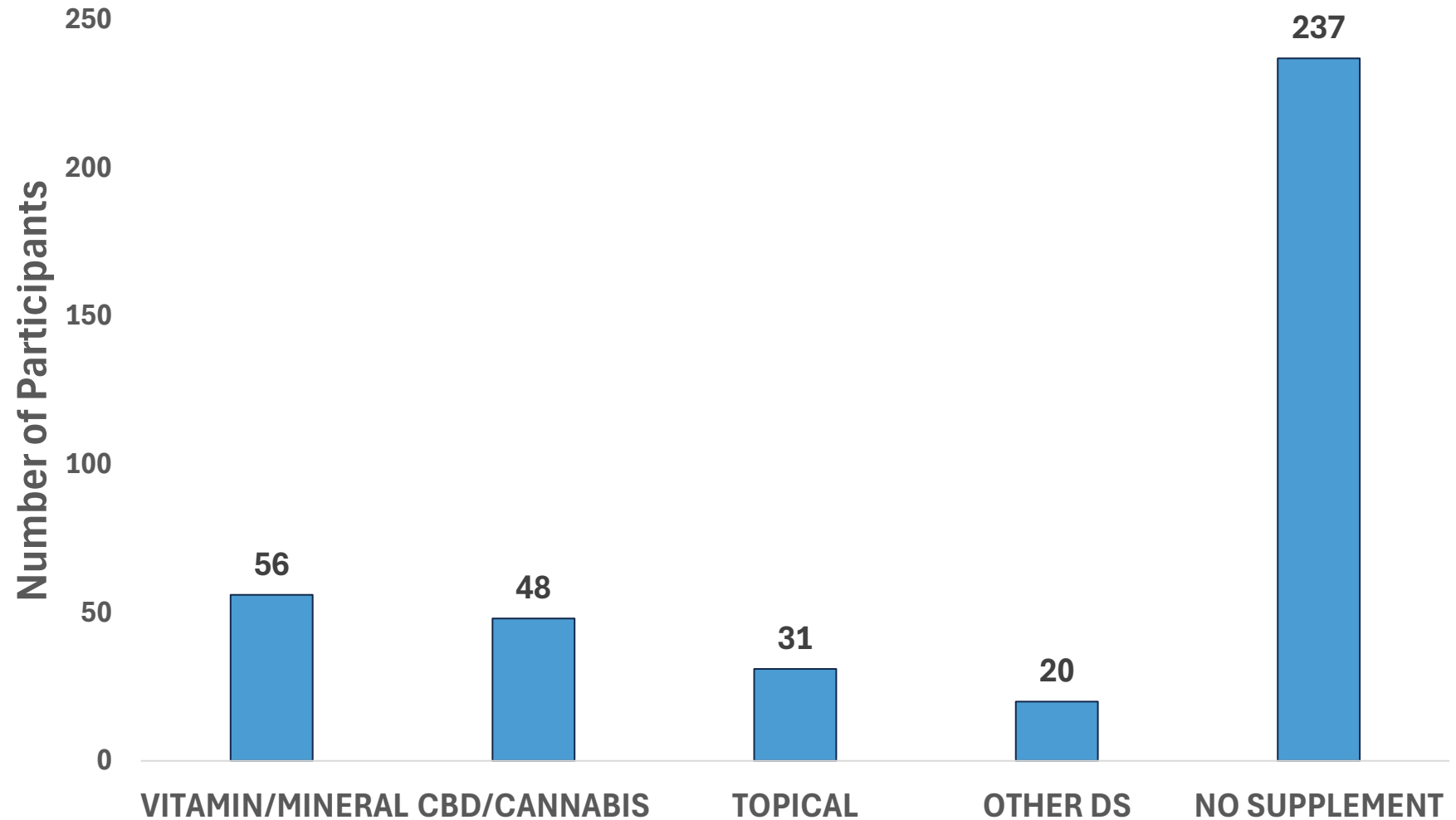
AGE	Mean=53 years old
SEX	Female (69%)
RACE	White (48%) and Black/African American (45%)
EDUCATION	Associates degree holders or less (61%)
INCOME	Lower income (51% <\$50,000)
EMPLOYMENT	Not employed (55%)



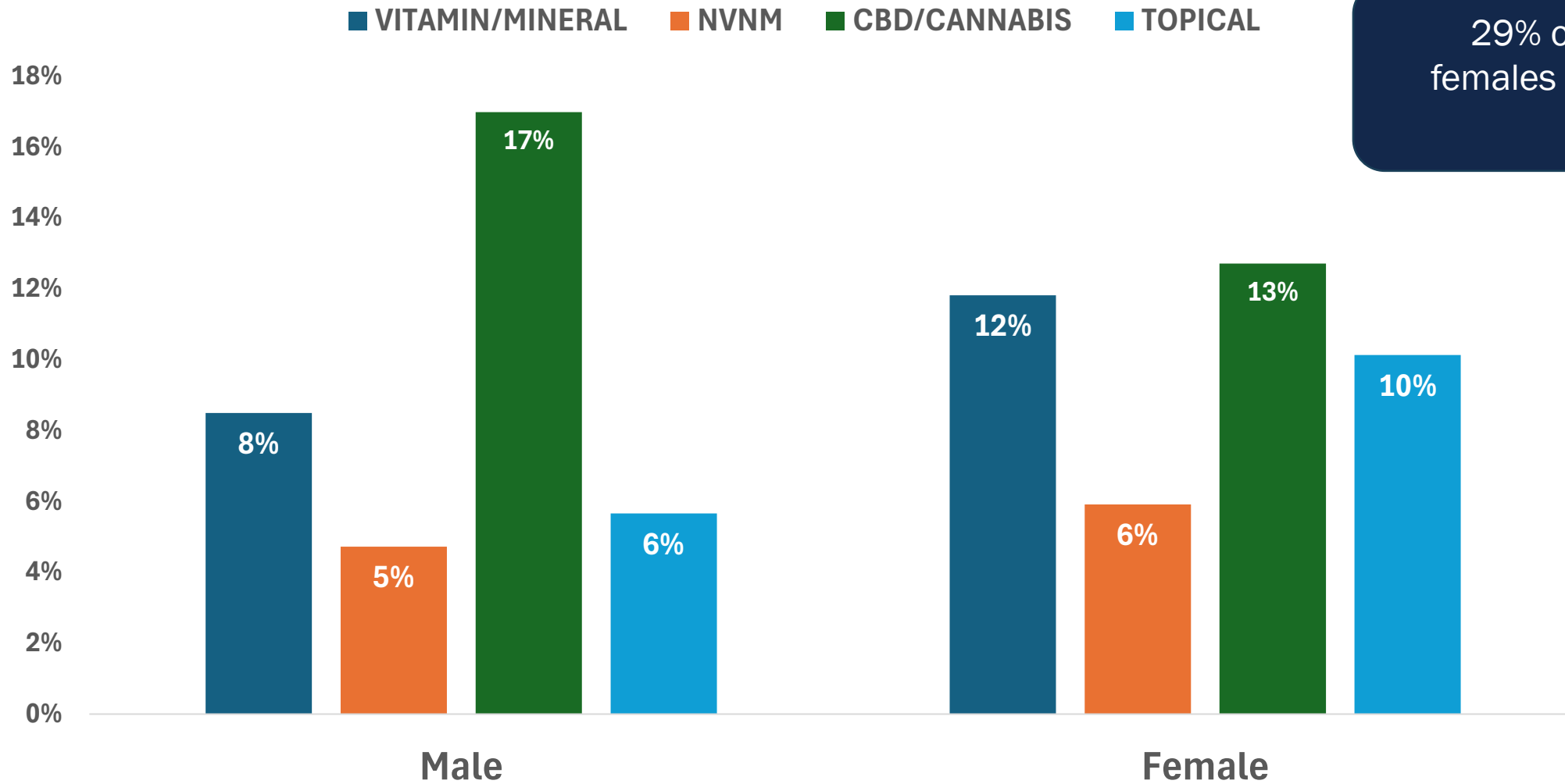
Distribution

N= 344 interviews

- Vitamin/Mineral - 16%
- CBD/Cannabis- 14%
- Topicals -9%
- Other DSNP- 6%
- No DSNP- 69%



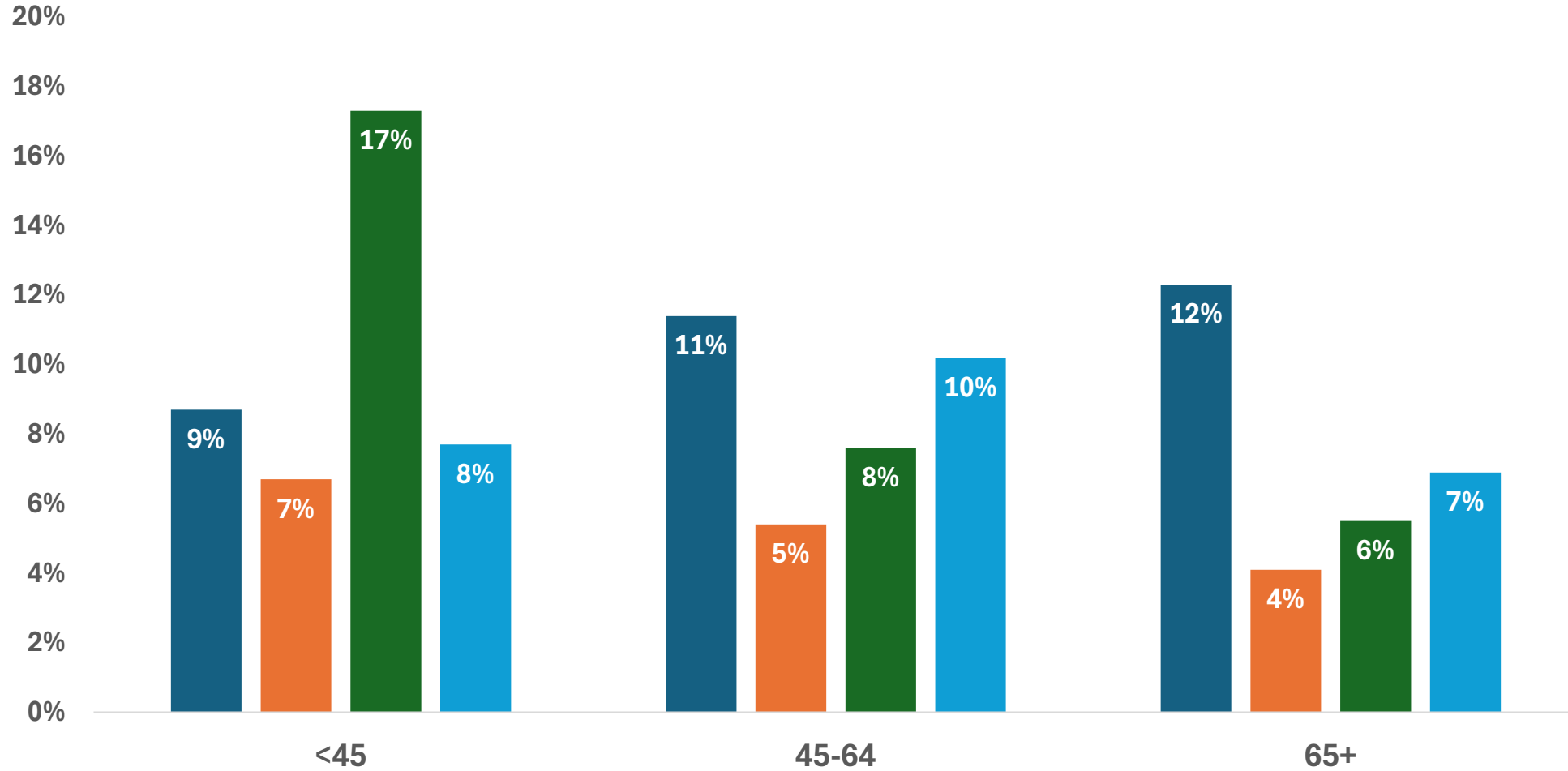
DSNP Use by Sex



29% of males and females reported using DSNP

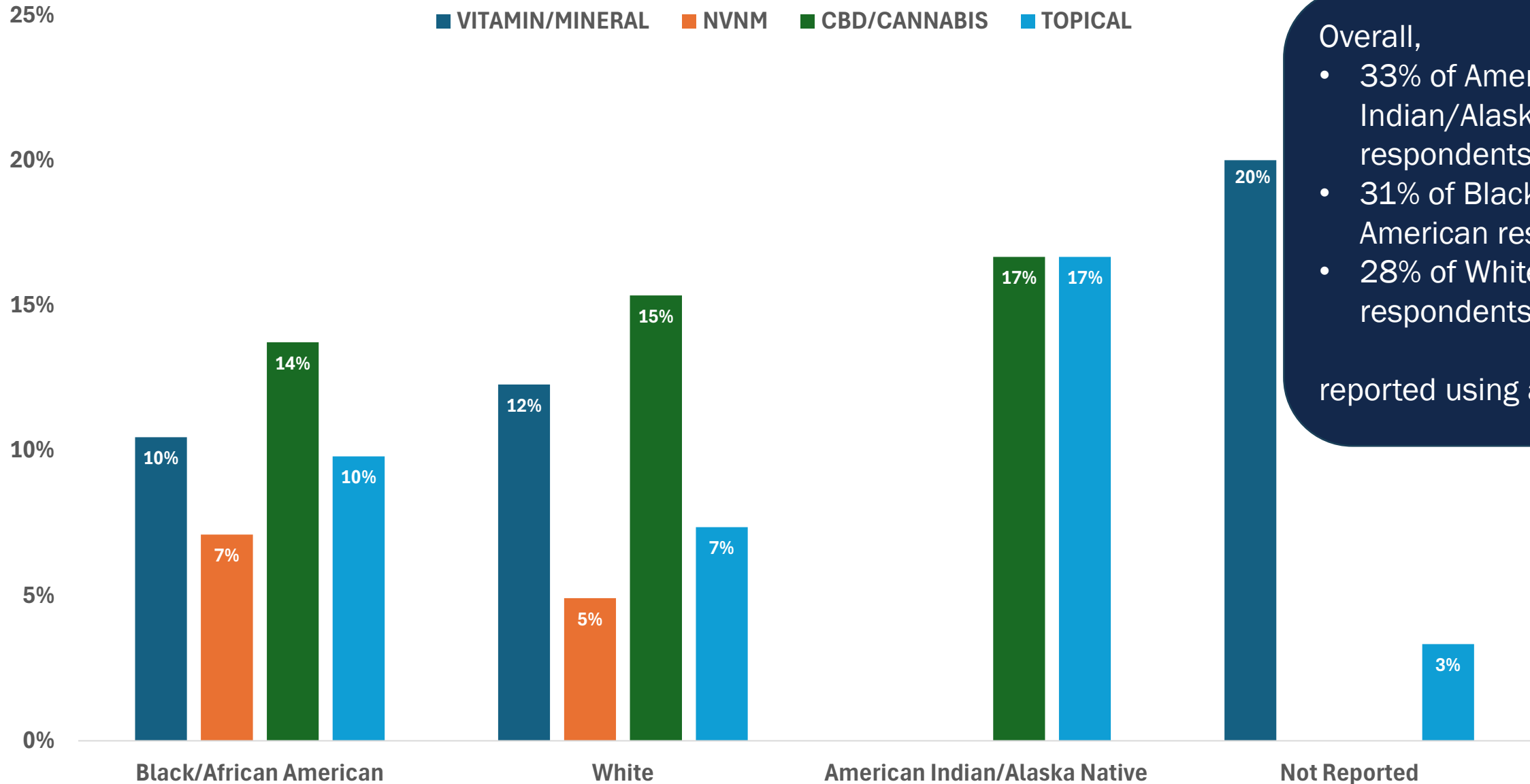
DSNP Use by Age

VITAMIN/MINERAL NVNM CBD/CANNABIS TOPICAL



Age	Any DSNP
<45	32%
45-64	31%
65+	19%

DSNP Use by Race



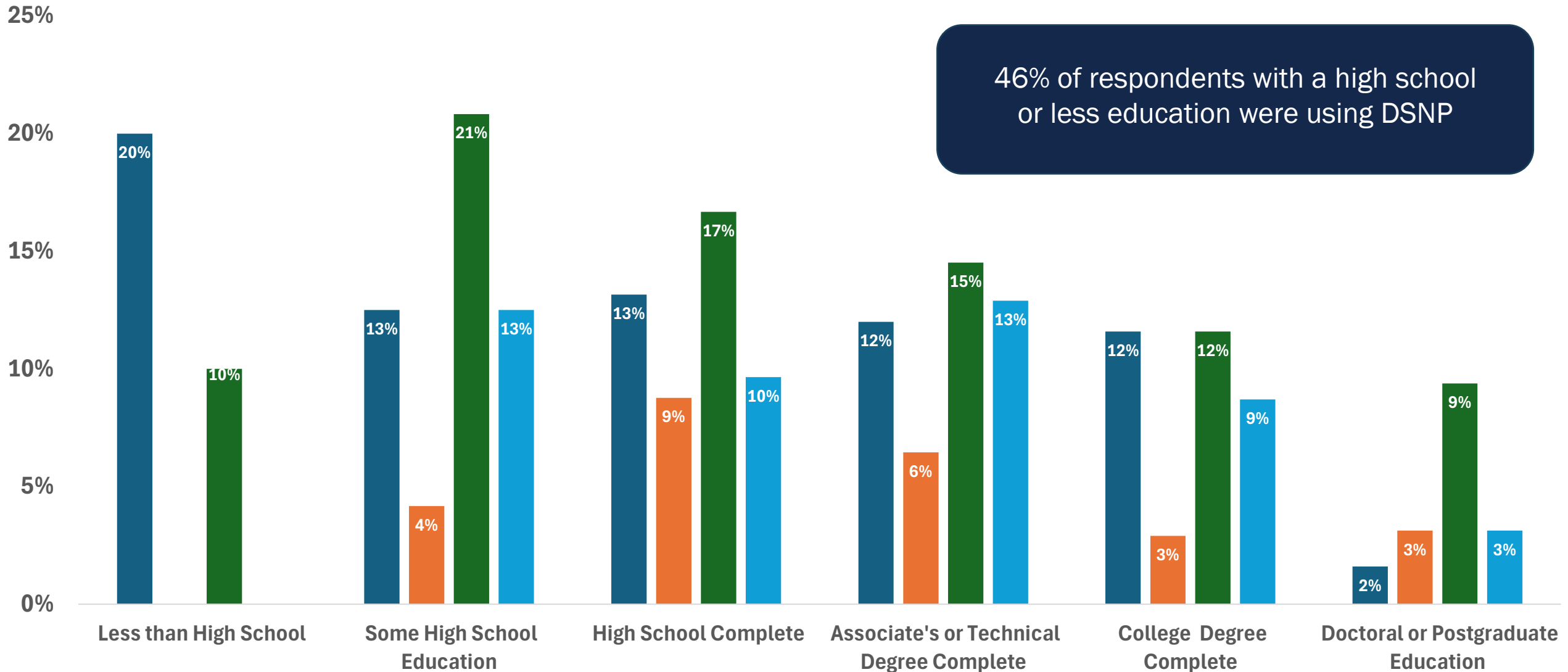
Overall,

- 33% of American Indian/Alaska Native respondents
- 31% of Black/African American respondents
- 28% of White respondents

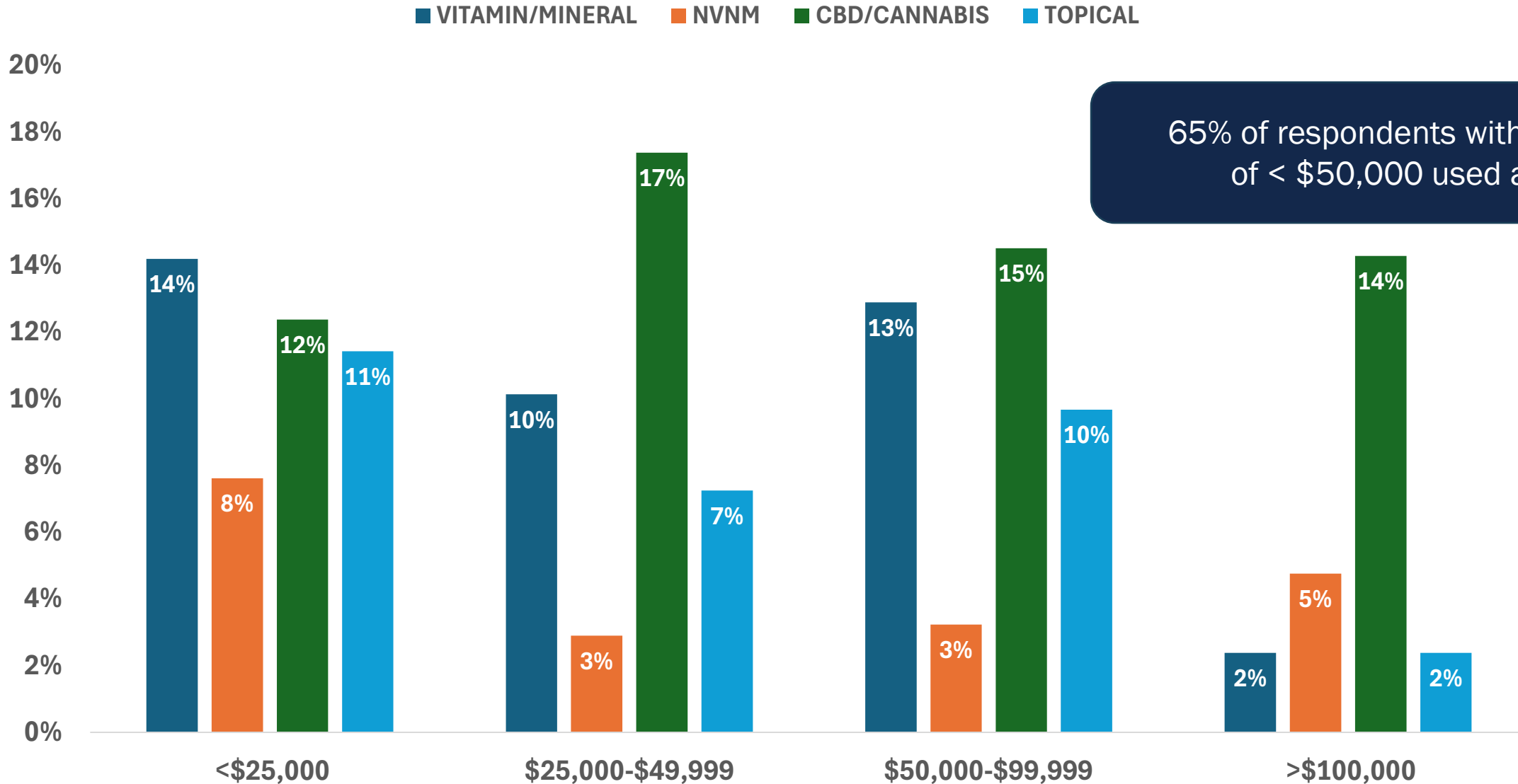
reported using a DSNP

DSNP Use by Education

VITAMIN/MINERAL NVNM CBD/CANNABIS TOPICAL



DSNP Use by Income

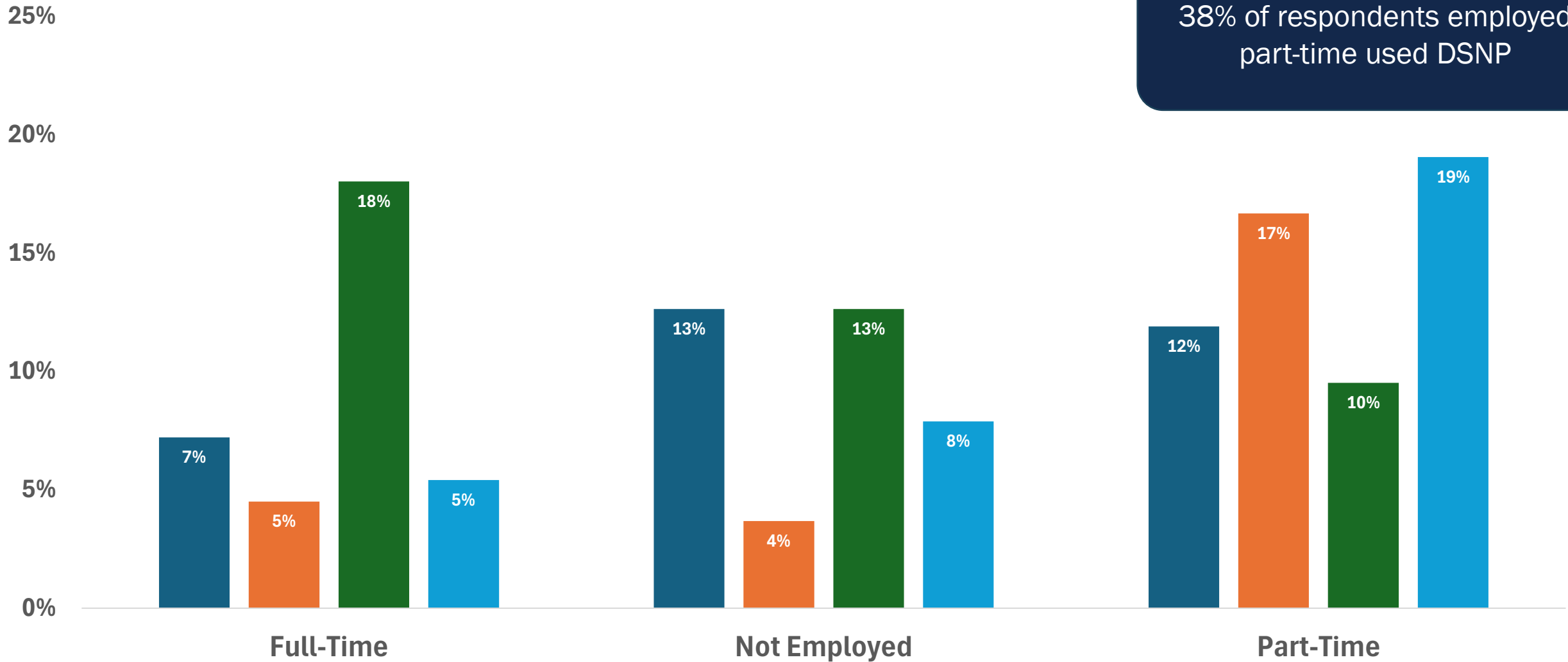


65% of respondents with an income of < \$50,000 used a DSNP

DSNP Use by Employment

VITAMIN/MINERAL NVNM CBD/CANNABIS TOPICAL

38% of respondents employed part-time used DSNP





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Key Takeaways



No DSNP Use vs DSNP Use

	NO DSNP USE	DSNP USE
AGE	Mean=53 years old	Mean=50 years old
SEX	Female (68%)	Female (69%)
RACE	White (47%) and Black/African American (44%)	Black/African American (48%) and White (45%)
EDUCATION	High school graduates or less (40%)	High school graduates or less (52%)
INCOME	<\$50,000(49%)	<\$50,000(57%)
EMPLOYMENT	Not employed (57%)	Not employed (52%)

DSNP Population: Summary

Overall DSNP users were :

- 50 years old (on average)
- Female (69%)
- Black/African American (48%) and White (47%)
- High school graduates or less (52%)
- Lower income (57% <\$50,000)
- Not employed(52%)

- Demographics consistent between DSNP groups
- DSNP users are younger, less educated, lower income, and more employed than non-DSNP users
- Commonly used products include:
 - Topicals
 - Vitamins
 - Minerals
 - Cannabis/CBD
- It is possible to collect DSNP labels electronically!



Scan to learn
More about OPTIMUM!



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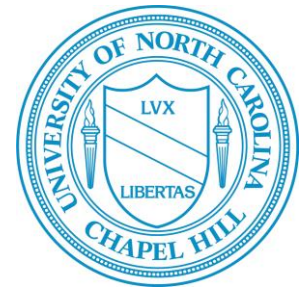
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EXCEPTIONAL CARE. WITHOUT EXCEPTION.



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