

# Exploring the Influence of Oral Health Literacy and Oral Health Chronic Disease Knowledge on Older Adults' Oral Care Behaviours.

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# World Health Organization

Oral diseases are the most common of the chronic diseases and are important public health problems because of their prevalence, their impact on individuals and society and the expense of their treatment

# Purpose

- To explore the influence of oral health literacy (OHL) and oral health chronic disease knowledge (OH-CDK) on older adults' oral care behaviours (OCBs).

# Population of Interest



# Why this Population?

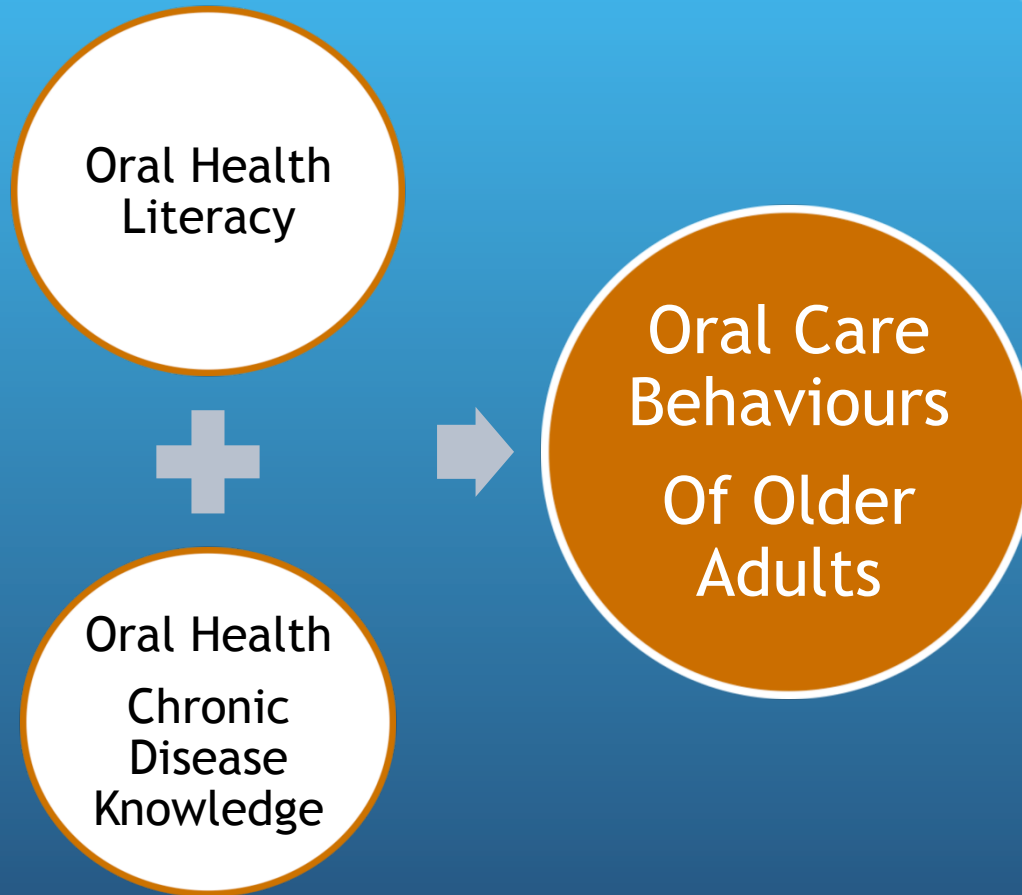


- Large cohort born between 1946 to 1965; (Stats Canada, 2011 Census)
- PEI has the third largest share (14%) of persons aged 65 and older
- Aging boomers keeping natural teeth throughout their lifetime (CHMS, 2007-2009)
- poor oral health can impact the chronic disease management

# Influences on Older Adults' Oral Health



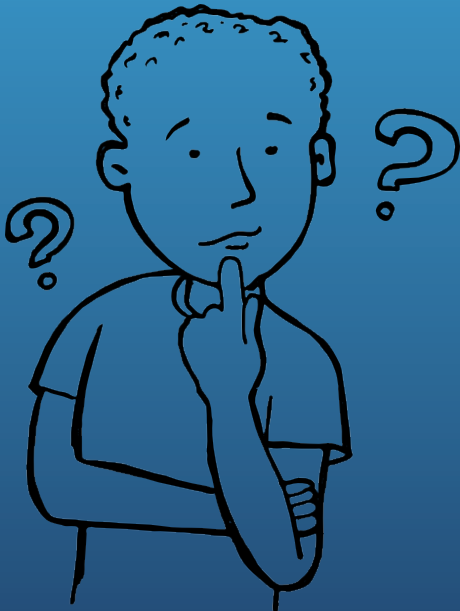
# Research Focus



# Oral Health Literacy (OHL)

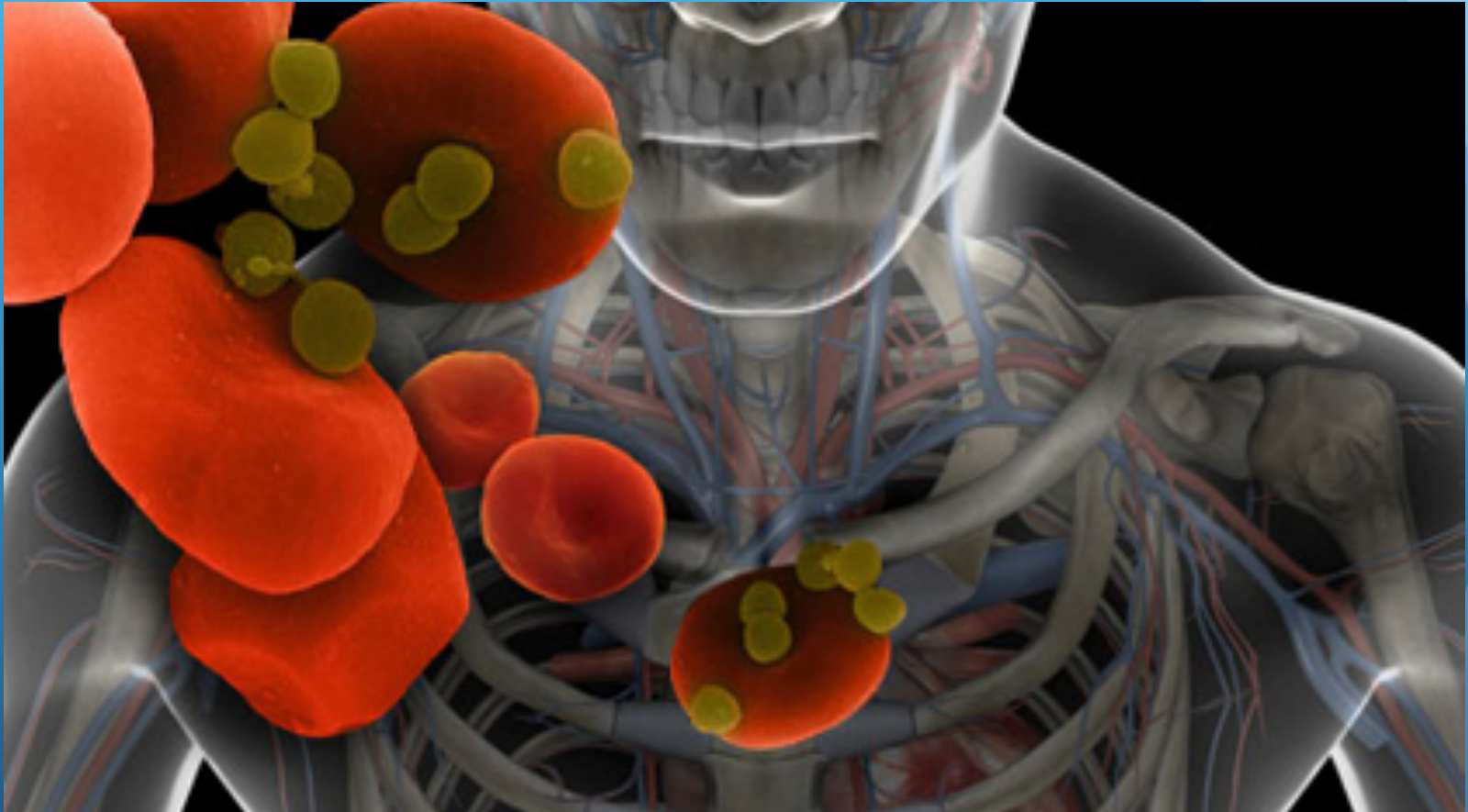
OHL is the degree to which individuals have the capacity to obtain, process, and understand basic oral health information and and apply this information to make appropriate health decisions.

(Healthy People, 2010)





# Oral Health Chronic Disease Knowledge

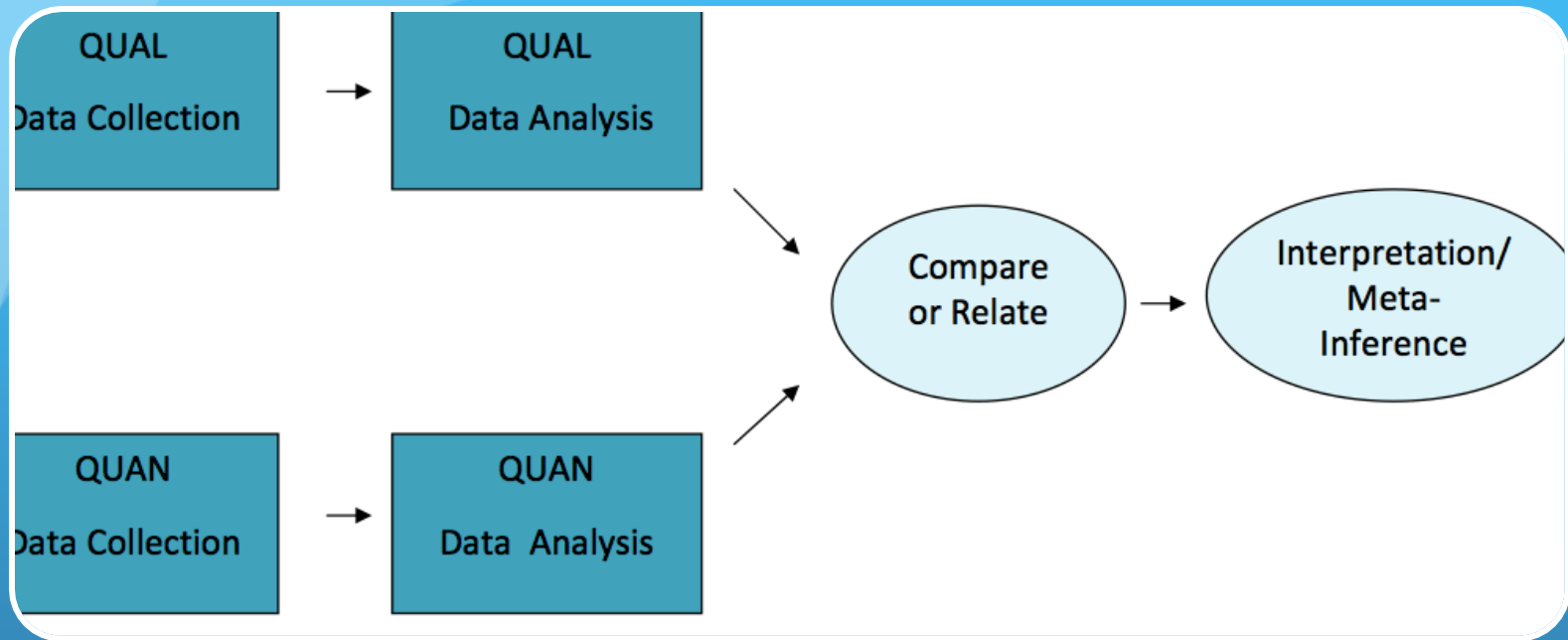


# Oral Care Behaviours

Are defined as oral  
self- care activities  
undertaken by  
individuals to  
maintain or promote  
dental health

(Locker & Payne, 1992)



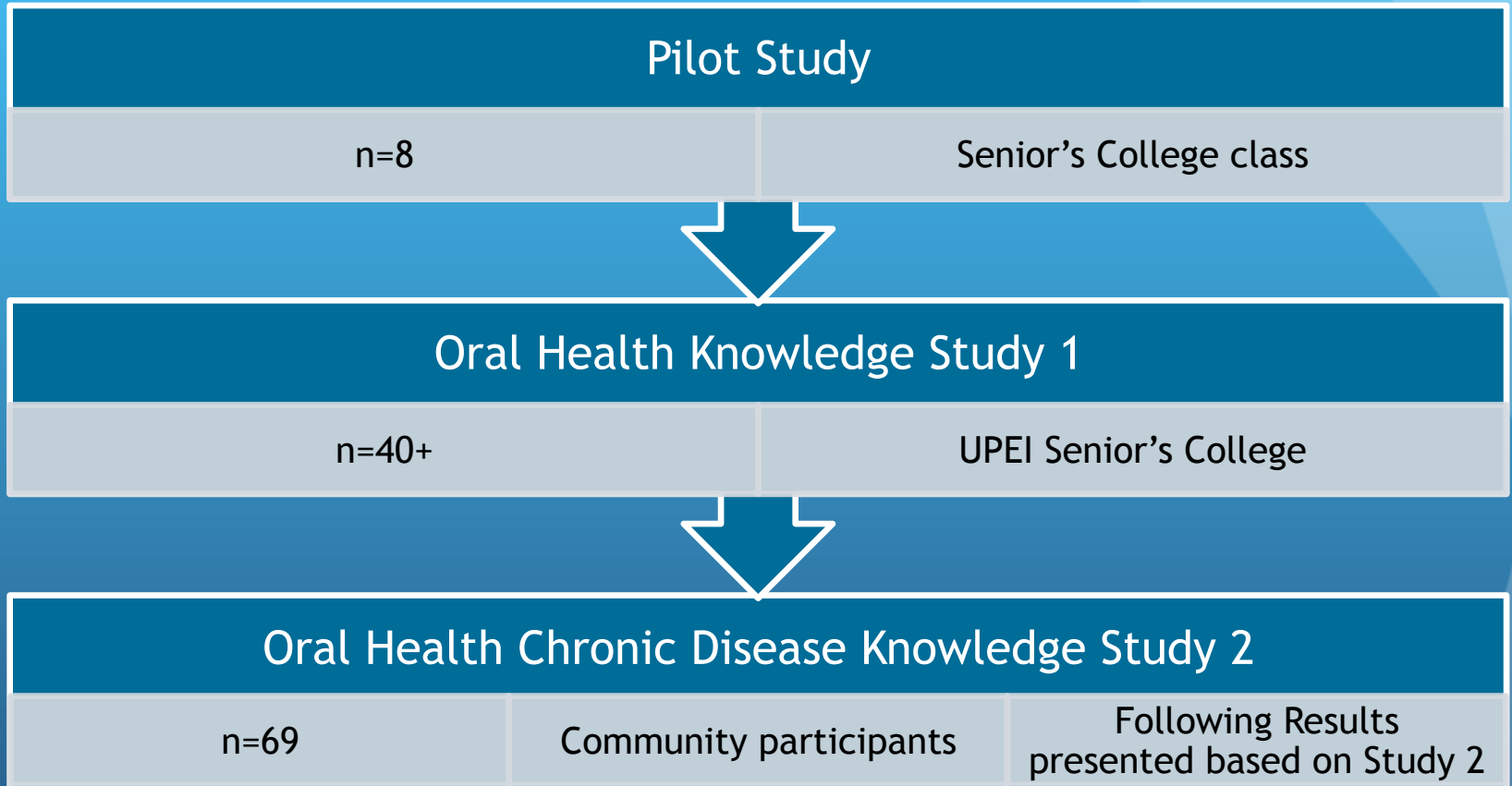


Creswell JW. *Research design : qualitative, quantitative, and mixed methods approaches*. 4th ed. Thousand Oaks, CA: Sage Publications; 2014.

# Research Methodology

## Convergent Mixed Method Design

# Pilot Study



# Sample

- Community dwelling men & women (PEI residents)
  - Aged 50 and older
  - Able to read and write in English
  - Access to a computer with an Internet connection
- Recruited 82 respondents; 9 excluded due to missing data; further 4 excluded based on DOB
- Final sample of 69 participants

# Data Collection Tools

- Background Tool Questionnaire
- Oral Health Literacy- Adult Questionnaire
- Oral Care Behaviours Survey
- Oral Health Chronic Disease Knowledge Questionnaire
- 9 open-ended questions

# Results



# Background Information

Ranged in age from 50 to 69 years  
 $M = 59.07$  ( $SD = 5.39$ )

More women ( $n=50$ ) than men ( $n=19$ )

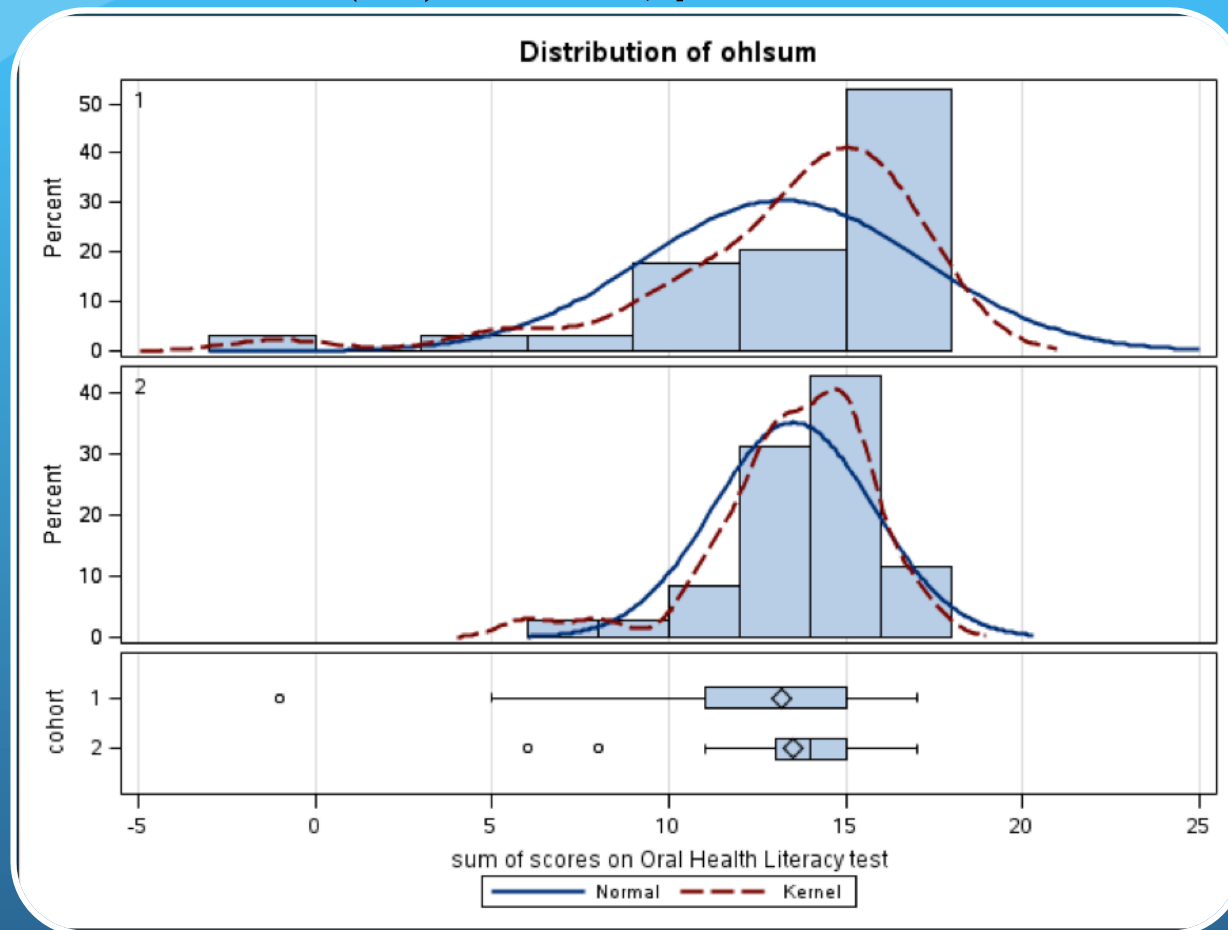


All participants reported:

- Having some natural teeth
- Over 46% reported a household income > \$75,000
- 73% had private dental insurance
- Minimum some college or trade school education



No significant difference in OHL scores between cohorts  
 $t(67) = -0.40, p = 0.69$

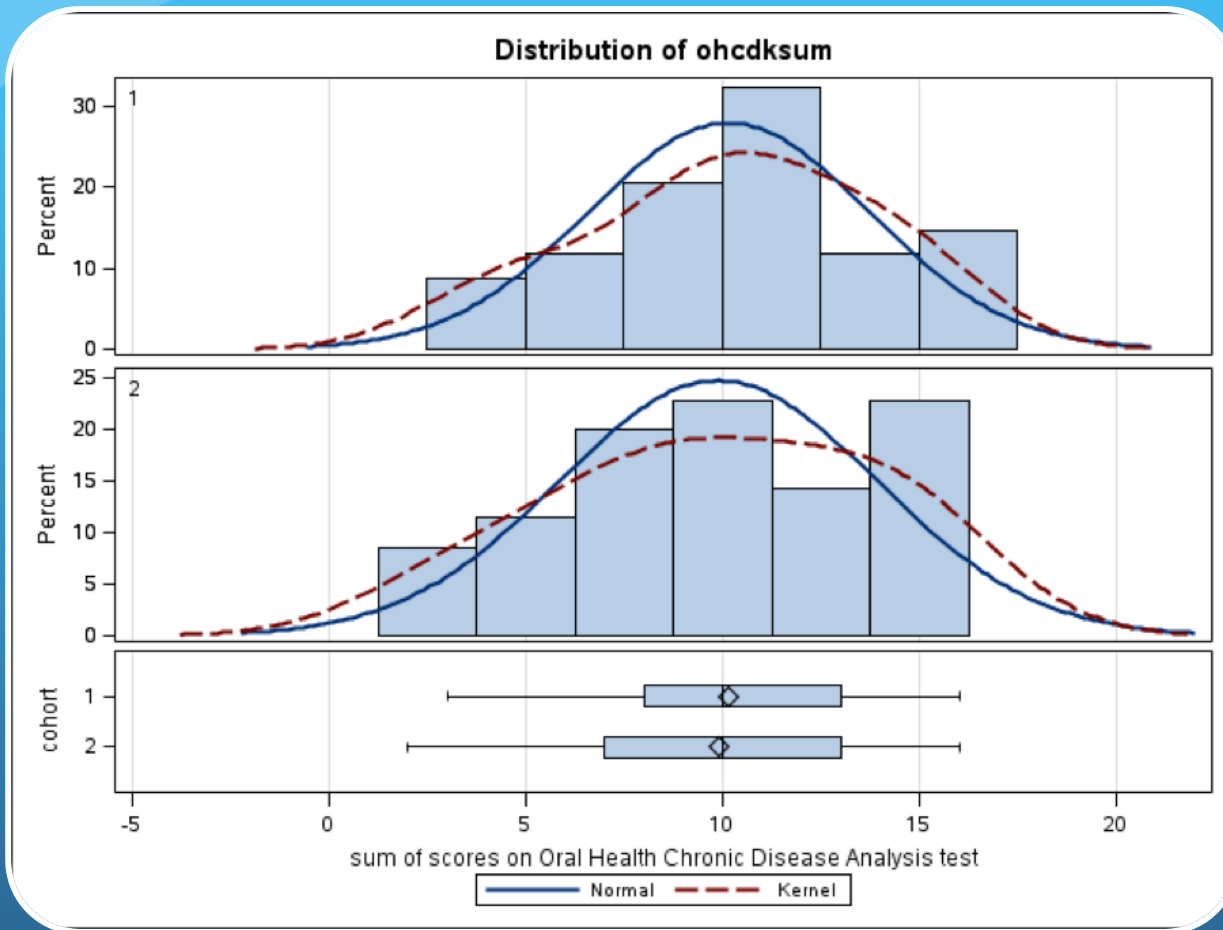


Total sample:  $M = 13.36, 95\% CI [12.62, 14.10]$

Early boomers:  $M = 13.21, 95\% CI [11.89, 14.53]$

Late boomers:  $M = 13.51, 95\% CI [12.77, 14.25]$

No significant difference in OHCDK scores between cohorts.  
 $t(67) = 0.28, p = 0.78$ .



Total sample:  $M = 10.01$  95% CI [9.13, 10.89]

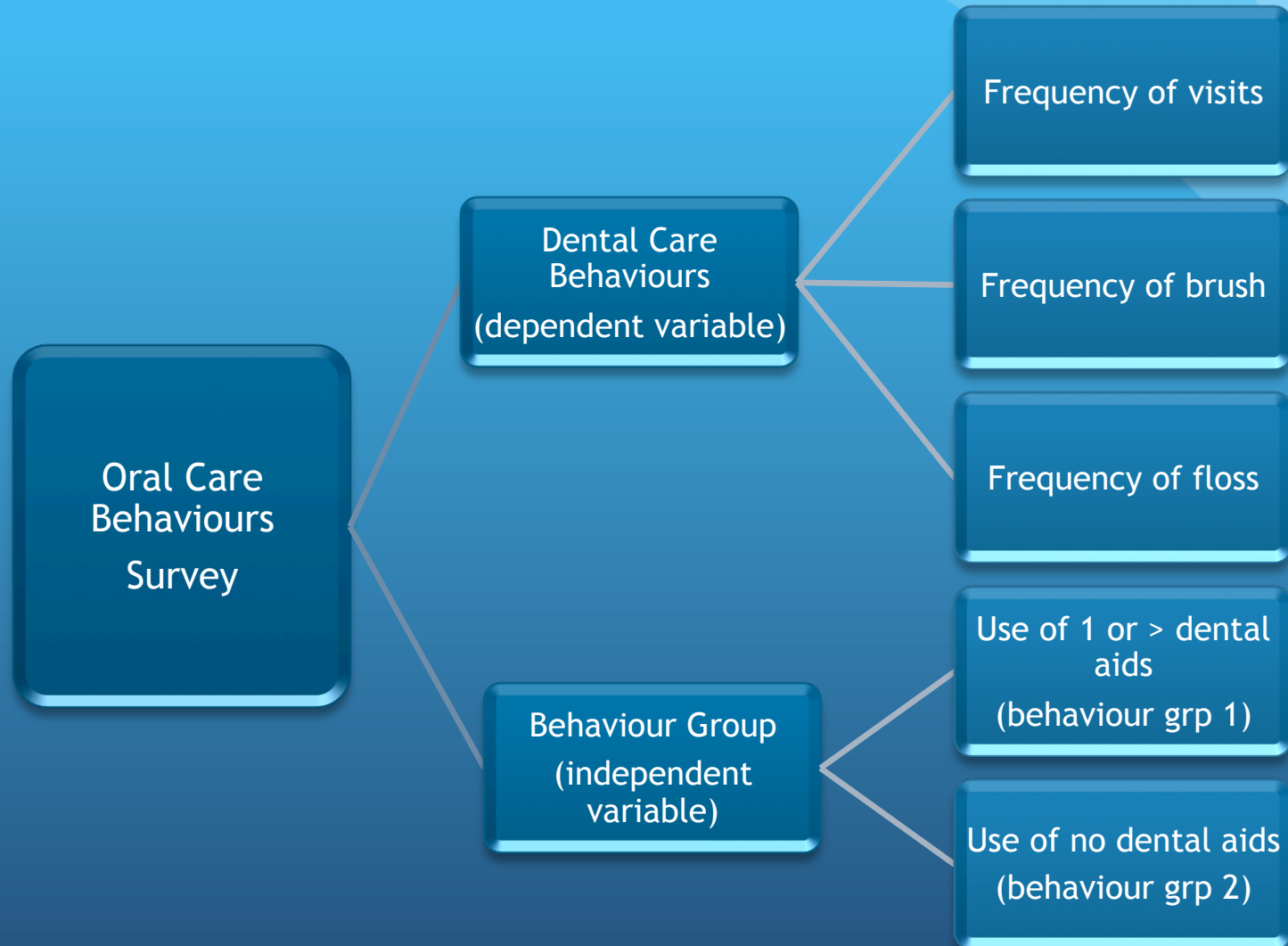
Early boomers:  $M = 10.15$  95% CI [8.96, 11.34]

Late boomers  $M = 9.88$  95% CI [8.55, 11.21]

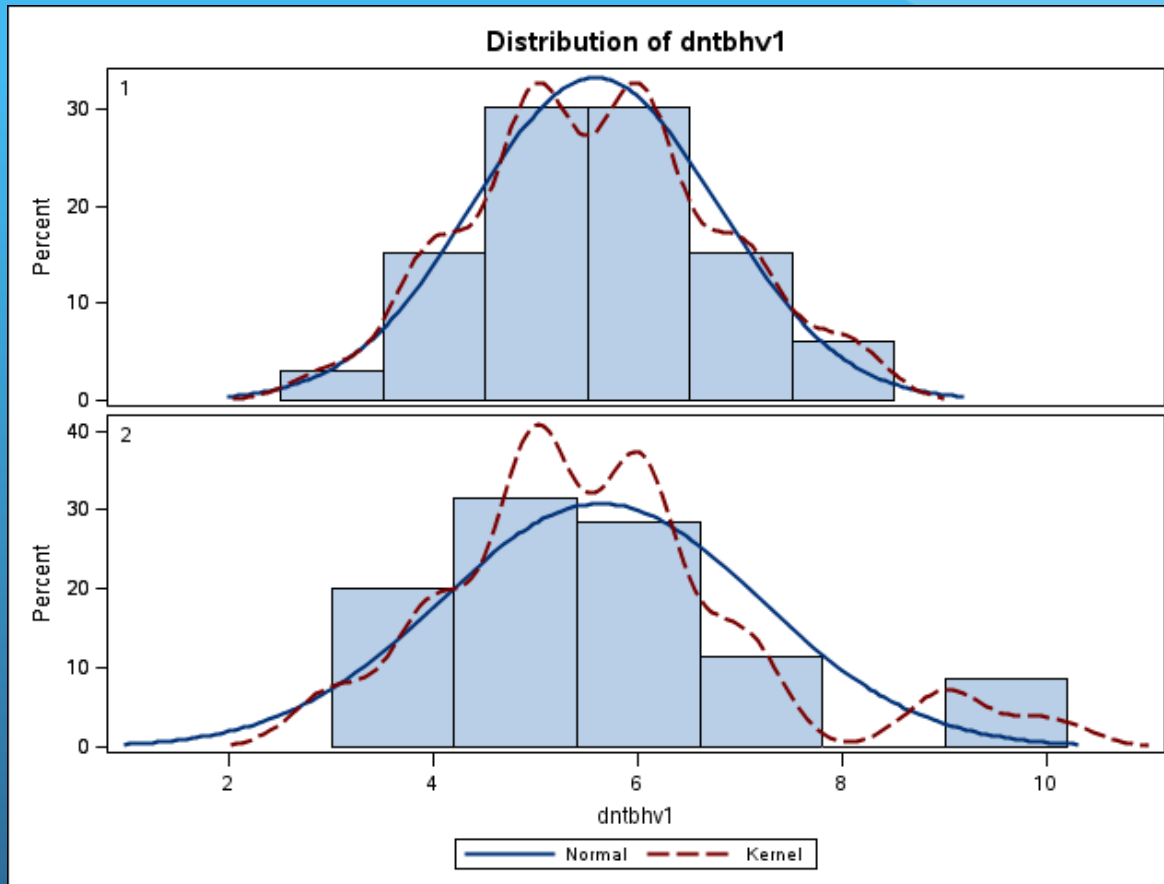
# Oral Care Behaviours Total Sample

- 71% reported visiting a dental professional more than once per year
- 75% reported brushing 2 or more times per day.
- Almost half of the sample surveyed, 48.53%, reported that they did not floss on a daily basis,
- 33.33%, approximately one-third of the sample, reported not using any dental home care aids.

# Oral Care Behaviours Survey



# Dental Care Behaviours



Total Sample:

$M = 5.60, 95\% CI [5.36, 5.84]$

Early boomers:

$M = 5.58, 95\% CI [5.15, 6.0]$

Late boomers:

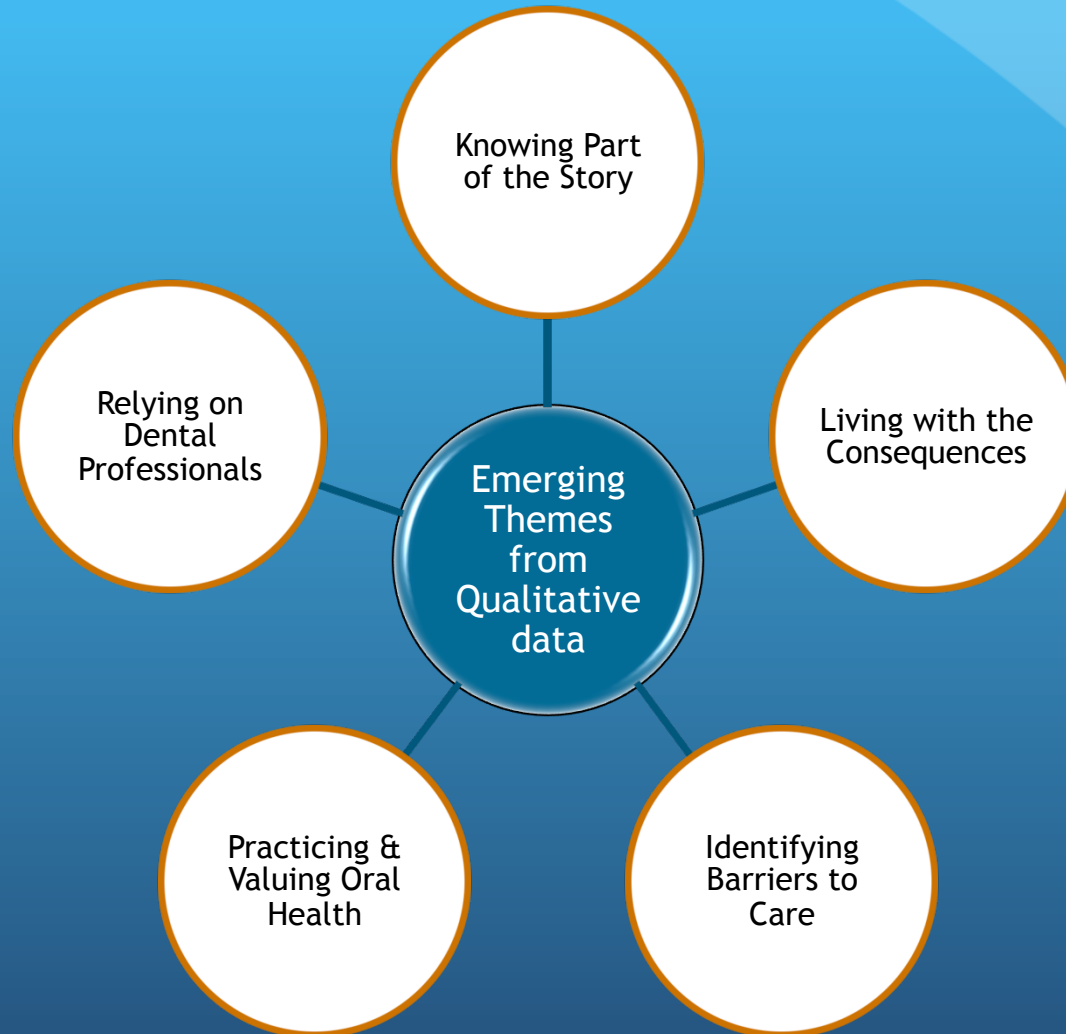
$M = 5.62, 95\% CI [5.09, 6.16]$

# Predictive Model for Dental Care Behaviours

Explained 93.5% of the variance in the DV



# Emerging Qualitative Themes



# Discussion



- Most individuals appeared to be somewhat dentally motivated
- Most participants had adequate oral health literacy
- Having access to private dental insurance influenced dental behaviours
- A knowledge gap was identified (OHCDK)



# Limitations

- Small sample size  $n=69$
- Internet based study may have excluded some individuals from participating
- Study may have attracted more highly dentally motivated individuals
- OHCDKQ is an new data collection tool

# Future Research

- Conduct a larger study with participants from a more varied ethnic and SES background
- Try to recruit more men (48% of PEI pop)
- Utilize focus groups
- Conduct further analysis on the OHCDKQ

# Implications for Practice

- Many people are unaware of the link between oral disease and the “Big 4” chronic diseases...imp role for dental hygienists
- dental insurance influences behaviour.....imperative to advocate for alternative payment schemes -
- Consider the impact of oral health in overall disease prevention
- Need for an inter-professional approach to manage chronic diseases

# Special Thanks

- Dr. Lori Weeks
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- Dr. Sharon  
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