

# ***Gender differences in oral hygiene behavior and expected social outcomes***

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**Advice | Research | Training | Supervision**



# Background

- Oral hygiene behavior (OHB) is an essential aspect of general social life
- Inadequate OHB is very prevalent in all cultures
- Important to get insight in determinants, which depend on context and culture
- Identification and assessment are important for developing tailored oral health care interventions




# *Aim of the study*

- To identify and assess OHB in female and male adults
- To investigate gender and age differences in the relationships between OHB and expected social outcomes related to healthy teeth (ESO)



# Method

- Participants from Dutch, Caribbean, Nepalese, Uruguayan, Spanish and Dominican Republic nationality
- Completed an index for OHB, which is a forerunner of the **MondiX**<sup>®</sup>  
Licensed by SPOH ARTS 
- A scale for ESO via an Internet questionnaire and paper-and-pencil-questionnaires

# Participants

Number, Means and Standard deviation (SD) for OHB and ESO for all participants in the six samples (male = M / female = F)

Measures	The Netherlands N = 487 N M/F = 89/398	Caribbean N = 113 N M/F = 51/62	Nepal N = 108 N M/F = 54/54	Uruguay N = 80 N M/F = 26/54	Spain N = 75 N M/F = 17/58	Dom. Republic N = 92 N M/F = 36/55
Oral Hygiene Behavior	*		**	φ	**	
Male	<b>1,25 (0,32)</b>	1,35 (0,25)	<b>1,04 (0,22)</b>	1,26 (0,39)	<b>1,30 (0,25)</b>	1,47 (0,26)
Female	<b>1,34 (0,30)</b>	1,42 (0,26)	<b>1,16 (0,25)</b>	1,51 (0,24)	<b>1,44 (0,24)</b>	1,49 (0,25)
Expected Social Outcomes			**		#	
Male	4,23 (0,64)	4,03 (0,68)	<b>3,78 (0,58)</b>	4,31 (0,55)	4,04 (0,70)	4,18 (1,06)
Female	4,23 (0,58)	4,23 (0,61)	<b>3,45 (0,84)</b>	4,31 (0,72)	4,33 (0,60)	4,38 (0,74)

Note. \*\* p < .001 \* p < .05 # p < .10 φ = Levene's test

Subgroup of 912 participants (71% female), mean age = 32,3 (SD = 12,7)

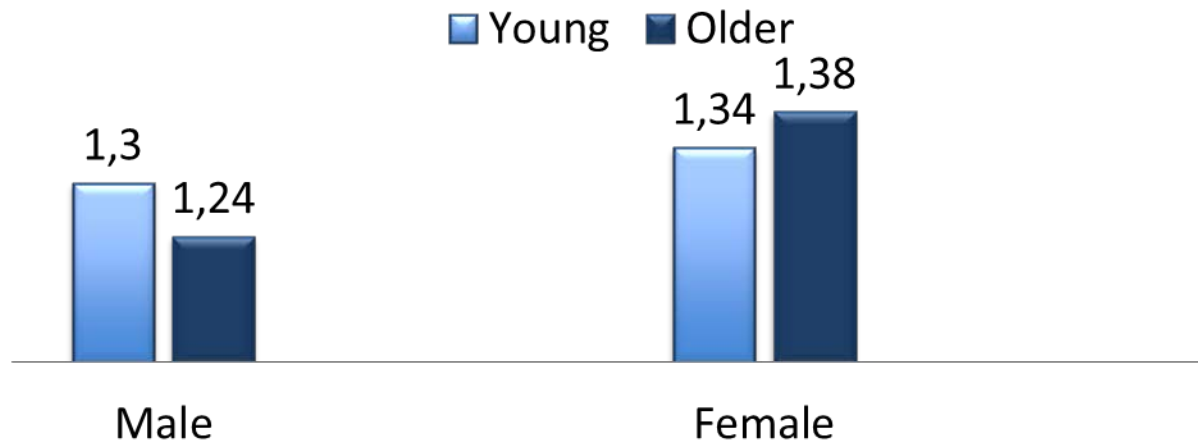
split into:

**Male** (N = 244) versus **Female** (N = 636) and  
**Young** (N = 402; 18 – 25 years) versus **Older** (N = 478; 26 – 65 years)

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# Results

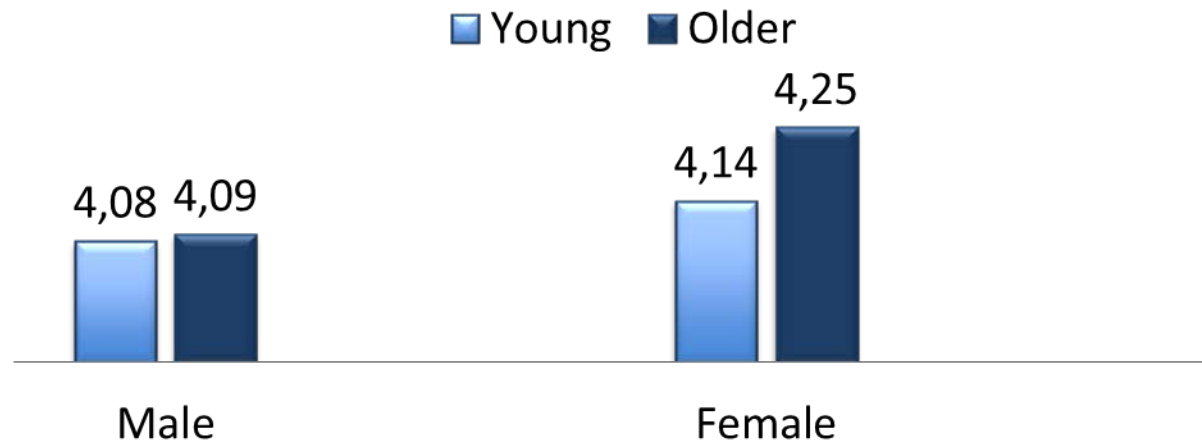
## Oral Hygiene Behavior



Females in general reported a significant better OHB than males,  $p = .000$   
Especially older females do,  $p = .034$

# Results

## Expected Social Outcomes



Females reported more positive ESO than males,  $p = .05$

# Conclusion / Discussion

- Some significant gender differences in mean sum scores in OHB (and ESO)
- Findings illustrative, provide more insight in the way males and females perceive or experience different aspects of oral health and personal OHB
- Differences supports the need of further experimental investigation for the development of tailored oral hygiene interventions
- Females as role models for intervention tailored for partners, children, as well as peer groups of same sex and younger age



# Conclusion / Discussion

Limitations due to some methodological aspects:

- Concept of OHB and ESO were developed in the Netherlands and may be not applicable to other populations
- Based on dental experts' consensus, items in the OHB index were clearly understandable, observable and correlate to oral hygiene behavior
- Support the well-established fact that messages in oral hygiene self-care intervention **tailored to gender and age differences may be more effective** than a so called '*one-size fits all*' approach

# Thank you

## Questions?

*This free communication is based on*  
**Buunk-Werkhoven YAB & Dijkstra A. Gender differences in  
 determinants of oral hygiene behavior: a secondary analysis**  
*(manuscript submitted for publication)*

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