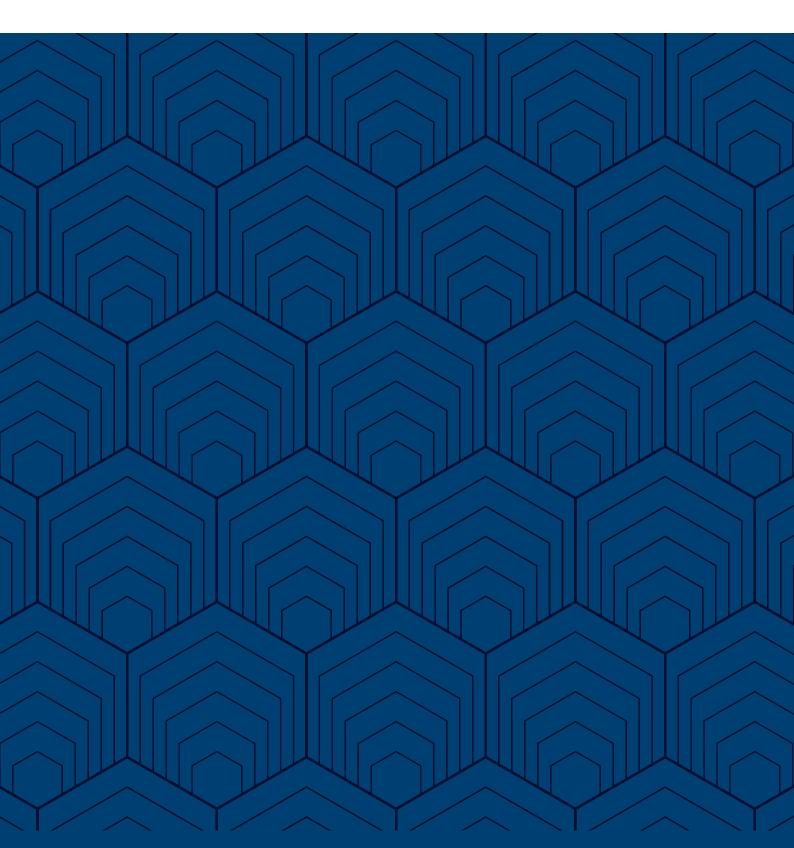
General Dental Council

Dental hygienists working patterns inferential analysis



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Glossary of terms

Term	Meaning	
Active in the UK dental sector	Whether someone is: • Currently working in the dental sector • Seeking work in the dental sector	
Clinical / non-clinical	Whether someone is working in a role that is: Clinical (fully or at least 75%) Mix of clinical and non-clinical Non-clinical (fully or at least 75%) Other	
Employment status	Whether someone works: • Employed • Self-employed / locum / agency • Business owner / part owner • In training • On parental leave • On sick leave • Working unpaid / pro-bono • Not applicable • Prefer not to say	
Healthcare sector	Sector worked in: NHS (fully or at least 75% of time) Mix of NHS and private Private (fully or at least 75% of time) Other	
Non-response bias	Is a bias that can happen when there is a significant difference between those who respond and those who don't respond to a survey	
Weekly hours worked	Hours worked per week by range	



Term	Meaning
Work setting	Setting worked in: • General dental practice • Specialist dental practice
	Community dental services
	Dental hospital
	Other hospital settings
	Laboratory
	Oral public health
	Armed forces
	In education / training as a student
	In education / training as a member of staff
	Researcher / academic
	• Other
	Not applicable
	Prefer not to say

Acknowledgements

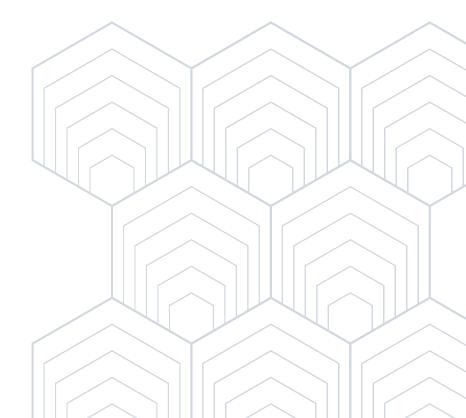
The GDC is grateful to all the dental professionals who responded to the working patterns questions. We would also like to thank the professional bodies, trade organisations, employers and other government stakeholders who supported the development of questions and encouraged dental professionals to complete this data.

Any further questions or suggestions related to the publication of working patterns data can be submitted via email at research@gdc-uk.org.



Executive summary

- Since November 2023, working patterns questions have been available on the GDC's online portal, eGDC, alongside the annual renewal process. Responses from dental care professionals were requested for the first time as part of their 2024 annual renewal (June August). Following the publication of the working patterns dental care professional summary tables in October 2024¹, this report presents the results from further analysis of responses from dental hygienists. Only statistically significant findings are focused on.
- Of the 9,177 dental hygienists who completed annual renewal in July 2024, 6,164 (67%) responded to the working patterns questions.
- Around 2% of dental hygienists who completed the working patterns questions were looking for work. Those looking for work had received their primary qualification a median of 2.5 years ago, compared with those in employment who had received their primary qualification a median value of 11.6 years ago.
- More than two-thirds (68%) of dental hygienists listed their primary field of practice as dental hygienist, and more than a fifth (29%) reported working as a dental therapist.
- Nine-in-ten (90%) dental hygienists indicated only one employment status, with the most frequently mentioned being self-employed (73%).
- More than two-thirds (67%) of dental hygienists in clinical roles were working in the private sector, compared to only 38% of those in non-clinical roles.
- More than half (55%) of dental hygienists who were up to 30 years of age were working more than 30 hours a week delivering dental care. This proportion decreased with age.
- Most (92%) responding dental hygienists reported working in general dental practice, however this proportion varied by UK country. The lowest proportion of dental hygienists working in general dental practice was in Scotland (83%), while the highest proportion was in Northern Ireland (95%).



1 Introduction

The General Dental Council (GDC) has undertaken further analyses of our working patterns data, bringing it together with equality, diversity and inclusion (EDI), registration and Fitness to Practise (FtP) data to derive greater insight and value from our working patterns responses. This report provides further analysis of dental hygienists' responses to the working patterns questions.

Of the 9,177 dental hygienists who completed their annual renewal in July 2024, 6,164 (67%) answered the working patterns questions. This analysis includes:

- Employment status
- Where dental hygienists work (location and setting)
- Healthcare sector dental hygienists deliver care in (NHS v private)
- Weekly hours worked by dental hygienists
- Whether dental hygienists work in clinical or non-clinical roles
- Variations by equality, diversity and inclusion characteristics
- Correlations between working patterns questions and incidence of FtP cases (at the aggregate level)

1.1 Methodology

Working patterns data is being collected using questions made available on the GDC's online portal (eGDC). This was done to maximise response rates, and data completeness, and was arrived at in dialogue with professional organisations, registrants and governmental stakeholders. We launched the data capture process by encouraging dental professionals to provide their data when they completed their annual renewal, beginning with dentists in 2023, and then dental care professionals in 2024. Completion of the working patterns questions is voluntary.

Analyses reported here are derived from dental hygienists' responses received up to 10 August 2024. Responses received after this date will be included in future outputs. Only dental hygienists who reported that they were either 'working in the dental sector' or 'looking for work in the dental sector' in the United Kingdom (UK) were included in these analyses.

For the analysis of responses, we tested if a difference in results was statistically significant at a 95% confidence level and only statistically significant results are reported.

The appendices contain further details on data collection and question design (4.1 Question design and format), on data cleaning (4.2 Data cleaning), on statistical linear models use to test hypotheses, *p* values and effect sizes² (4.3 Statistical analysis models), comparisons of the respondent numbers with GDC registration data across EDI characteristics and selected registration fields (4.4 Non-response bias), and notations for the statistically significant differences (4.5 Statistical notation).

^{2.} The effect size measures the strength of a relationship between two or more variables (i.e. what proportion of the difference in the data is explained by this relationship).

2 Results

2.1 Active in the UK dental sector

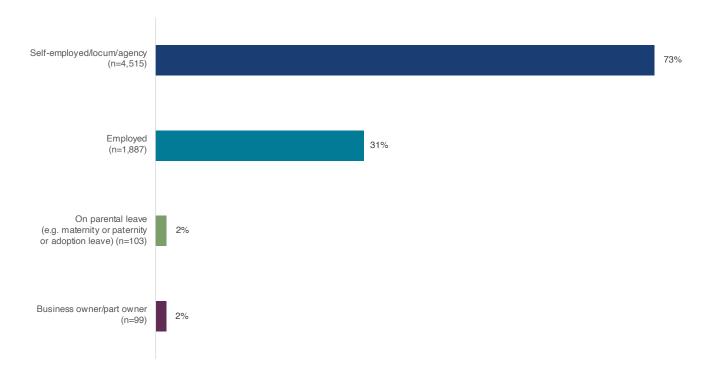
Of the 6,164 dental hygienists included in this analysis, 98% were working in the dental sector and 2% reported that they were looking for work in the dental sector.

Those looking for work had received their primary qualification a median of 2.5 years ago, compared with those in employment who had a received their primary qualification a median of 11.6 years ago^a.

2.2 Employment status

Dental hygienists were asked about their employment status within the dental sector (Figure 1). They could select multiple responses to this question. Nine-in-ten (90%) dental hygienists indicated only one employment status.

Figure 1 - Most common employment status³



Nearly three-quarters (73%) of dental hygienists indicated they were self-employed, with the next most frequently mentioned employment status being employed (31%)⁴.

^{3.} The employment status responses of 'in training', 'on sick leave', 'working unpaid' and 'not applicable' were less than 1% each and therefore have been omitted from the figure.

^{4.} This includes hygienists who selected more than one employment status.

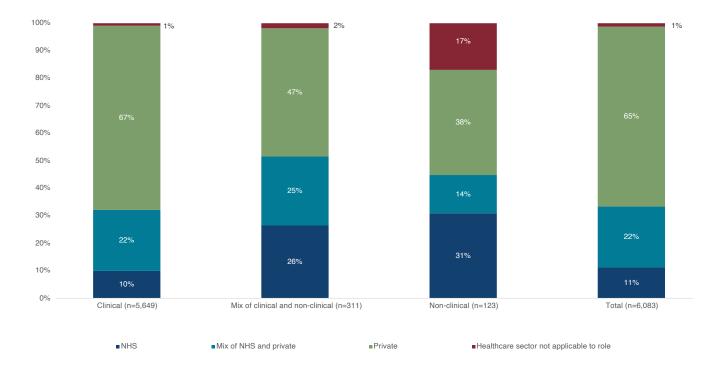
2.3 Primary field of practice

Dental hygienists were asked about their primary field of practice⁵. More than two-thirds (68%) of dental hygienists reported their primary field of practice as being 'dental hygienist'. More than a quarter (29%) of dental hygienists reported their primary field of practice as dental therapist, while 1% reported their primary field as dentist, 1% as dental nurse and 1% as other fields (e.g. orthodontic therapist, dental technician, specialist).

2.4 Clinical / non-clinical work

Most (92%) dental hygienists were working in clinical roles. Work in clinical and non-clinical roles differed by healthcare sector (Figure 2)^b, with more than two-thirds (67%) of dental hygienists in clinical roles working in the private sector, compared to 38% in non-clinical roles.





^{5.} A dental professional may be registered under multiple titles with the GDC, but the working patterns question specifically asks for their primary field of practice.

^{6.} Due to small base numbers, dental hygienists who selected 'not applicable to role' have been omitted from this figure.

Weekly hours worked by dental hygienists 2.5

Hours worked⁷ by dental hygienists varied by age group (Figure 3)^c, with more than half (55%) of dental hygienists who were aged up to 30 years of age reporting to work more than 30 hours a week; this proportion decreased by age group.

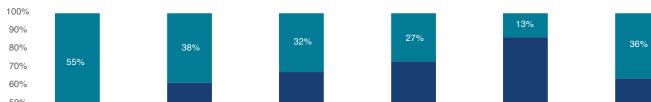
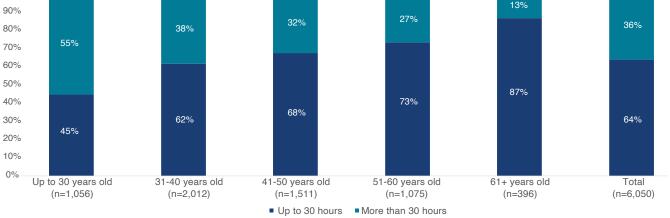
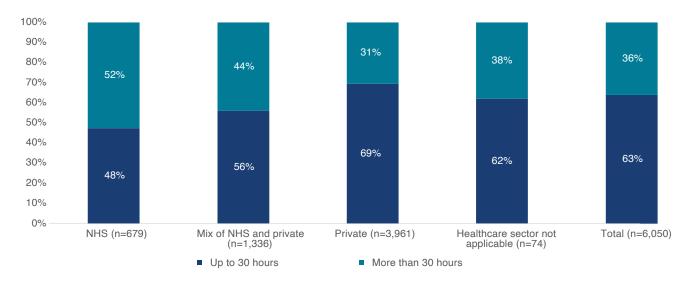


Figure 3 - Hours worked by age group



More than half (52%) of dental hygienists who reported working in the NHS sector were working more than 30 hours a week, which was higher than the figure for all healthcare sectors (36%) (Figure 4)d.

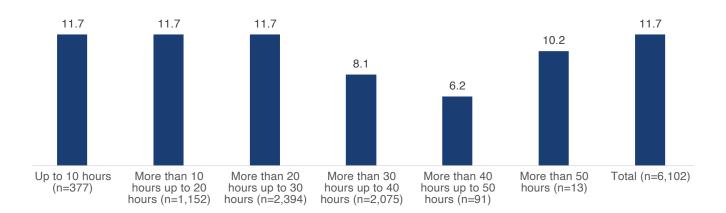




^{7.} For the purpose of this analysis, due to small respondent numbers per response options, hours worked have been grouped into 'Up to 30 hours' (including responses of 0 hours) and 'More than 30 hours' a week categories.

The reported hours worked per week by dental hygienists varied significantly by time since primary qualification. Dental hygienists who reported working over 30 hours up to 50 hours a week typically had obtained their primary qualification less than nine years ago, with those working 'more than 30 hours up to 40 hours' a week having obtained their primary qualification a median of 8.1 years ago. Those working 'more than 40 hours up to 50 hours' a week obtained their primary qualification a median of 6.2 years ago (Figure 5).

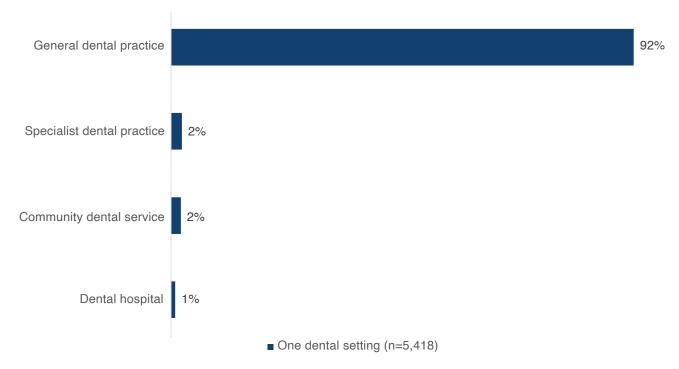
Figure 5 - Median time (years) since primary qualification by hours worked per week8



2.6 Work setting

Most (88%) dental hygienists who responded to the working patterns questions worked in only one setting. Of these, more than nine-in-ten (92%) indicated that they work in general dental practice (Figure 6).

Figure 6 – Main work settings for dental hygienists with only one reported setting9

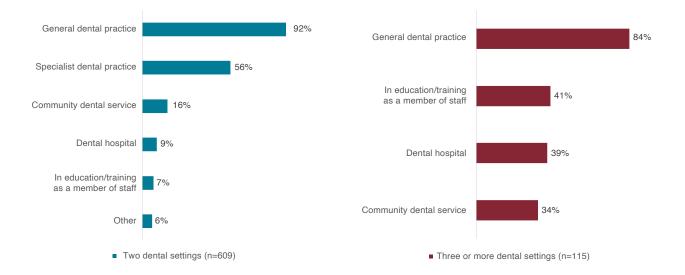


This varied by UK country, with Scotland having the lowest proportion of dental hygienists working in general dental practice (83%), and Northern Ireland having the highest proportion (95%)^f.

^{9.} Respondents who did not select a setting or who selected more than one were not included in this figure. Other settings that were less than 1% and are not included in this figure were: 'Armed forces', 'others', 'researcher / academic', 'non-clinical', 'in education / training as a student', 'oral public health', 'laboratory', 'other hospital settings', 'in education / training as a member of staff' and 'not applicable'.

Those dental hygienists who worked in more than one dental setting usually worked in general dental practice (Figure 7).

Figure 7 - Work setting for dental hygienists with more than one reported setting¹⁰

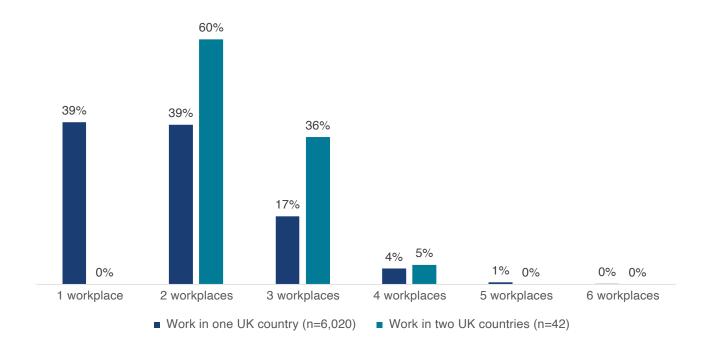


^{10.} The settings 'other hospital settings', 'laboratory', 'oral public health', 'non-clinical', 'armed forces', 'in education / training as a student', 'researcher / academic', 'not applicable', and 'prefer not to say' were omitted from this figure because they received less than 1% of all responses.

2.7 Number of workplaces and number of countries of work

Nearly all (99%) dental hygienists were working in only one UK country. Most (78%) of the dental hygienists working in one UK country had either one or two workplaces (39% each), while most (60%) dental hygienists working in more than one UK country had two workplaces (Figure 8).

Figure 8 - Number of workplaces by number of UK countries worked in¹¹



2.8 Fitness to Practise

The GDC does not use working patterns data in FtP case decision making. We matched our working patterns data to our FtP and EDI data to undertake pseudonymised¹² analysis to explore possible links to working pattern responses. We found no correlations between involvement in an FtP concern¹³, working patterns responses or any respondent characteristics (such as EDI characteristics, time on the register or route of qualification)¹⁴.

^{11.} This figure omits prefer not to say (n=22), and those who reported their number of places commonly worked = 0 (n=53).

^{12.} The person responding was given a dummy ID so that they could not be identified.

^{13.} Which was defined as a dental hygienist being involved in a case that had at least progressed beyond the triage stage within the previous two years.

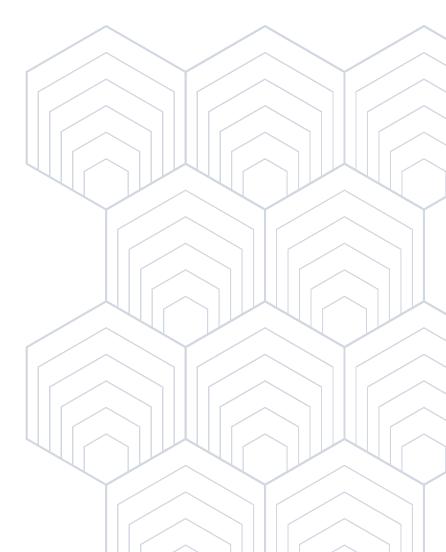
^{14.} Fewer than one percent of dental hygienists who responded had an FtP case closed within the past two years.

3 Conclusions

Most responding dental hygienists were currently in employment and working as self-employed. Those looking for work had typically received their primary qualification more recently and were usually within their first three years since qualifying. Two-in-three dental hygienists stated 'dental hygienist' as their main field of practice, with the next most frequent field being dental therapist.

Those with one employment status usually reported working in general dental practice doing clinical roles. More than two-thirds of dental hygienists working in clinical roles were in the private healthcare sector (compared to less than two-fifths of those in non-clinical roles). Dental hygienists who had received their primary qualification less than nine years ago worked more hours, on average, compared to those with an older primary qualification.

There were no correlations between any working patterns questions and involvement in an FtP concern.



4 Technical appendix

4.1 Question design and format

GDC researchers looked at existing information on working patterns data including sources from the NHS, the Office for National Statistics (ONS), the Government Statistical Service (GSS) and the Institute for Social and Economic Research. This was combined with questions previously developed from GDC primary research.

The questions were designed to minimise the burden on respondents and to capture factual data about working patterns. They were fixed response questions and took on average five minutes or less to complete. They were voluntary and every question had a 'prefer not to say' option to ensure that respondents had the possibility of avoiding answering any question which they might find to be sensitive in nature.

The working patterns questions were piloted with an external group of dental professionals.

4.2 Data cleaning

Any values that were left blank or entered in an invalid format (e.g. for text entry) were coded to unknown during the data cleaning process.

4.3 Statistical analysis models

This analysis uses null hypothesis frequentist linear models to test for correlations in the data. The nine working patterns questions were combined with an additional 22 GDC registration fields and five fitness to practise fields. The large number of analyses has meant that only those with statistical significance (p < 0.05) and at least a small effect size have been highlighted as 'significant' (the model performance is included in 4.5 Statistical notation).

4.4 Non-response bias

Tables 1 to 5 show EDI category comparisons between dental hygienists who completed the working patterns questions and the numbers of dental hygienists on the GDC's register.

The main difference between the dental hygienist register's EDI characteristics and working patterns sample were:

Ethnicity: Dental hygienists who identified their ethnic group as 'White' accounted for 72% of working patterns dental hygienist respondents, compared to 67% of registered dental hygienists (Table 2).

Marital status: Dental hygienists who identified their marital status as 'Married' represented 54% of the working patterns dental hygienist respondents, compared to 49% of registered dental hygienist (Table 3).

Table 1 – Sex from working patterns compared with register data

	Dental hygienist working patterns respondents (10/8/2024) (n=6,164)	Dental hygienist register data (10/8/2024) (n=9,881)
Female	92%	91%
Male	7%	8%
Prefer not to say	1%	1%
Total	100%	100%

Table 2 – Ethnicity from working patterns compared with register data

	Dental hygienist working patterns respondents (10/8/2024) (n=6,164)	Dental hygienist register data (10/8/2024) (n=9,881)
Asian or Asian British	17%	18%
Black, Black British, Caribbean or African	2%	3%
Mixed or multiple ethnic groups	2%	2%
Other ethnic group	2%	2%
White	72%	67%
Unknown	2%	3%
Prefer not to say	3%	4%
Total	100%	100%

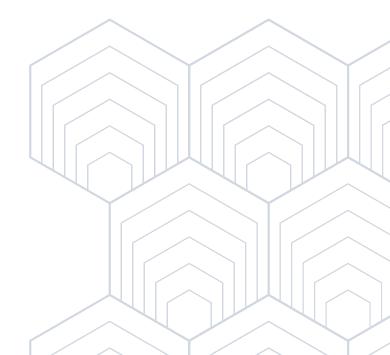


Table 3 - Marital status from working patterns compared with register data

	Dental hygienist working patterns respondents (10/8/2024) (n=6,164)	Dental hygienist register data (10/8/2024) (n=9,881)
Divorced	7%	6%
Formerly in a civil partnership which is now legally dissolved	0%	0%
In a registered civil partnership	1%	1%
Married	54%	49%
Never married and never registered in a civil partnership	27%	28%
Separated, but still legally in a civil partnership	0%	0%
Separated, but still legally married	1%	1%
Surviving partner from a registered civil partnership	0%	0%
Widowed	1%	1%
Unknown	4%	7%
Prefer not to say	0%	7%
Total	100%	100%

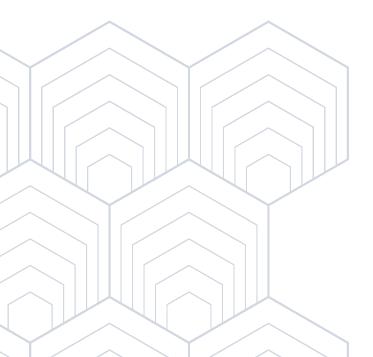


Table 4 – Sexual orientation from working patterns compared with register data

	Dental hygienist working patterns respondents (10/8/2024) (n=6,164)	Dental hygienist register data (10/8/2024) (n=9,881)
Bisexual	1%	1%
Gay/Lesbian	1%	1%
Other sexual orientation	0%	0%
Straight/Heterosexual	90%	88%
Unknown	2%	3%
Prefer not to say	6%	7%
Total	100%	100%

Table 5 – Age from working patterns compared with register data

	Dental hygienist working patterns respondents (10/8/2024) (n=6,164)	Dental hygienist register data (10/8/2024) (n=9,881)
16-21	>1%	0%
22-30	18%	21%
31-40	33%	34%
41-50	25%	23%
51-60	18%	16%
61-65	5%	5%
65+	2%	2%
Total	100%	100%

4.5 Statistical notation

^a Kruskal Wallis H test = 14.99 (n=6,164), df = 1, p = 0.01, eta² = 0.01 (small effect size)

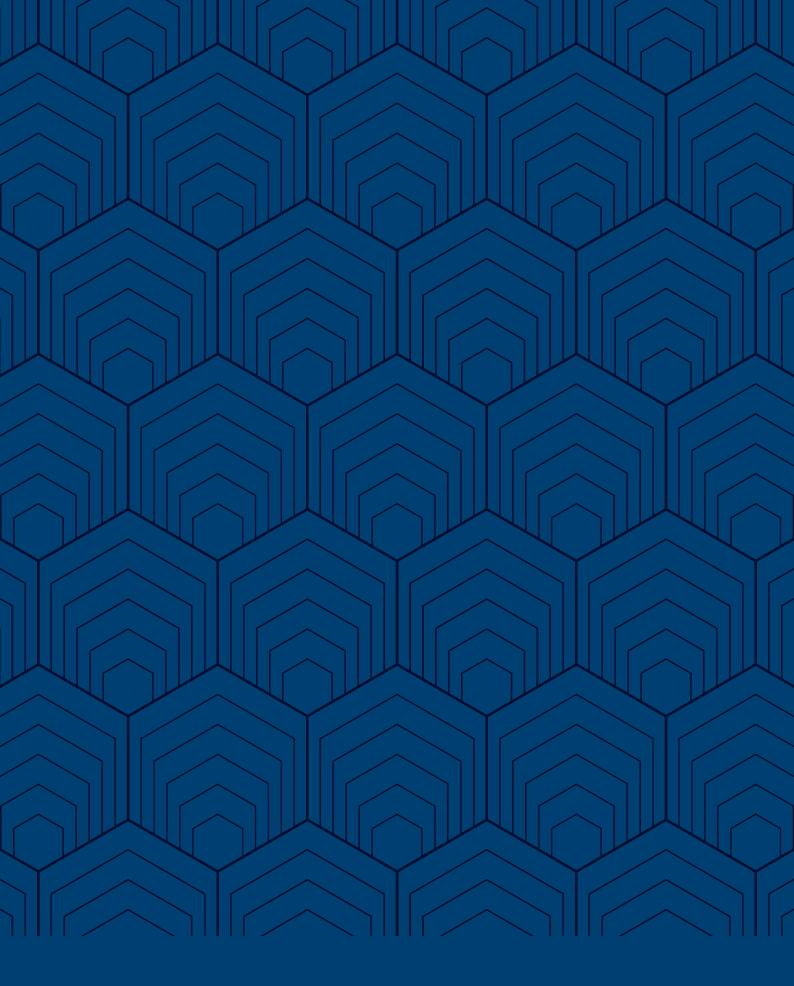
^b Pearson Chi-Square $X^2 = 388.1$ (n=6,083), df = 6, p = 0.01, Cramer's V = 0.17 (strong effect size)

 $^{^{\}circ}$ Pearson Chi-Square $X^2 = 318.1$ (n=6,164), df = 8, p = 0.01, Cramer's V = 0.16 (medium effect size)

^d Pearson Chi-Square $X^2 = 166.0$ (n=5,976), df = 2, p = 0.01, phi = 0.16 (medium effect size)

 $^{^{\}circ}$ Kruskal Wallis H test = 6,081 (n=6,163), df = 8, p = 0.01, eta² = 0.06 (medium effect size)

^f Pearson Chi-Square $X^2 = 106.4$ (n=6,121), df = 4, p = 0.01, Cramer's V = 0.13 (medium effect size)



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