

Background

As the global population ages, the prevalence of dementia will increase, causing a greater need for our healthcare workers to be prepared in caring for patients with dementia. This study aims to explore the readiness of our existing healthcare workers in managing persons with dementia (PWD).

Methods

Following DSRB approval, a voluntary and anonymous online survey was shared with staff in Jurong Community Hospital (JCH), Singapore. This included doctors, nurses, allied health, pharmacists, and patient service staff. The content included the “Dementia Knowledge Assessment Scale” (DKAS), “Approaches to Dementia Questionnaire” (ADQ) and demographic questions.

The DKAS is a validated survey used to measure the respondents’ knowledge of dementia [2]. It consists of 25 statements which are either factually correct or wrong. Respondents are asked to rate the statements using a Likert scale with the options: true, probably true, probably false, false, and don’t know. A higher DKAS score indicates better dementia knowledge, with a total score ranging from 0 to 50.

The ADQ measures a responder’s attitude towards caring for persons with dementia. It uses a 5-point Likert Scale ranging from “Strongly Disagree” to “Strongly Agree”. There are 19 different statements looking at 2 areas: “Hope” and “Person-Centeredness”. The total score for the ADQ ranges from 19 to 95. A higher score suggests a more positive attitude towards persons with dementia. [1]

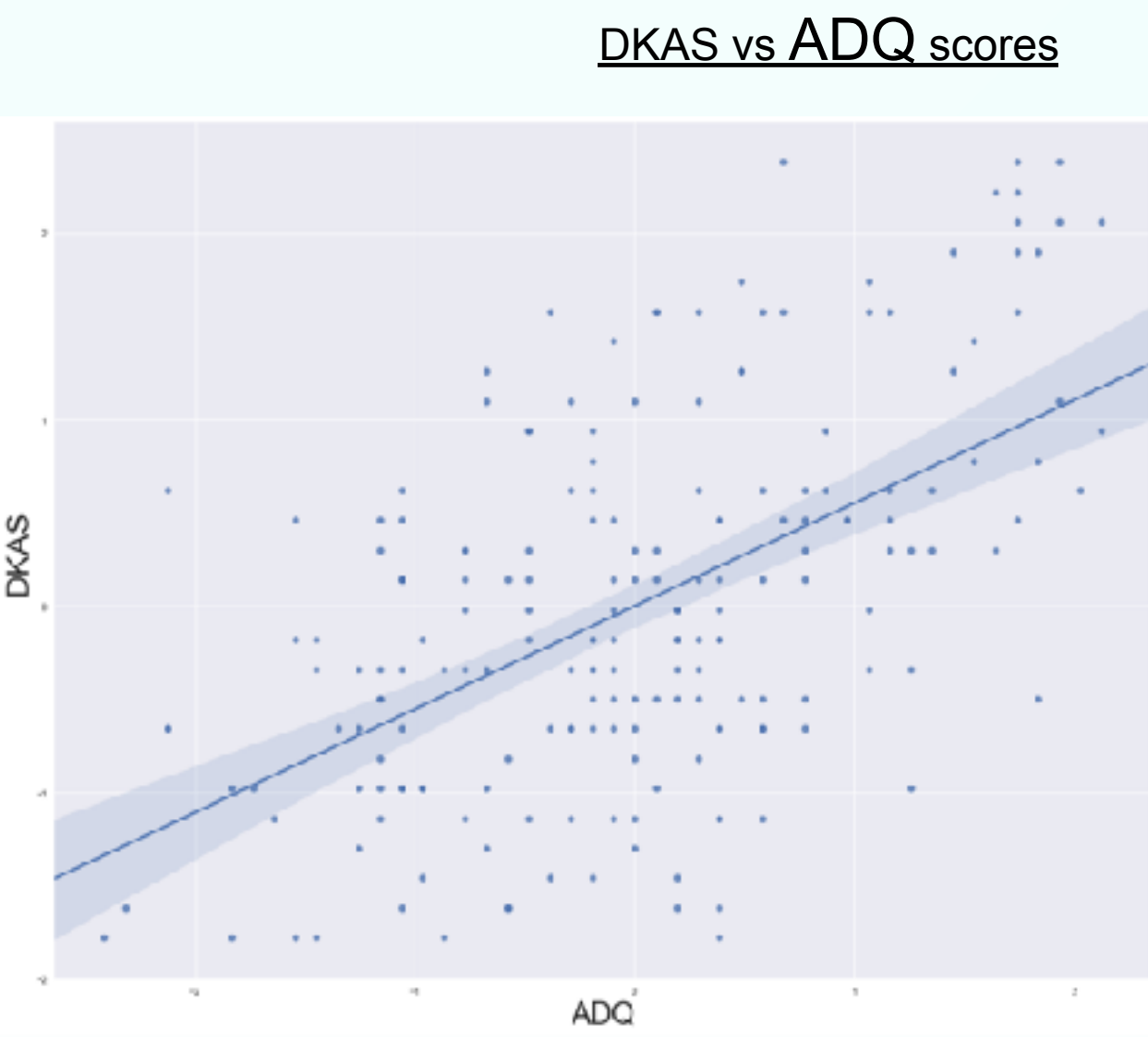
The correlation analysis was performed using Pearson’s Correlation Coefficient. One-way ANOVA / Kruskal-Wallis H Test was used to analyse the significant differences on DKAS / ADQ between the characteristics of the demographics groups. Tukey’s Honestly Significant Difference (HSD) post-hoc test was used to compare the difference between all pairs of the demographics characteristics.

Results

Demographics		Count	Knowledge DKAS Score range 0-50		Attitude ADQ score range 19-95	
Groups	Type		Mean	P-Value	Mean	P-Value
Total		202	25.72		67.10	
Gender	Female	162	24.57	<0.01*	66.74	0.136
	Male	40	30.38		68.58	
Age	18-30	76	25.24	0.96	67.16	0.93
	31-40	67	26.03		66.99	
	41-50	36	24.19		67.64	
	>50	23	25.70		66.43	
First degree relative with dementia	Yes	165	25.89	0.91	67.38	0.79
	No	37	25.68		67.04	
Caregiver for someone with dementia	Yes	158	25.93	0.88	66.70	0.67
	No	44	25.66		67.22	
Occupation	Nurse	115	23.68	<0.01*	65.46	<0.01*
	AHP	43	28.44		69.63	
	Doctors	20	37.50		72.10	
	Others	24	20.83		66.29	
Years spent working in healthcare	0-5 years	90	23.54	0.025	66.36	0.29
	6-10 years	66	27.05		67.27	
	>10 years	46	28.09		68.33	

\* Statistical significances are based on p-value< 0.01 in the 2-tailed tests.

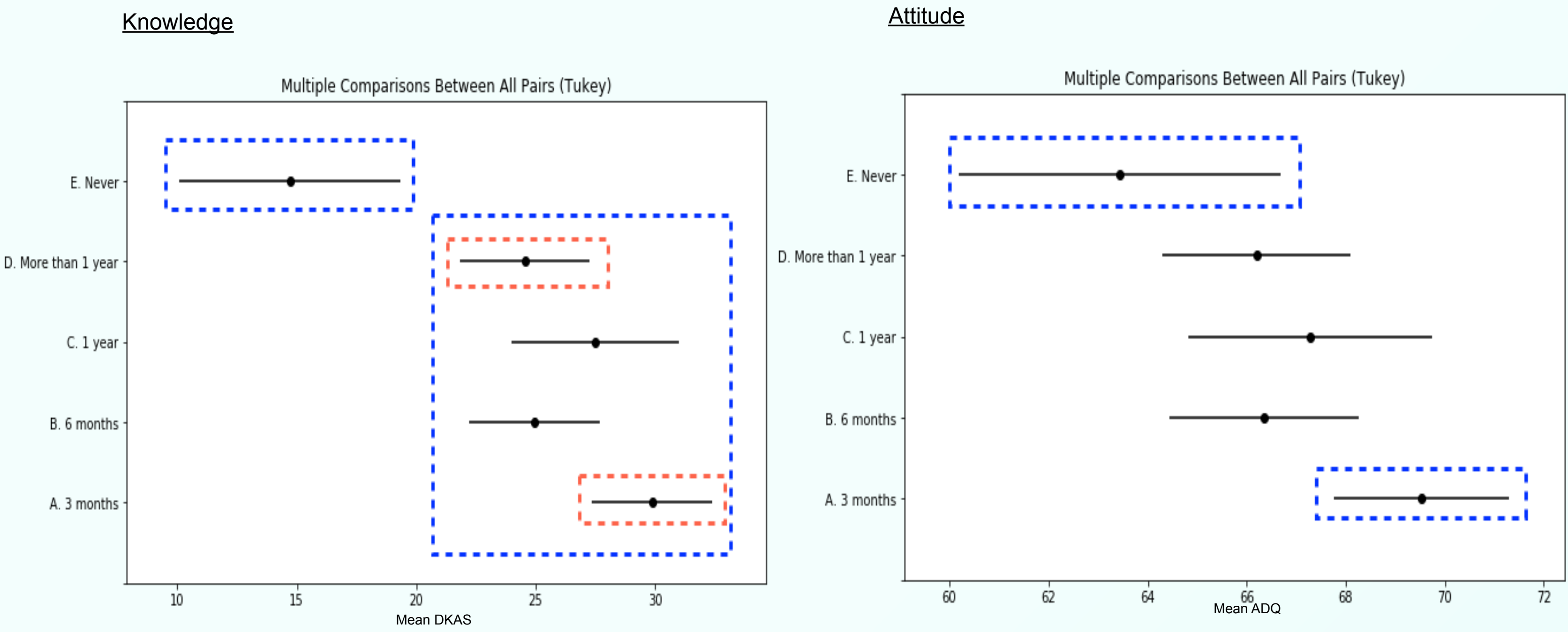
- Being a dementia caregiver, or a 1<sup>st</sup> degree relative with dementia did not effect knowledge or attitude.
- The time in healthcare did not appear to impact knowledge or attitudes
- There were significant differences between genders and their knowledge.
- There were significant differences between the occupations in their knowledge and attitudes towards dementia.



- There is a positive correlation\* between DKAS and ADQ.
- Attitude towards PWD improves with increasing knowledge on dementia.

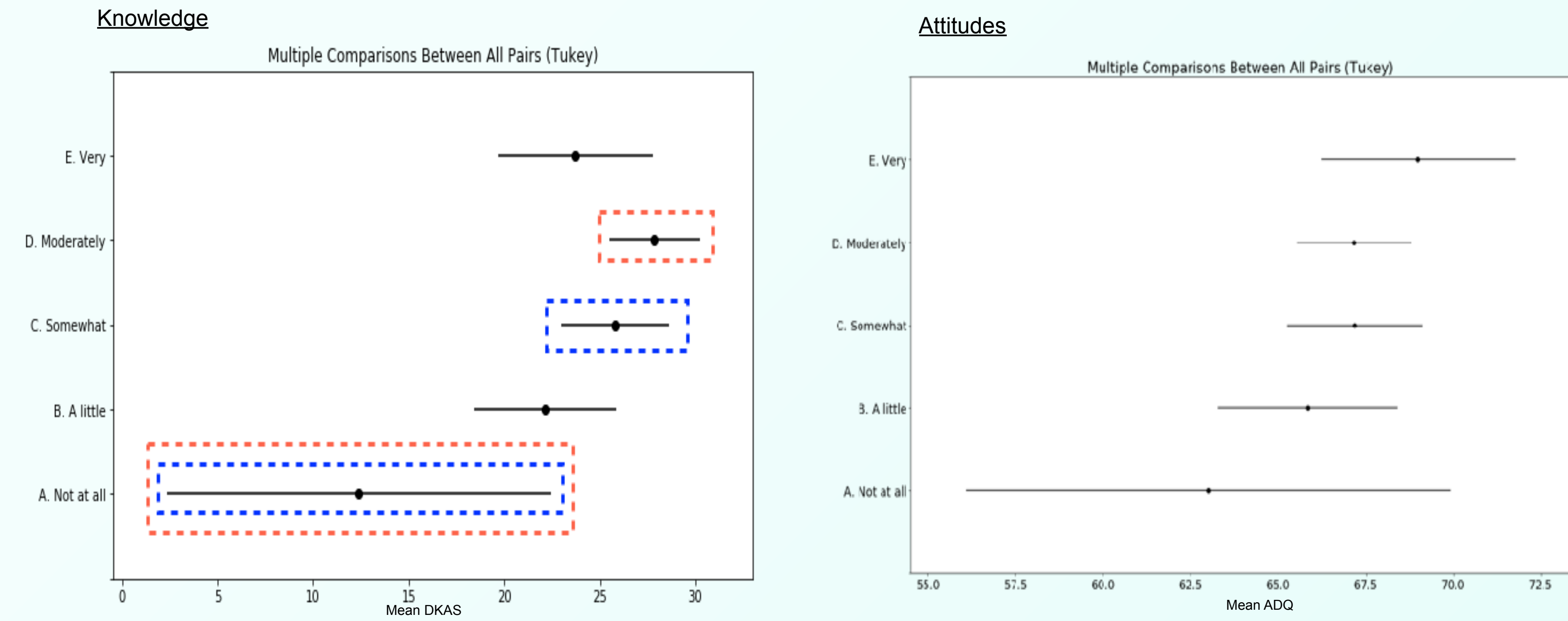
\* Pearson's Correlation Coefficient = 0.553 with 99% confidence interval of 0.411 to 0.668. P-value < 0.01, at 99% significance level.

“When was your last dementia teaching session?”



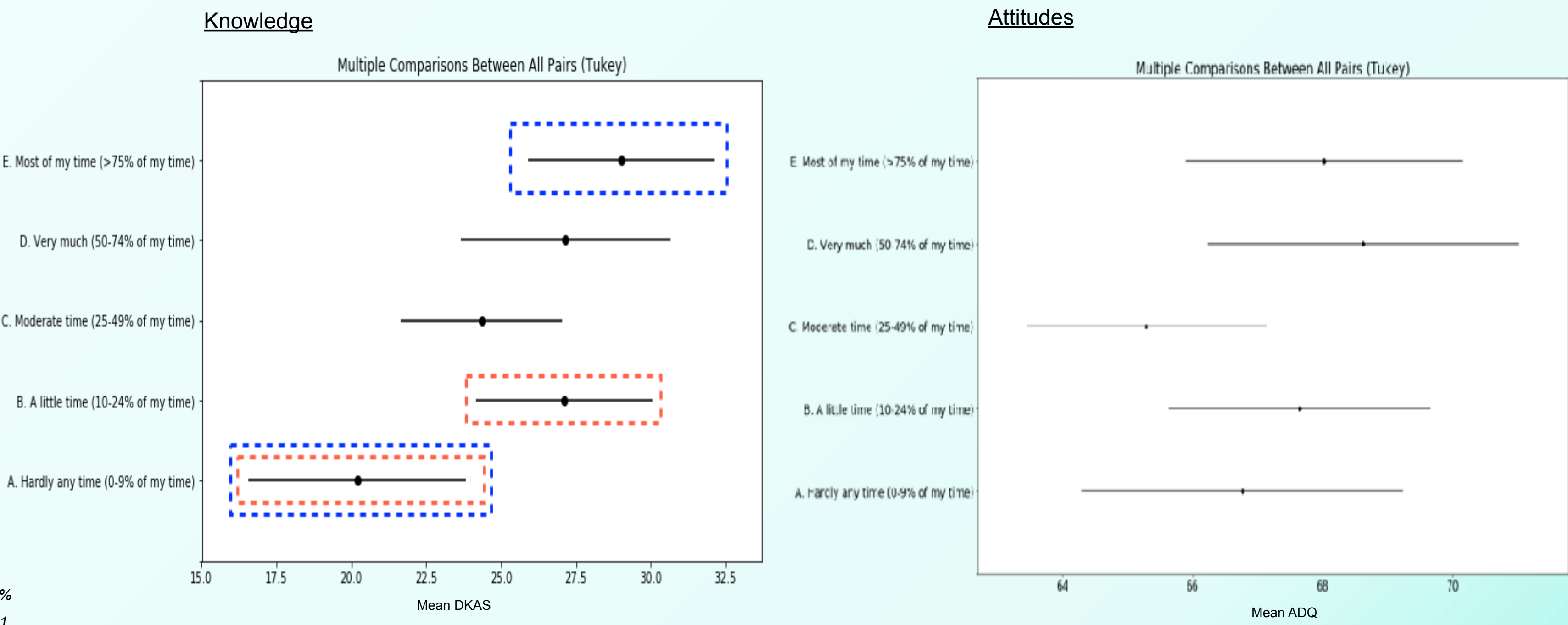
- Having any teaching shows higher level of dementia knowledge regardless of interval.
- There is a significant difference in attitude between 3 months and no teaching at all.

“How confident do you feel caring for a person with dementia? “



- Higher confidence shows significant differences in knowledge.
- We did not find any significant differences between attitudes and confidence.

“How much of your time is spent with a PWD?”



- Longer time spent with PWDs shows higher knowledge levels, but not better attitude.

\* Statistical significances are based on p-value< 0.05 in the 2-tailed HSD tests.

Discussion

- Being a dementia caregiver, or having a 1<sup>st</sup> degree relative with dementia did not differ from those that were not caregivers or did not have a first degree relative. This could mean as a society we have to continue equipping our caregivers with more knowledge and skills. Further studies should be done in the community on this.
- There were significant differences between occupations on their knowledge and attitudes towards dementia. This should be addressed given our multidisciplinary approach towards dementia care.
- Time in healthcare did not appear to affect our ADQ or DKAS score.
- At least one teaching session on dementia is crucial for healthcare workers in obtaining better dementia knowledge.
- Attitude towards dementia improves significantly if a teaching session was performed at least 3 months ago.
- Attitudes towards PWDs improves with greater knowledge on dementia. This has important implications in pushing for further dementia education of healthcare staff.
- With better knowledge of dementia, healthcare workers may have higher confidence in caring for patients with dementia.
- Knowledge, but not attitudes, is directly linked with time spent with PWDs. Education of staff has to look at improving both knowledge and attitudes in staff.

Conclusion

More resources should be allocated to training all health professionals to improve their level of knowledge and attitudes regarding dementia. This is crucial as dementia management requires a multi-disciplinary approach. Future research should focus on strategies to improve dementia education for healthcare workers.

References

1. Trevors C. M., Beattie, E., Martin-Khan, M., Fielding, E. (201). A Survey of the Queensland healthcare workforce: Attitudes towards dementia care and training. BMC Geriatrics. 2013; 13(101):962-968.

2. Annear MJ, Toye C, Elliott K-EJ, McInerney F, Eccleston C, Robinson A. Dementia knowledge assessment scale (DKAS): confirmatory factor analysis and comparative subscale scores among an international cohort. BMC Geriatrics. 2017;17(1):168-.