

Context

Reflective practice is essential to promote continuous learning and development of professional practice within Healthcare¹. Demonstrating reflective practice is central to the fulfilment of professional competencies for physiotherapists^{2,3} due to the link with desirable professional skills⁴.

Reflective practice has been widely accepted and valued as core aspect of undergraduate physiotherapy programmes. These skills are typically assessed via reflective writing and portfolio activities. Successful achievement of learning outcomes provides assurance that students have achieved competency, but the full scope of reflective capacities have not previously been explored.

Priddis and Rogers (2018) developed the **Reflective Practice Questionnaire (RPQ)** in response to a lack of valid measures. This self-reported questionnaire tool was designed to assess the core domains of a "reflective practitioner". It has been demonstrated to be a reliable measure of reflective capacity and has been used to explore the reflective capacity of different populations including the general public, qualified mental health professionals and medical students^{5,6}.

Research Question & Aim

Do the reflective capabilities of student physiotherapists improve during undergraduate training?

Aim. To use the Reflective Practice Questionnaire (RPQ) to assess:

1. the reflective capacity of undergraduate physiotherapy students at different time points within their undergraduate training.
2. the reflective capacity of undergraduate physiotherapy students compared to known data for other populations.

Method

Undergraduate physiotherapy students registered for the academic year 2020-21 were invited to complete the RPQ, at the beginning of semester 1 and again at the end of semester 2.

Responses were scored on a Likert Scale of 1-6, the median and IQR calculated for the ten sub-scales. Comparisons were made to known published data from the general public, mental health practitioners and medical students for the reflective capacity sub scale, which includes:

- Reflection-on action,
- Reflection-in-action,
- Reflection with others,
- Self-appraisal,

Additionally, comparisons were made across the 3-year groups as well as "Confidence General" and "Uncertainty" domains.

Results

Response rates: Semester 1 = 61% (n=33); Semester 2 = 66% (n=143)

Mean age: 20.23 years;

Sex: 79% female; 21% male

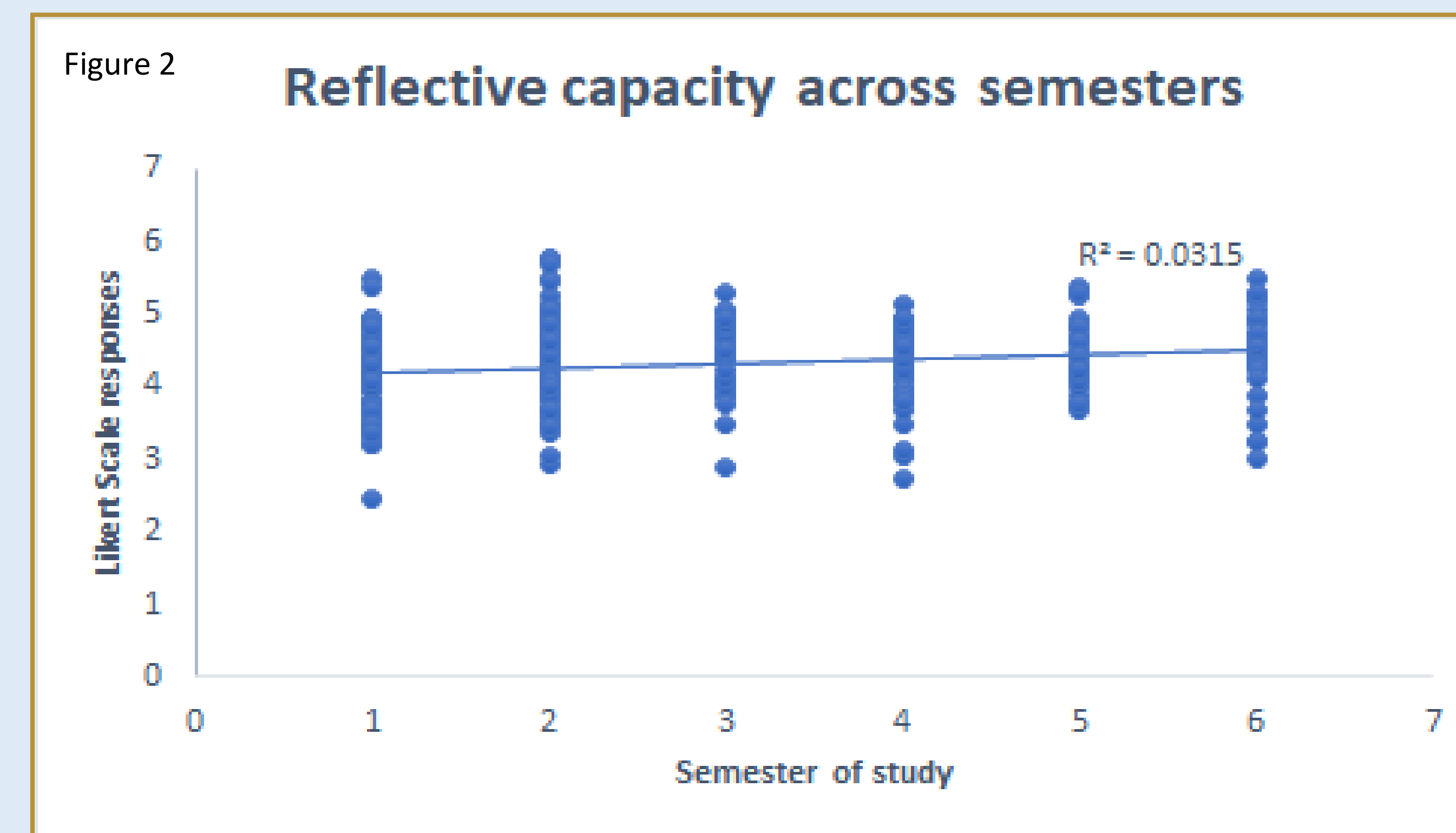
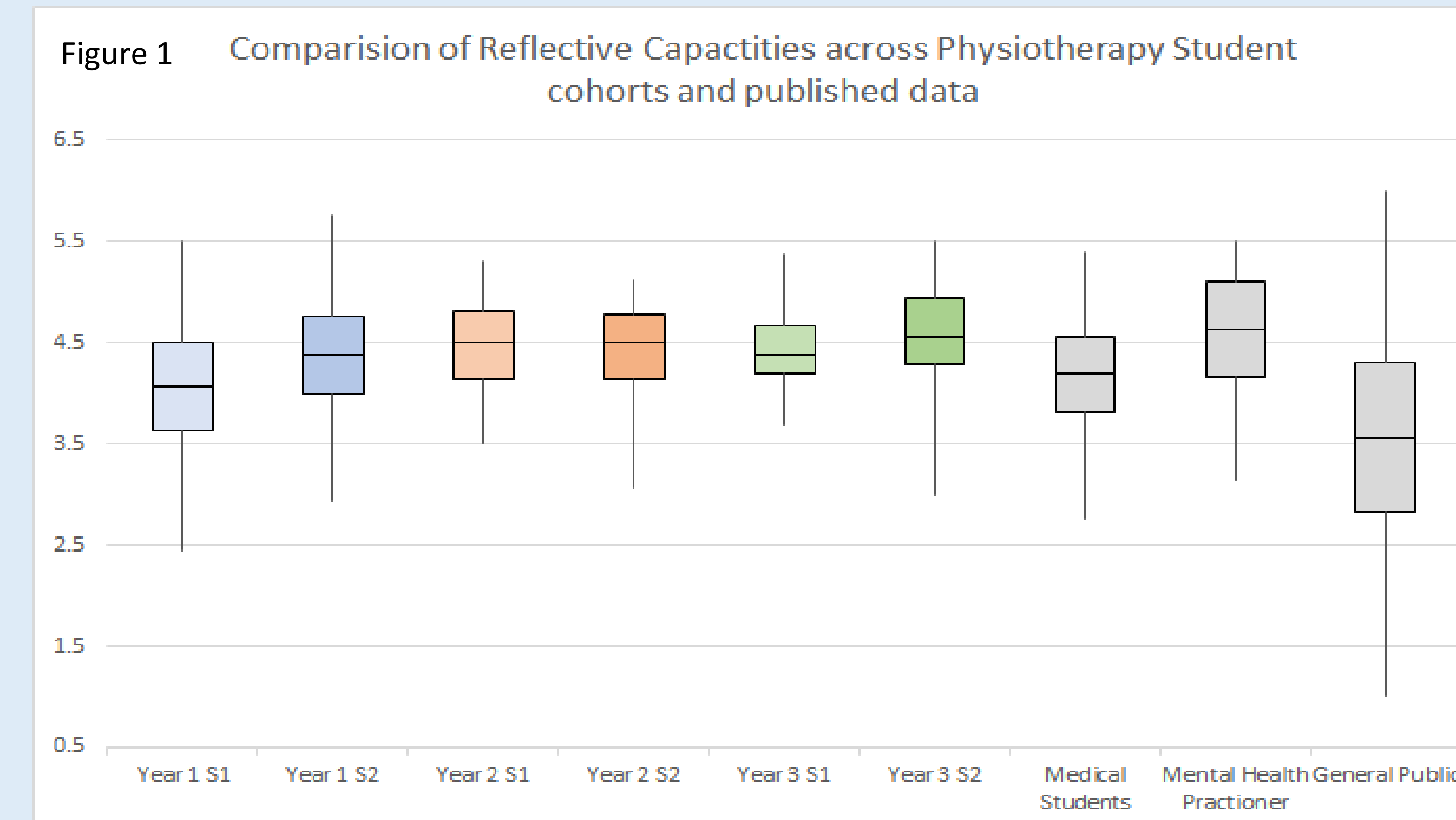


Table 1: Comparison across year groups
Confidence General (CG) and Uncertainty (Unc)

	Year 1		Year 2		Year 3	
	S1 N=61	S2 N=72	S1 N=34	S2 N=40	S1 N=38	S2 N=31
CG Median	2.0	3.0	3.0	3.25	3.0	3.75
IQR	1.5	1.25	1.5	1.44	1.25	1.5
Unc Median	3.5	3.75	4.0	4.0	3.75	3.75
IQR	1.0	1.0	1.31	1.25	0.75	1.25

Discussion

Figure 1 shows a general trend of improving reflective capacities across the year groups. Although there are fluctuating responses at different stages within the programme, it appears that the students enter the programme with a level of reflective capacity that is greater than the general public. This may suggest that the physiotherapy profession attracts reflective individuals. The reflective capacity of physiotherapy graduates is slightly higher than medical students but did not appear to be as well developed as that observed in mental health practitioners.

Figure 2 indicates that there is a limited relationship between reflective capacities and year group. This may be due to the small sample size, the unpredictable nature of responses and the impact of changes in clinical experience due to COVID.

Table 1 reports the "general confidence" and the level of "uncertainty" within the year groups - these domains are reported to have a positive association with increased reflective capacities^{5,6}. The data suggests that whilst the confidence of the students improves throughout the programme, a level of uncertainty remains.

Year 1 within the programme focuses upon exposure to different models of reflection and self-reflective writing. It's possible that exploring and understanding self-reflection at an early stage may build a foundation for enhanced reflective capacity in the future.

Conclusion

The reflective capacities of Physiotherapy students are greater than the general public and slightly higher than medical students.

There is a trend for reflective capacity to improve throughout the programme with the greatest improvement seen from the start of year 1 to the end of year 3.

Confidence appears to increase throughout the programme (but uncertainty remains evident).

Physiotherapy educators should encourage students to embrace 'uncertainty'. It may be possible to enhance clinical experiences to help optimise reflective capacity.

Key References

1. Chaffey LJ, de Leeuw EJ, Finnigan GA. (2018) Facilitating Students' Reflective Practice in a Medical Course: Literature Review. *Educ Health* 2012;25:198-203
2. CSP (2019) <https://www.csp.org.uk/news/2019-06-24-csp-encourages-members-engage-statement-supporting-reflective-practice>
3. HCPC (2019) HPCP (2019) <https://www.hcpc-uk.org/globalassets/news-and-events/benefits-of-becoming-a-reflective-practitioner---joint-statement-2019.pdf>
4. Smith M, Trede F. 2013. Reflective practice in the transition phase from university student to novice graduate: implications for teaching reflective practice. *High. Educ. Res. Dev.* 32(4): 632-645.
5. Priddis L, Rogers S., (2018) Development of the reflective practice questionnaire: preliminary findings, *Reflective Practice*, 19:1, 89-104.
6. Rogers S, Priddis L, Michels N, Tieman M, Van winkle L., (2019) Applications of the reflective practice questionnaire in medical education. *BMC Medical Education* 19,47.