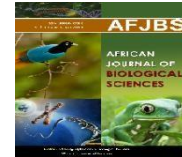


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Validity, utility, and reliability of Assessment of Clinical Performance in Physiotherapy (ACPP-N) for novice physiotherapy students

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Abstract: Background: Assessment of clinical performance could be challenging particularly for novice students. Hence, a new tool Assessment of Clinical Performance in Physiotherapy for novices (ACPP-N) was developed to assess students at the early stage of their clinical placements.

Purpose: To validate and measure the reliability and utility of ACPP-N in clinical practice.

Method: Thirty-four physiotherapy students in their first and second year, and their clinical educators from a range of practice settings were invited to complete ACPP-N and online survey.

Results: Words used in the tool were clear, the domains were proportionately distributed, and the passing score of 60% was a true representation of student's achievement of learning outcomes. The marking criteria descriptors and the differentiation between "0" and N/A" were clear. All ACPP-N tool items were deemed relevant and appropriate in assessing novice clinical competencies with I-CVI all above 0.79 and S-CVI >0.90. Cronbach's alpha of 0.89 showed good internal consistency of the N=20 items of the ACPP-N tool.

Conclusion: ACPP-N is a valid, reliable, and practical tool in evaluating clinical competencies of novice physiotherapy students.

Keywords: clinical competencies, physiotherapy students, novice clinical students, reliability, validity

Introduction: Clinical placement is an integral part of the physiotherapy curriculum. The students of physiotherapy attend a minimum of 1000 hours of clinical placement in a range of clinical settings (O'Shea, Haberlin, Alpine, and Reed, 2015). Clinical placement within the curriculum is considered equivalent to an academic component with teaching, learning, and assessment taking place outside the campus within the clinical settings. The success of clinical practice placements depends upon the collaboration between academics, students, and clinical staff (Commission for Academic Accreditation, 2019).

Physiotherapists working in the hospitals are recruited and trained by the university to educate students whilst they are in the clinical placement and in this article, we refer to them as 'clinical educators' (CEs). CEs play key roles in students' learning during their clinical placements and provide opportunities for students to acquire the skills required for safe and effective practice. More importantly, CEs are gatekeepers to monitor the learning quality and the maintenance of professional standards (Pront, Gillham, and Schuwirth, 2016).

A mechanism for accurately measuring students learning and progress is an important part of evaluating student readiness for entry-level physiotherapy performance for graduation and licensure application (Attrill, Lincoln, and McAllister, 2016). There are a very few assessment tools available for evaluating students on clinical performance in physiotherapy. Some of them are Common Clinical Assessment Form (CAF) by Coote, Alpine, Cassidy, Loughnane, and McMahan et al., (2007), Assessment of Physiotherapy Practice (APP) by Dalton, Davidson, and Keating (2011), Clinical Performance Assessment Scale (CPAS) by Joseph, Hendricks, and Franz (2011), Clinical Competency Scale (CCS) by Yoshino and Usuda (2013), Canadian Physiotherapy Assessment Performance (CPAP) by Mori, Norman, Brooks, Herold, and Beaton (2015), Clinical Competence Evaluation Instrument (CCEI) by Muhamad, Ramli, and Amat (2015), and Physiotherapy Student Clinical Assessment Tool (PSCAT) by Shenoy and Vivian (2019). A recent systematic review by O'Connor, McGarr, Cantillon, McCurtin, and Clifford (2017) assessed the psychometric properties of assessment tools that evaluated students' clinical performance not only highlighted the paucity of research in this area but also inconsistency in reporting the results.

The physiotherapy program in the United Arab Emirates is still nascent and there are now only three institutions in the United Arab Emirates (UAE) offering physiotherapy undergraduate program. Most of the institutions started initially with the transnational curriculum and later was contextualized. The institution (where the sample is drawn from this research), which initially had a transnational curriculum from an Australian University, utilised Assessment of Physiotherapy Practice (APP) (Dalton, Davidson, and Keating, 2011; Dalton, Davidson, and Keating, 2012) for evaluating clinical performance of physiotherapy students. In the transnational curriculum, all the clinical placements were in the last two of the five years of the physiotherapy program. The curriculum made a major shift from Australian transnational to the UAE contextualized curriculum, with a total of seven clinical placements of each 4 to 5 weeks long with the clinical placements starting in the first year of their study up until their final year. APP was not found to be spirally progressive to distinguish between the beginners to advanced competencies.

These changes mandated a need for a validated tool that could assess students during the different levels of their studies and show their progression from novice to autonomous students. One of the tools that matched the requirement was Canadian Physiotherapy Assessment of Clinical Performance, which is still being validated with some preliminary data being published that is aiming to measure performance of beginner to

entry-level physiotherapy students (Mori, Norman, Brooks, Herold, and Beaton, 2016; Mori, Norman, Brooks, Herold, and Beaton, 2016a). The tool is based on the competency profile for physiotherapists in Canada, which is at its third phase of development. Due to varied curriculum and entry requirements, it was not deemed adaptable to the clinical education context of physiotherapy students in the UAE. It is challenging to adopt a tool into another context (O'Connor, McGarr, Cantillon, McCurtin, and Clifford, 2017).

So, there was a need to develop the tool which could show progression of students from one level of practice to another. also allow self-assessment of students. It is important that students learn to evaluate their own performance early into the program through self-assessment and reflection. Self-assessment helps students evaluate their own academic abilities and monitor their progress throughout the learning process (Brown and Harris, 2014; Panadero, Jonsson, and Botella, 2017). Reflection has been integrated into physiotherapy education due to its numerous positive benefits, particularly the development of competence and effective clinical practice (Donaghy and Morss, 2007; Smith and Trede, 2013).

The tool, Assessment of Clinical Performance of Physiotherapy (ACPP) was developed by a group of three educators from FCHS physiotherapy program who are the researchers of this study. The tool defined three levels of clinical placements for students - 'Novice' for Clinical Placement 1 & 2; 'Intermediate' for Clinical Placement 3, 4 & 5; 'Advanced' for Clinical Placement 6 & 7.

This article reports the validity, reliability & utility of the ACPP tool developed for novice level (ACPP-N) students. The novice was defined by the researchers as *'Initial placements at a beginner level with complete supervision requiring frequent prompts in all the domains of clinical practice. The students are expected to assist educators on simple cases to gain hands on experience.'* ACPP-N was designed to evaluate students' performance in the first and second clinical placement.

Study Aims

1. To test the validity and reliability of ACPP-N in measuring novice physiotherapy students' clinical performance in a practice setting
2. To examine the utility of the tool to measure competencies in practice setting

Materials and Methods

Participants

First year students of physiotherapy from Fatima College of Health Sciences who registered for the clinical module and CEs who supervised these students participated in this study. The duration of the clinical placement was for 5 weeks, and students attended the placements for three days a week, for a total of 5 weeks. A total of sixty-eight participants were invited and took part in this study (34 physiotherapy students and 34 educators). All participants completed the ACPP-N tool in two different points, mid-way (2.5 weeks) and at the end of the placement (week 5). This provided us with 136 submissions of completed

ACPP-N tool. The same participants were invited to take part in the online survey at the end of the placement, of which sixteen CEs and thirty-two students completed the survey.

Assessment of Clinical Performance in Physiotherapy

The ACPP tool was developed by the authors of this study that covered three different levels of students – novice, intermediate and autonomous. The tool comprised of 5 domains related to physiotherapy clinical practice covering 30 competencies. Each competency was on a scale of 0 to 5 with the incremental progression of one point from the minimum score of 0 being ‘not achieving’ and 5 as ‘exemplary performance’.

This initial draft was shared to gain feedback from the faculty members of the university involved in the physiotherapy students' clinical education. Based on the feedback from the team members, the following revisions were made to develop the final draft as shown in the table below and ACPP-N was finalized (Appendix 1).

Table 1. Summary of changes made to ACPP after revision of the initial draft.

First draft	Second draft
Described all the domains and criteria for the three levels – Novice, Intermediate and Autonomous. It was abbreviated as ACPP.	It was decided to focus the validation of the novice level for this study as it was the first clinical placement for students who were on the new curriculum. The form was abbreviated as ACPP-N.
Thirty competencies were identified for all levels, of which only twenty-two competencies were included for the novice level.	The competencies were reduced to 20 as the two competencies related to assessment and intervention were not deemed suitable for the novice level.
No considerations were made on the total score for students at any level.	A total score including all 20 competencies were calculated as 100 and a passing threshold of 60% (according to the university regulation) was applied
The tool had only one column either for students or educators. In this case two different forms had to be used for each assessment, one by the student and the other by CE.	A user-specific column was created for the student to self-score in the first column and for the CE to add the students score in the second column. This reduced duplication of general information and was easy to compare between a student and the CE's scores.

Orientation session

Two different orientation sessions on two different days were held for students and clinical educators were held to provide the overview of clinical education and to introduce ACPP-N tool. The length of the orientation session lasted for about 2.5 hours as it included general clinical education principles for CEs and clinical education expectations for students. The

purpose and the items on ACPP-N tool were clearly explained and provided them with ongoing support during the clinical placement.

Data collection

After finalizing ACPP- N, students and CEs were provided with the orientation workshop to this tool. The participants of the workshop were informed about the validation phase of this tool who consented to participate in the study.

All participants were asked to complete the ACPP-N tool at two different timelines. The first in the 3rd week as mid-way performance which was used as a formative assessment and the second was in the 5th week as the summative assessment. The student completed self-evaluation using ACPP-N and sent the completed form to their CE to mark. Submission of ACPP-N tool was a mandatory requirement for the students on this clinical placement and the passing criteria was set at 60% (according to the University regulations). The 60% was based on the scores given by the CE in the 5th week.

At the end of the clinical placement in the 5th week, all the participants were invited to complete an online survey exploring the utilization and contextualization of the tool. The first part of the survey included demographic information. The second part included questions that related to the relevance and appropriateness relating to the 5 domains of ACPP-N. This part also had an open-ended question for the participants to suggest additional domains or criteria that could be considered in the ACPP-N tool. The third section included questions related to ease of use of the tool and clarity of words. The final question was to indicate the amount of time taken by the participants to complete the tool.

Data Analysis

The data collected through ACPP-N and survey were analyzed as follows. For the face and construct validity and utility of the tool, the survey responses were analysed using frequency of participants' responses. Content validity index per item and at scale were analysed based on the responses of the clinical educators on the relevance of each item to the tool. For the reliability, internal consistency was measured using Cronbach's alpha on midway and final ACCP assessment.

For validity and utility of the tool, the participants were asked to answer a questionnaire using a rating scale of 0-2 (0 – can't decide, 1 – disagree, 2 – agree). Face validity was measured by asking participants to rate ACPP-N's clarity and ease of use. Construct validity was measured by asking the participants to rate their agreement on the proportionate weight distribution of each domain of the ACPP-N and whether the passing score of 60% is a true representation of the achievement of learning outcomes. The ACPP-N's utility was measured based on 5 aspects: (1) on the clarity of marking criteria descriptors (2) to seek the clarity on how the word 'novice' was defined, (3) how clear the differentiation between "0" and "N/A" was, (4) how confident the scorer (educator or student) was in using the scale of 0-4, and (5) how practical the tool was for the novice level. Response rate were obtained for each of the survey items regarding utility, face and construct validity of the tool.

Content validation of ACCP-N was done by clinical educators (n=16) as experts in the field of clinical training. Using a 4-point rating scale, each item of the ACCP-N tool was rated according to its relevance in measuring novice level clinical performance: 0 for 'don't know'; 1 for 'not relevant'; 2 for 'relevant'; 3 for 'highly relevant'. The content validity index per item (I-CVI) of 0.79 or above and content validity index as scale (S-CVI/Ave) of 0.90 or above were the minimum acceptable indices (Rodrigues et al., 2017). Answers to the open-ended question "Are there any other items that you think should be assessed or included in the ACPP tool?" were extracted for content analysis. Each clinical educator response was coded as CE1, CE2, CE3 and so on.

For reliability, the internal consistency of the tool was measured per domain (professional behavior, assessment, and treatment) and overall, as a tool. Data analysed were based on four combined datasets: (1) students' midway and (2) final self-assessment of their clinical performance, and the (3) clinical educators' midway and (4) final assessment of students' clinical performance. The Cronbach's alpha of each domain and the overall tool were interpreted as: ≥ 0.9 – excellent, ≥ 0.8 – good, ≥ 0.7 – acceptable, ≥ 0.6 – questionable, ≥ 0.5 – poor, and < 0.5 – unacceptable (George and Mallery, 2007).

Ethical considerations

The ethical approval for the study was sought from Fatima College of Health Sciences Ethics Review Committee (Ref No: FCEC-3-20-21-PT-8-SF). The consent form was embedded into the online survey and the first question was related their consent of participating in the study. Only those participants who selected 'Yes' were allowed to continue and those who selected 'No', were thanked and exited from the survey. Only the researchers of this study had access to the survey results which was stored securely in a cloud folder with restricted access.

As part of clinical course requirements, all students and CE had to submit ACPP-N to their clinical instructors and the data from ACPP-N was collected by the researchers for the analysis after the ratifying the results by the exam board. Hence, this study did not influence on students' performance or progression.

All identification of students and staff in both ACPP-N and survey were kept anonymous for data analysis. Destruction of data will be in accordance with the research and ethical committee guidelines and all data will be deleted after 2 years from the time of data collection.

Results

Face validity, construct validity, and utility of the ACCP-N tool are presented below using the data gathered from the survey. Content validity of the ACCP-N tool is shown below using data from survey of the clinical educators. The reliability of ACCP-N tool in terms of its items' internal consistency is presented using data from the midway and final assessment of n=34 students' clinical performance.

Survey results

Thirty-two (n=32) of the eligible students (N=34) and 16 clinical educators participated in the survey for face validity, construct validity, and utility of the ACCP-N tool.

For face validity, 90.6% of the students (29 of n=32) and 100% of the clinical educators (n=16) agreed that the tool used clear words (Fig. 1A). Moreover, the ACCP-N tool was easy to use according to 84.4% (27 of n=32) of the students and 93.8% (15 of n=16) of the clinical educators (Fig. 1B).

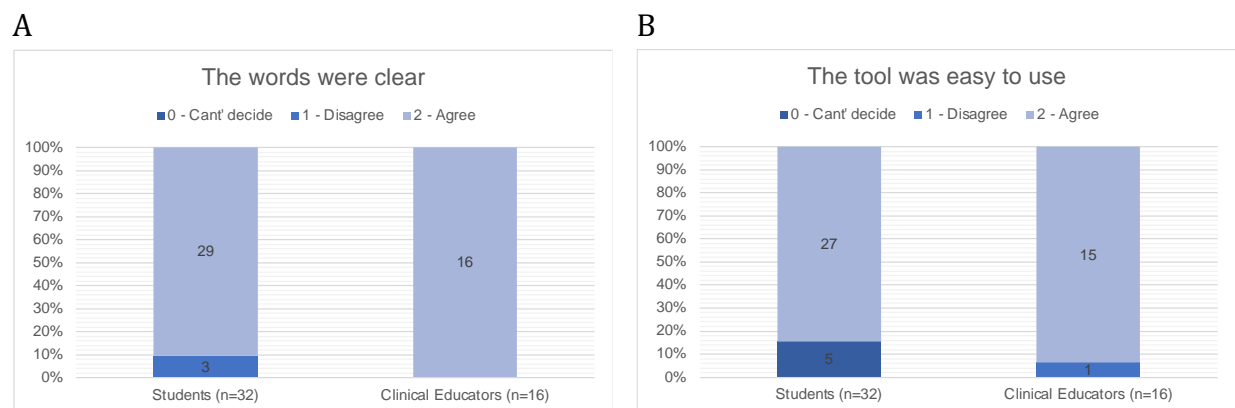


Figure 1. Summary of face validation of the ACCP-N tool based on responses of n=32 students and n=16 clinical educators.

According to 75% (24 of n=32) of the students and 87.5% (14 of n=16) of the clinical educators, the weight of each domain was proportionately distributed (Fig. 2A). Regarding the passing score of 60% in ACCP-N, 75% (24 of n=32) of the students and 81.3% (13 of n=16) of the clinical educators agree that it is a true representation of the achievement of learning outcomes (Fig. 2B).

A

B

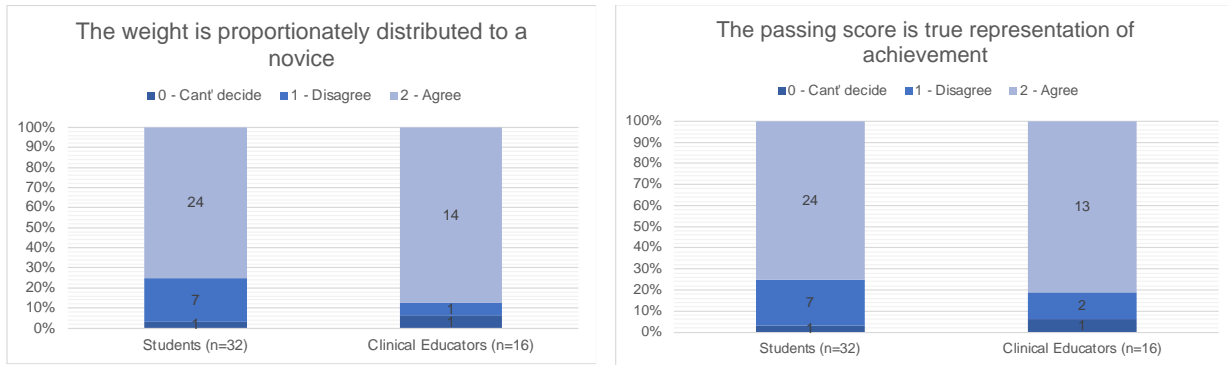
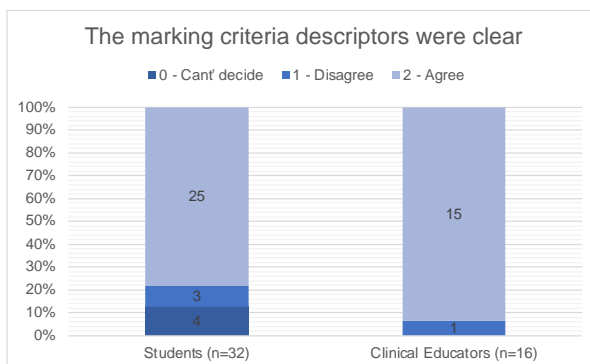


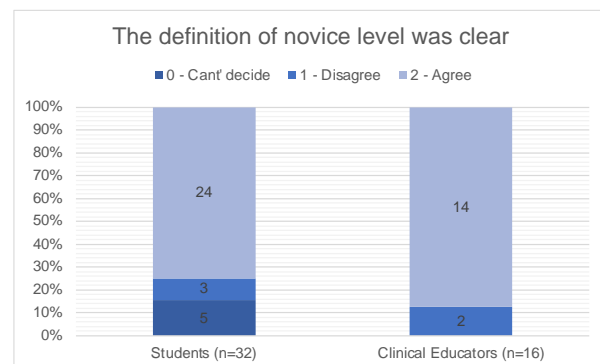
Figure 2. Summary of construct validation of the ACCP-N tool according to responses of n=32 students and n=16 clinical educators.

The marking descriptors were clear according to 78.1% (25 of n=32) of the students and 93.8% (15 of n=16) of the clinical educators (Fig. 3A). On the definition of novice level, 75% (24 of n=32) of students and 87.5% (14 of n=16) of the clinical educators agreed that it was clear (Fig. 3B). The differentiation of 0 and NA in the ACCP-N tool was clear according to 84.4% (27 of n=32) of the students and 75% (12 of n=16) of the clinical educators (Fig. 3C). Majority of the students (87.5% or 28 of n=32) and clinical educators (81.3% or 13 of n=16) felt confident in using the scale of 0-4 on ACCP-N (Fig. 3D). Among the students, 78.1% (25 of n=32) agreed that the ACCP-N is a practical tool for novice level while 93.8% (15 of n=16) of clinical educators agreed (Fig. 3E).

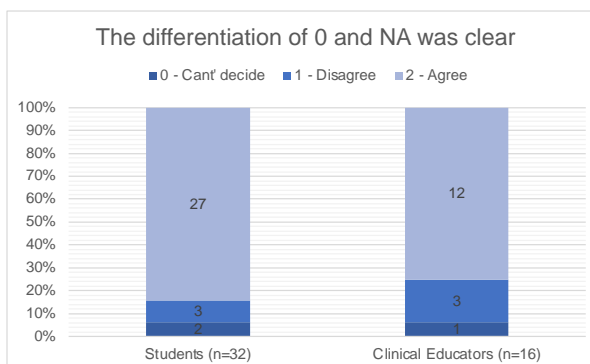
A



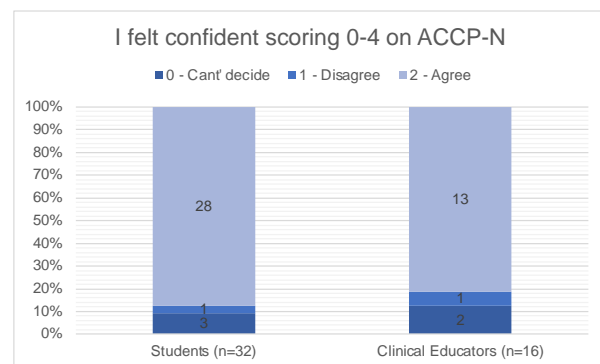
B



C



D



E

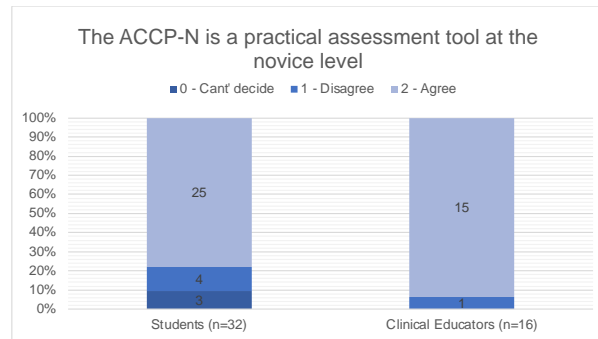


Figure 3. Summary of ACCP-N's utility based on participant responses.

On average, the students took 10.9 minutes to complete the form, while the clinical educators took 19.1 minutes to complete the form. Some of the students and educators indicated that the completion time included reflection and/or discussion.

The clinical educators (n=16) also conducted the content validation of the ACCP-N tool. Table 2 summarizes the clinical background of the clinical educator participants.

Table 2. Summary of clinical educators' (n=16) background.

Years of clinical education experience	0-2 years	3 of n=16
	2-5 years	4 of n=16
	>5 years	9 of n=16
Specialty	Musculoskeletal	7 of n=16
	Neurology	9 of n=16

Table 3 summarizes the results of content validation done by the clinical educators per item and at scale. Results show that all items were rated as >0.79 which means that the experts consider all items to be relevant and appropriate part of the tool in measuring novice level clinical performance. Therefore, none of the items required revision or elimination.

Table 3. Summary of content validity index per item and at scale.

Domains	ACCP-N items	Relevant	Non-relevant	I-CVI	Interpretation	S-CVI/Ave
Professional behaviour	Time management (attendance, punctuality, completion of FCHS requirements)	16	0	1.00	Item is relevant and appropriate	0.97

	Communication (team, patients, carers, reporting, use of language, sharing information)	16	0	1.00	Item is relevant and appropriate
	Dress code (shoes, uniform)	16	0	1.00	Item is relevant and appropriate
	Attitude (learning, taking feedback on board, reflective practice)	16	0	1.00	Item is relevant and appropriate
	Responsibility (completion of work, acceptance of load)	16	0	1.00	Item is relevant and appropriate
	Ethical considerations (confidentiality, respect, cultural sensitivity, disclosure)	16	0	1.00	Item is relevant and appropriate
	Teamwork (inter and multi-professional)	16	0	1.00	Item is relevant and appropriate
Assessment	Understanding patient records (basic)	15	1	0.94	Item is relevant and appropriate
	Consideration of vital signs/red flags	16	0	1.00	Item is relevant and appropriate

	Patient interview	16	0	1.00	Item is relevant and appropriate
	Physical examination (simple and routine)	15	1	0.94	Item is relevant and appropriate
	Interpretation of findings and creating problem list	15	1	0.94	Item is relevant and appropriate
Treatment	Goal settings (patient oriented)	16	0	1.00	Item is relevant and appropriate
	Selection of intervention (appropriate)	16	0	1.00	Item is relevant and appropriate
	Implementation of intervention (simple)	15	1	0.94	Item is relevant and appropriate
	Evaluation of intervention (effectiveness, follow up)	16	0	1.00	Item is relevant and appropriate
	Risk minimization (infection control measures, safe practice)	16	0	1.00	Item is relevant and appropriate
	Patient education (family, carer, patient)	16	0	1.00	Item is relevant and appropriate
Documentation	Complete patients note (concise, clear)	15	1	0.94	Item is relevant and appropriate

Evidence-based practice	Understanding of research in the field	14	2	0.88	Item is relevant and appropriate	
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Relevant: ratings >2; Non-relevant: ratings <2

For the open-ended question to CEs, “Are there any other items that you think should be assessed or included in the ACPP tool?”, no common theme or concept arose from the answers provided by the clinical educators. Only 5 of n=16 educators provided answers to this question, 3 of which stated that the tool “covers all the needed items for novice level” (CE3), “the format was good” (CE7) and “everything is included” (CE12). CE10 suggested to add items (e.g., clinical log, case presentation) into the tool regarding other assessment tasks that the students are required to complete during the clinical placement along with the ACPP-N tool.

Midway and final ACPP-N assessment results

A total of n=136 samples were gathered from the students’ and clinical educators’ midway and final assessment of students’ clinical performance. For reliability across items of the tool (Table 4), the professional behaviour domain with 7 items ($\alpha = .85$) and treatment domain with 6 items ($\alpha = .87$) showed good internal consistency. The assessment domain with 5 items showed acceptable reliability ($\alpha = .76$). The documentation and EBP domains have one item each, hence, could not undergo analysis for internal consistency. Overall, the whole ACCP-N tool with a total of 20 items showed good internal consistency ($\alpha = .89$).

Table 4. Summary of reliability per domain and as a tool based on n=136 samples.

Domains/Tool	N of items	Cronbach’s alpha	Interpretation
Professional behaviour	7	.85	Good internal consistency reliability
Assessment	5	.76	Good internal consistency reliability
Treatment	6	.87	Good internal consistency reliability
ACPP-N tool	20*	.89	Good internal consistency reliability

**Includes 1 item from Documentation domain and 1 item from EBP domain*

Discussion

The student's engagement and learning during clinical placement require a valid and reliable clinical performance assessment instrument (McCallum, Mosher, Jacobson, Gallivan, and Guiffre, 2013). The purpose of this study was to validate the use of a clinical tool as a standardized measure of the clinical competencies of physiotherapy students at a novice level. When a scale is developed for validation, it is crucial to gain

feedback from all stakeholders who would be utilizing this tool in the future. In this study we had input from physiotherapy academics, clinical educators, and students. Following the input from physiotherapy academics, the first draft of the tool was modified to focus only on the competencies required at the novice level.

The CEs on this study were recruited from different fields of specialties in physiotherapy. They were recruited from a range of settings that included large teaching hospitals, both public and private. Most of the educators of this study had experience in assessing students on clinical placement using competency measures. Hence, we considered their input as 'experts' who found that all the items on ACPP-N tool were relevant and appropriate for the level of students with an average content validity index of 0.97 at scale which is considered as highly acceptable (Rodrigues, Adachi, Beattie, and MacDermid, 2017).

A suggestion was made by one of the CEs to include all the assessments required for the students to complete the clinical placement. However, the ACPP-N tool is intended to measure the clinical competencies but is not a tool to capture all the concurrent assessment tasks done within the clinical placement such as case presentations, attendance sheets, clinical case logs, and skills checklist. Despite the ACPP-N tool being the core measuring tool for novice clinical competencies of students, separate assessment instruments were provided to measure the performance in other assessment tasks.

An important aspect of this scale was for us to develop a simple marking criterion to use as it is intended for students of year 1 to self-evaluate using the scoring system. Most students (73%) and CEs (94%) found that the tool was very clear and easy to apply. The time taken to complete the tool could be an important consideration as highlighted by O'Connor, McGarr, Cantillon, McCurtin, and Clifford (2018). The average time taken to complete the tool was 11 minutes for students and 19 minutes for CEs. It was deemed difficult to determine the time needed to complete the ACPP-N tool as it being a tool that requires ongoing assessment of students since their start of the placement. Moreover, the students need to engage in reflection before completing the rubric and CEs to gather evidence and discuss the performance with the students before scoring. Hence, the average time provided may not be a true representation of the required completion time of the tool. Furthermore, the validated version of the tool if in a fillable PDF file would be user friendly with the scoring criteria added as a drop-down menu against each criterion.

It is often difficult to distinguish between 0 and NA and could easily be used interchangeably, but in this study, we found there was no confusion both among and students and CEs. This could be because this point was stressed during the orientation session, and it was again reminded during the assessment weeks. The orientation session might have played an important role in understanding the tool; however, the study did not evaluate the impact of training session on use of the tool.

There could be a subjective decision between 'proficient' and 'exemplary' while scoring them on each of the criteria, although there was no input related to this from any of the participants, the authors recommend defining both clearly in the validated version of the tool. However, this variance would be expected due to the complex nature of clinical placement arrangements and diverse experiences of CEs. Despite these challenges, a high level of consistency was found in marking the students' performance on ACPP-N.

Global measure is used in the APP to rate the students learning throughout the placement (Dalton, Davidson, and Keating, 2012). In ACPP-N, the researchers decided not to include a global rating scale of the clinical performance that reflects the students learning throughout the placement due to its subjectivity and variability in global scoring (Kirwan, Clark, and Dalton, 2019).

The tool was found to be reliable both per domain and overall. The score of 0.89 is considered to have good internal consistency as a tool (George and Mallery, 2007). Dalton, Davidson, and Keating (2012) in their study while testing the reliability of a clinical tool (APP), considered the scores of students and CEs separate for analysis. In our study, the intra-rater reliability was not done due to the small sample size (as the same student being tested two times during the placement, one in the mid-way and one final). The inter-rater reliability was also not possible due to each student being supervised and assessed by one CE throughout the placement. The Canadian Physiotherapy Assessment of Clinical Performance tool developed by Mori, Norman, Brooks, Herold, and Beaton (2016).

ACPP-N is a valid tool in evaluating clinical competencies of novice physiotherapy students in terms of face, content, and construct validity. The items of the ACPP-N tool were found to have good internal consistency across all items. Findings also suggest that the tool is easy to use by both students and CEs.

The researchers recommend providing training sessions prior to use of the ACPP-N tool. Conducting the training sessions separately for educators and students resulted in a more robust instruction and focused discussion of the tool. Moreover, a consistent and ongoing support throughout the placement duration is highly recommended for a new tool.

For future studies, it is recommended to look at the students' progression from midway to final assessment, from novice to intermediate, and from intermediate to an autonomous level. Additionally, to test inter-rater reliability, the student should be supervised and evaluated by two CEs during the placement. For intra-rate reliability, the suggestion is to score self and CE twice with at least 24 hours separation. However, for inter-rater and intra-rater reliability, it is important to consider the practical aspect of having two supervisors for one student and the time needed to complete the tool twice in two consecutive days, respectively.

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Declaration of Interest

The authors report there are no competing interests to declare. This project did not receive any funding from any institution or agency.

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Appendix 1: Assessment of Clinical Performance in Physiotherapy for Novice (ACPP-N)

Name of the Student: Student ID:
 Name of the Clinical Educator:
 Course Code: Course Title:
 Hospital: Specialty:
 Date of placement: From..... To:
 _ Midway Feedback _ Final Feedback

Level:

Novice (CP1 & CP2) – Initial placements at a beginner level with complete supervision requiring frequent prompts in all the domains of clinical practice. The students are expected to assist educators on simple cases to gain hands on 5 Domains and 20 Items with Max of 100 marks

CP – Clinical Placement*Marking Criteria:**

0: Not achieving
 1: Poor performance
 2: Inconsistent
 3: Adequate (passing)
 4: Proficient
 5: Exemplary
 NA: Not applicable

1. Professional Behaviour	Marks (Student)	Marks (Educator)
Time management (Attendance, punctuality, completion of FCHS requirements)		
Communication (team, patients, carers, reporting, use of language, sharing information)		
Dress code (shoes, uniform)		
Attitude (learning, taking feedback on board, reflective practice)		
Responsibility (completion of work, acceptance of load)		
Ethical considerations (confidentiality, respect, cultural sensitivity, disclosure)		
Team work (inter and multi-professional)		

2. Assessment	Marks (Student)	Marks (Educator)
Understanding patient records (basic)		
Consideration of vital signs/red flags		
Patient Interview		
Physical examination (simple and routine)		
Interpretation of findings and creating problem list		

3. Treatment	Marks (Student)	Marks (Educator)
Goal settings (patient oriented)		
Selection of intervention (appropriate)		
Implementation of intervention (simple)		
Evaluation of intervention (effectiveness, follow up)		
Risk minimisation (Infection control measures, safe practice)		
Patient education (family, carer, patient)		

4. Documentation	Marks (Student)	Marks (Educator)
Complete patients note (concise, clear)		

5. Evidence-Based Practice	Marks (Student)	Marks (Educator)
Understanding of research in the field		

<p>Comments</p> <p>Student:</p> <p>Educator:</p>
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