



## Completion Report

### Project Supported by LTC/OBA Funding\*

(Period covered: \_\_\_\_\_ – \_\_\_\_\_)

#### Part I: General Information

**Funding Source** (please tick ✓ as appropriate): ☐ LTC ☐ OBA Funding

**Project Code:** 2010-11/OBA/RS

**Host Department:** RS

**Project Title:**

Exploring the Impact of Outcome-Based Education on Physiotherapy and Occupational Therapy Students, and Analysis of Stakeholders' Opinions on Learning Outcomes Achievement, and Expectations from the 3-3-4 Graduates

**Project Team:**

Project Leader (Name & Dept):

Grace Szeto & Kenneth Fong

Team Member(s) (Name & Dept):

Margaret Mak and Hector Tsang

#### Part II: Project Details

##### 1. Financial Information

###### (a) Overview

Approved Funding:

Additional Funding Received (if any):

Total Funding Received:

+

=

Source of  
Additional Funding:

###### (b) Project Expenditure

| Expenditure  | Original Budget<br>Approved | Revised Budget <sup>1</sup><br>(if applicable) | Actual<br>Expenditure | Balance |
|--|-----------------------------|--|-----------------------|---------|
| Salary (Please indicate rank,<br>number of staff members & salaries) |                             |  |                       |         |
| Equipment  |                             |  |                       |         |
| General Expenses   |                             |  |                       |         |
| Others   |                             |  |                       |         |
| <b>Total</b>   |                             |  |                       |         |

<sup>1</sup> Please give reasons for the revised budget and quote the relevant authority's approval reference where appropriate.

##### 2. Project Schedule

**Dates as Stated in Original Proposal:**

Start date (dd/mm/yyyy):

01/04/2011

Completion date (dd/mm/yyyy):

30/10/2012

**Actual Start and Completion Dates:**

Start date (dd/mm/yyyy):

01/04/2011

Completion date (dd/mm/yyyy):

31/12/2012

**Project Period Extension(s) (if any):**

Total no. of extension(s) obtained :

1

time(s)

Obtained during the project period:

For a total of 2 month(s)

**Reason(s) for Extension(s) (if any):**

To complete the final report of the project.

\* LTC: Learning and Teaching Committee

OBA Funding: Funding for Promoting Outcome-Based Approaches to Student Learning

### 3. Project Implementation

(a) Project objectives

The overall goal of the proposed project is to explore the influence of outcome-based education on physiotherapy and occupational therapy students, and the stakeholders' perception of the learning outcomes obtained and their expectations of future graduates from the 334 education system. Specific study objectives include:

- (a) To identify and map out the scopes of intended learning outcomes as understood, learnt and achieved by PT/OT students and the expectations of related stakeholders including policymakers/employers, patients, parents and graduates.
- (b) To understand students' perspective of future roles in PT and OT career through an establishment of a continuous process of self-evaluation of the influence of OBE learning on their future visions over 3 years.
- (c) To review the intended learning outcomes, OBE-led PT and OT curriculum and strategies of teaching and learning for 3-years and 4-years undergraduates respectively.

(b) Overview of specific work undertaken for achieving the project objectives (including any changes to original proposal)

We have completed the surveys and interviews for the major stakeholders – including the employers, graduates and undergraduates. These included the employment of the HKU – Public Opinion Program to conduct the survey with employers, as well as our own surveys of graduates and undergraduates. These are as outlined in the original proposal.

(c) Difficulties encountered, if any, which have affected progress, and remedial actions taken

We have only been able to reach a limited number of graduates for the survey and interviews. In addition, as the project duration is not very long, we are not able to get in-depth study of the students' responses to the new 334 programmes. This part will need to have more detailed investigation in the future.

(d) Deliverables/useful findings/good practices emerged

A full report has been compiled for distribution to various stakeholders. This includes an executive summary in English and Chinese, as well as a full description of the study method and the results, and the full report produced by HKU.

An overview of the complete data set suggests that the three stakeholder groups were satisfied that the PolyU students had achieved or were on the road to achieving the programme outcomes to a level that would prepare them as competent graduates who perform to a good standard in the workplace – namely the healthcare organisations in the public and private sectors in Hong Kong.

Areas for improvement have been identified for both programmes, including critical thinking and clinical reasoning skills, verbal and written communication skills, innovative and problem solving skills as well as leadership. The programme teams have made recommendations about further revision and updating of the curriculum in order to enhance these competencies further.

(e) Dissemination activities taken/planned to sustain impact

The full report is printed in hard copies and it will be distributed to the major employers of our graduates, including those who participated in the surveys and interviews. A seminar will be organised in Jan-Feb, 2013 period to disseminate the information obtained in the study to the public

and the various stakeholders.

(f) Self-evaluation or additional information/remarks

The project team has worked well together and we have tried our best to obtain the cooperation from employers of various sectors – including HA, NGO and private.

Name of Project Leader: Dr Grace Szeto & Dr Kenneth Fong      Date: 11 January 2013  
(in block letters)

**Part III: Evaluation by D/SLTC (or by HoD/Dean of School<sup>^</sup>)**

- (a) Rating and comments/recommendations on the following areas of the project  
(please put a ✓ in 1 of the following 2 ratings and provide comments)

| Areas   | Rating       |                   | Comments and Recommendations |
|---|--------------|-------------------|------------------------------|
|   | Satisfactory | Needing attention |                              |
| Overall financial management/<br>use of funding   | ✓            |                   |                              |
| Overall project progress  | ✓            |                   |                              |
| Outputs /deliverables /<br>dissemination  | ✓            |                   |                              |
| Overall rating / comments on the<br>project (Please suggest remedial actions<br>if the rating is 'Needing attention') | ✓            |                   |                              |

- (b) Issues requiring the attention of FLTC/Dean of School and/or the funding authority

nil

- (c) Outputs/deliverables/good practices of the project that can be shared with other subjects, programmes or departments within the Faculty, or with the wider PolyU community

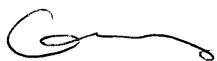
This project has evaluated the extent to which the generic and professional competencies are achieved by the graduates PT and OT programmes in the Dept of RS. Opinions of the employers, graduates and undergraduate students were sought.

Feedback questionnaire were collected from 119 employers, 97 graduates (47 PT and 50 OT) from the 2009-2011 cohorts, and 309 undergraduates (179 PT and 130 OT) from Years 1 to 3.

From both the employers and graduates' point of view, around half of them believe that our graduates did not do well under the item of "Demonstrating leadership appropriately" and "being innovative in services/areas of practice". Follow-up action is recommended to improve these learning outcomes in the new curriculum.

The project team plan to hold a seminar in Jan-Feb, 2013 period to disseminate the information obtained in the study to the public and the various stakeholders.

- (d) Additional comments/remarks



Name of D/SLTC Chair  
(or HoD/Dean of School):

DR GLADYS CHEUNG  
(in block letters)

Date: 14 Jan 2013

<sup>^</sup> To be prepared by HoD/Dean of School if the PL is also the D/SLTC Chair, or if the Centre/Unit/Office does not have a DLTC.

#### Part IV: Evaluation by FLTC/Dean of School#

(a) Overall rating on the project (please put a ✓ in 1 of the following 2 ratings):

- ☐ Satisfactory  
☐ Needing attention

(b) Overall comments and recommendations on the project:

(c) Issues requiring the attention of the funding authority:

Name of FLTC Chair/  
Dean of School: \_\_\_\_\_

(in block letters)

Date: \_\_\_\_\_

# The Dean of School or HoD of the Centre/Unit/Office needs not fill this part if he/she has already commented in Part III.

#### Part V: Response & Follow-up Plan by Project Leader

(Response and follow-up plan is required from the Project Leader if there is any area rated as 'needing attention' in Part III and/or IV.)

Name of Project Leader: \_\_\_\_\_  
(in block letters)

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Project Leader

\_\_\_\_\_  
Signature of D/SLTC (or HoD)@

\_\_\_\_\_  
Signature of FLTC/  
Dean of School

\_\_\_\_\_  
(Name in block letters)

\_\_\_\_\_  
(Name in block letters)

\_\_\_\_\_  
(Name in block letters)

@ To be signed by HoD if the PL is also the DLTC Chair, or if the Centre/Unit/Office does not have a DLTC; leave this blank if the PL is also the SLTC Chair.

The Project Leader and D/SLTC Secretary should each keep a copy of this *Completion Report* for records.  
A copy of this *Completion Report* will be submitted along with the *F/SLTC Annual Report (Form 20)* to LTC/WGOBE as a supporting document.

# Outcome-Based Education Fund 2010-12

Exploring the Impact of Outcome-Based Education on Physiotherapy and Occupational Therapy Students, and Analysis of Stakeholders' Opinions on Learning Outcome Achievement, and Expectations from the 3-3-4 Graduates



FINAL REPORT

**Project Team:**

Dr Grace Szeto  
Dr Kenneth Fong  
Dr Margaret Mak  
Prof. Hector Tsang

Department of Rehabilitation Sciences  
The Hong Kong Polytechnic University  
31st December 2012

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# EXECUTIVE SUMMARY

## Introduction

In line with The Hong Kong Polytechnic University's (PolyU) outcome-based education (OBE) approach, The Department of Rehabilitation Sciences (RS) set up an OBE framework to restructure its teaching of professional content for the education of Physiotherapy (PT) and Occupational Therapy (OT) professionals. In 2008 the department conducted a major evaluation of employers' perceptions of graduates. An expansion to this evaluation was carried out in 2011/12 with the addition of graduates' and current students' perceptions of the restructured programs, as well as their perceptions of the impact of the OBE experience.

## Skills and competencies addressed in the study

The programme outcomes for both PT and OT align with PolyU's institutional outcomes:

- Generic learning outcomes: Language proficiency, communication and problem solving skills, critical thinking skills, social responsibility, entrepreneurship, teamwork and leadership, lifelong learning skills and global outlook
- Programme-specific outcomes: Professional competence, skill and attitudes, addressed in terms of critical thinking in evaluation and design of care, effective and safe execution of care, teamwork and leadership skills, effective communication and interpersonal skills, and the awareness of the need for continuing life-long learning with global outlook and social responsibilities.

## Objective of the project

The major objective of this project was to explore the influence of outcome-based education on PT and OT students, the stakeholders' perceptions of the learning outcomes obtained and their expectations of future graduates from the 334 education system.

## Summary of project design

| Instrument    | Target group  | Constructs measured   |
|---------------|---|---|
| Questionnaire | Employers of PolyU graduates 2008-2011 ( <i>combined and separated by PT/OT</i> )   | Employers' perceptions of graduate workplace performance in meeting requirements and standards ( <i>generic competencies and professional knowledge</i> )   |
| Questionnaire | PolyU graduates, 2008-2010  | Graduates' perceptions of their workplace performance in meeting requirements and standards ( <i>generic competencies and professional knowledge</i> )  |
| Questionnaire | PolyU undergraduates, Years 1-3, 2011/12  | Undergraduates' perceptions of their workplace performance in meeting requirements and standards ( <i>generic competencies and professional knowledge</i> ).  |
| Interviews    | Employers of PolyU graduates 2008-2011 ( <i>combined and separated by PT/OT</i> )<br>PolyU graduates, 2008-2100<br>PolyU undergraduates, Years 1-3, 2011/12 | <ul style="list-style-type: none"><li>• Perceptions of the quality of generic skills and professional knowledge acquired during the PT/OT programme</li><li>• Recommendations for developing these skills further through the programme</li><li>• Perception of the contribution of the PT/OT</li></ul> |

- 
- programme to their current/future level of workplace performance
  - Understanding of the terminology “OBE” and “intended learning outcomes”.
- 

### **Sample and data collection methods:**

- Employers: Questionnaire data from 119 employers were collected by telephone by The Public Opinion Programme (POP) at The University of Hong Kong. Follow-up interviews were conducted by telephone with 8 PT and 6 OT employers.
- Graduates: 97 graduates (47 PT and 50 OT) from the 2009-2011 cohorts completed questionnaires distributed by email. 48 (26 PT and 22 OT) were interviewed using a combination of telephone and face-to-face individual and focus-group interviews.
- Undergraduates: 309 undergraduates (179 PT and 130 OT) from Years 1 to 3 completed questionnaires during class time. 67 (35 PT and 31 OT) were interviewed in focus groups.

### **Main issues arising from results of both PT and OT stakeholders**

The results of the surveys and interviews were very consistent in the areas identified as strengths and weaknesses of the two programmes.

#### Generic competencies

- Employers’ perceptions:
  - The PT and OT employers’ groups showed similar perceptions about a number of generic competencies. All but two aspects of the graduates’ performance were perceived as “generally meeting the standard” or even “far exceeding standard” by at least 60% of the valid sample.
  - “Demonstrating leadership appropriately” and “being innovative in services/areas of practice” were perceived as “slightly below standard” or “far below standard” by 65% and 58% of the valid sample respectively.
  - In the interviews, both the PT and OT employers commented positively on the quality of the new graduates’ abilities to prepare and make presentations. Both groups were generally positive about the students’ problem-solving skills, but pointed out that there are some weaknesses when it comes to applying these skills in the workplace.
- Graduates’ perceptions
  - Overall, the PT and OT graduate groups’ questionnaire responses indicated confidence with their generic skills/competencies, with 67% or more giving ratings of meeting/exceeding standards on all but one item (innovation in services/areas of practice, 57%).
  - In the interviews both PT and OT groups considered that teamwork skills had been

developed well during their PolyU studies and that their problem-solving skills were adequate although they felt somewhat limited in applying them in the workplace setting.

- Undergraduates' perceptions
  - Like the graduates, the undergraduate questionnaire analyses indicated similarities for generic and skills/competencies, with 80% or more of both groups rating themselves as meeting/exceeding expectations on nearly all of the items.
  - Both PT and OT groups' results suggested that they saw their strengths as: "demonstrating professional behavior", "organizing work in a cost effective and timely manner" and "working independently".
  - The undergraduate students in both PT and OT revealed in the interviews that they considered their presentation and teamwork skills to be adequate but their critical thinking skills to be weak.

#### Professional skills/competencies

- Employers' perceptions
  - In general, all professional skills / competencies put to the test in this study were perceived as meeting/exceeding the standard by nearly 65% or above of the employers interviewed. The highest ratings (90%) were for "developing good rapport with clients, their families and/or other caregivers" and "practising a safe manner that minimises risk to clients, self, and others".
  - In the interviews, both the PT and OT employer groups commented that the PolyU graduates' theoretical knowledge is strong but that their practical application of skills needs improvement. Both also mentioned a weakness in the students' ability to write reports and proposals, both in English and Chinese, and to communicate with patients and understand their holistic needs, including mental and emotional factors. Both groups made it clear, however, that these practical skills can really only develop and mature in the workplace.
- Graduates' perceptions
  - When asked to self-rate their professional skills/competencies, the graduates appear to have been very positive, with around 80% or more rating themselves as meeting/exceeding expectations on all of the items.
  - Like the employers, both PT and OT graduate groups thought that their theoretical knowledge was strong on graduation but that their practical application needed attention when they entered the workplace.
- Undergraduates' perceptions
  - Both groups thought that there was too much content in the undergraduate programme, but having said that, they still said they felt under-prepared to enter the



workplace. Like the employers, the graduates commented that the practical skills can really only develop in the workplace over time.

- On eight of the 13 items, more than 90% of the students rated themselves as meeting/exceeding expectations, with more than 80% giving these ratings on three of the remaining items.
- The PT and OT undergraduate students interviewed replicated comments mentioned above, including that their theoretical knowledge was strong but they lacked sufficient practical skills, that there was too much content, but that these skills can really only be developed over time in the workplace.

## **Recommendations**

The present study has provided a comprehensive overview of how the various stakeholders, employers, graduates and undergraduates, have perceived the quality and effectiveness of the PT and OT programmes. Based on these results, several recommendations can be made for improvement to the programmes.

### Recommendations for OT programme

- Address comments on problem solving and written communication, e.g. through the use of problem-based learning and reinforcement of written communication skills in individual applied subjects.
- Increase the proportion of bed-side clinical teaching and increase tutorial time in applied subjects to bridge the gap between school and the clinical field.
- Introduce more clinical placements of different varieties, e.g. in NGOs or primary healthcare and offer a preparatory session rather than a pre-clinical information seminar.
- The longer programme duration in the new PolyU's 4-year structure may provide sufficient time for the students to learn and acquire the skills, without feeling the pressure of too much curriculum content.

### Recommendations for PT programme

- Clinical reasoning and critical thinking need to be matched with effective communication skills in terms of verbal and written communication in the clinical setting.
- More variety of clinical cases is needed and can be strengthened further in the new 4-year curriculum. In fact, there have already been some measures to enhance these skills in the curriculum review conducted in 2011-12 in preparation for the 4-year programme.
- Major changes in the new 4-year curriculum in terms of clinical placement arrangements will provide for a more continuous period of placements in the 4<sup>th</sup> year. This will

hopefully enhance the learning and improvement of professional competencies in the students.

- Efforts will be continued to improve academic content to enhance the development of problem-solving ability, leadership and global outlook. Students ongoing development as lifelong learners, combined with the increased emphasis on these aspects in PolyU's 4-year structure may also help to nurture the students' generic competencies.

## **Conclusion**

- In this project we set out to evaluate the extent to which the generic and professional competencies are achieved by the graduates PT and OT programmes in the Dept of RS, by seeking the opinions of the employers, graduates and undergraduate students.
  - An overview of the complete data set suggests that the three stakeholder groups were satisfied that the PolyU students had achieved or were on the road to achieving the programme outcomes to a level that would prepare them as competent graduates who perform to a good standard in the workplace – namely the healthcare organisations in the public and private sectors in Hong Kong.
  - Areas for improvement have been identified for both programmes, including critical thinking and clinical reasoning skills, verbal and written communication skills, innovative and problem solving skills as well as leadership. The programme teams have made recommendations about further revision and updating of the curriculum in order to enhance these competencies further.
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# 概論

## 引言

隨著香港理工大學倡議及推行“成果為本”的教育理念，康復治療學系(下稱本學系)對系內的物理治療學課程和職業治療學課程成立了本科專業“成果為本”的教學架構。本學系早於 2008 年對本系畢業生僱主關於畢業生的意見進行大型調查。2011- 2012 年又加大調查範疇至畢業生及在學生參與此調查及對成果為本的學習模式的意見。

## 本調查中技能及能力的評估

本學系內的物理治療學課程和職業治療學課程與大學“成果為本”的教學架構配合的發展，主要聚焦兩大類別的技能：

- 共通技能/能力：語言能力，溝通和解決問題的能力，批判性思維能力，社會責任，創業精神，團隊精神和領導能力，終身學習的能力和環球視野。
- 專業技能/能力：專業能力，技能和態度，解決的批判性思維的護理評估和設計，有效的護理和安全執行，團隊合作能力和領導能力，有效的溝通和人際交往能力，需要繼續終身學習的意識面向全球經濟前景和社會責任。

## 調查意旨

本調查主要意旨為探索“成果為本”的教育理念對物理治療學課程和職業治療學課程學生的影響，及利益相關者對教學成效的意見及對 334 教改後學生的期望。

## 調查設定

| 工具 | 目標群體   | 調查意向                                       |
|----|--|--|
| 問卷 | 2008 年至 2011 年理大畢業生的僱主（物理治療學課程/職業治療學課程合併和分開調查） | 僱主就畢業生的工作表現是否符合標準及要求的意見（共通技能/能力和專業技能/能力）   |
| 問卷 | 2008 年至 2010 年理大畢業生                            | 理大畢業生就自身的工作表現是否符合標準及要求的認知（共通技能/能力和專業技能/能力） |
| 問卷 | 2011/12 香港理工大學的本科生（一至三年級）                      | 在校學員就自身的工作表現是否符合標準及要求的認知（共通技能/能力和專業技能/能力）  |
| 談訪 | 2008 年至 2011 年理大畢業生的僱主（物理治療學課程/職業治             | • 關於物理治療學課程/職業治療學課程所傳授的共通技能/能力和專業技能/能力的質量  |

|  |  |
|--|--|
| 療學課程合併和分開調查)<br>2008-2100 理大畢業生<br>2011/12 香港理工大學的本科<br>在學生（一至三年級） | <ul style="list-style-type: none"> <li>關於進一步發揮課程所授技能的建議</li> <li>關於物理治療學課程/職業治療學課程所授知識對目前/將來工作的幫助</li> <li>對“成果為本”的教育理念和“預期學習成果”的理解</li> </ul> |
|--|--|

## 樣品和數據收集

僱主：由香港大學民意研究所(POP)從 119 名僱主的電話問卷調查中收集資料。其後，對 8 名物理治療學課程畢業生和 6 名職業治療學課程畢業生的僱主進行了電話採訪。

畢業生：2009-2011 年間，通過電子郵件完成 97 名畢業生（47 物理治療學課程畢業生，50 職業治療學課程畢業生）的問卷收集；和通過電話和面對面個/小組談訪的相結合完成對 48 名畢業生（26 名物理治療學課程畢業生，22 名職業治療學課程畢業生）的採訪。

本科在學生：309 名 1 至 3 年級本科在學生（179 名物理治療學課程在學生，130 名職業治療學課程在學生）在上課時間完成調查問卷。67 名（35 名物理治療學課程在學生，31 名職業治療學課程在學生），接受了小組採訪。

## 調查利益相關者所得的主要議題

調查和談訪的結果關於兩課程的強項與薄弱環節是非常一致的。

## 共通技能/能力

### 僱主意見

- 物理治療和職業治療學生僱主對部份共通技能/能力有相似意見。除兩項調查以外，百分之六十以上的答卷記錄“畢業生工作表現大致合格”或“表現出色”。
- “恰當發揮領袖才能”項目被 65%答者認為是“略於基準”，和“在服務或臨床範圍有創新表現”項目被 58%答者認為是“遠差於理想水平”。
- 在談訪中，兩課程畢業生的僱主對新畢業生籌備及完成演講的能力給予正面評價。兩組僱主對畢業生解決困難的能力，取基本正面態度。但指出其工作上的運用還略為遜色。

### 畢業生意見

- 總體而言，兩課程畢業生在問卷中表現對自己共通技能/能力的自信。大於 67%認為除“服務或臨床技術創新”一項(57%)以外，自己達到/超越基準。

- 在談訪中，兩課程畢業生認為自身團隊合作能力在課程中得到很好的發揮，解決難題的能力適中，但在工作環境上運用有限。

### 在學生意見

- 如畢業生，在學生在問卷中表現對自己共通技能/能力的自信。大於 80%認為就所有問卷項目自己達到/超越基準。
- 兩組在學生認為自己的長處在於“能有專業表現”，“能有效，準時地部署工作”和“獨立完成工作”。
- 在談訪中，兩組在學生認為自身演講和合作能力適當，但批判性思維能力比較弱。

## 專業技能/能力

### 僱主意見

- 總體而論，65%以上的僱主對問卷中所有評估專業技能/能力項目予以“達標/超標”評價。最高評分為(90%)“能與病患，家屬和照料者建立良好關係”和“運用安全技巧，減低傷患，自身和他人風險”。
- 談訪中，兩組畢業生僱主評價理大畢業生的理論基礎甚強，臨床技能應用須改進。兩組畢業生的中，英文報告及建議書寫作技能薄弱，未能有效與病患者溝通以全面照顧他們(精神和情感)需求。但這些技能需在臨床工作環境培養。

### 畢業生意見

- 畢業生對自身專業技能/能力的評估十分正面。大於 80%認為自己在所有評估項目達到/超越預期。
- 與僱主相似，兩課程畢業生皆認為畢業時自身理論水平強，但須在臨床環境強化他們的實戰技能。

### 在學生意見

- 兩科在學生都認為自身理論水平強，但須在臨床環境強化他們的實戰技能；課程內容繁多，但又覺得自己臨床裝備不足。如僱主所言，臨床技能只能在工作環境中培養。
- 8/13 的調查項目中，大於 90%的在學生認為自己達到/超越期許。其中 80%對其他項目有相同評估。

## 建議

本研究全面概述各利益相關者:包括僱主，畢業生和本科生對現有物理治療課

程和職業治療課程教學質素和效能的意見。基於這調查結果，提出以下改善建議。

#### 對職業治療課程的建議

- 調查中提及的解難題和書面溝通交流能力問題，我們建議在不同的實用學科中加插案例及問題為基礎的學習，和強化書寫溝通技能。
- 在實用科目中，加重臨床教時比例和輔導課。以更好銜接理論和實踐。
- 添加不同臨床實習機會：如在非政府或基層健康機構。及將臨床前諮詢講座改為臨床前準備工作坊。
- 改制後的四年課程中，學生應有足夠的時間，在輕減的課程內容壓力下，去培養技能。

#### 對物理治療課程的建議

- 應加強臨床論證和批判性思維能力，和有效的強化臨床溝通技能（口頭或書面）。
- 在新的四年學制課程，添加更多不同形式和類型的臨床案例，用以強化技能。其實，2011-2012 年的課程檢討會，已為新的四年課程內加插了一些技能培訓。
- 在新的四年學制內，臨床實踐安排已有重大改動，加強了第四年臨床工作的連接性。希望這能幫助提高學生的專業能力。
- 繼續努力改良課程內容，以提高學生解難能力，領導能力和國際視野。幫助學生培養終身學習能力，與香港理工大學的 4 年結構相結合，也有利於培養學生的共通技能/能力。

### 總結

- 此調查研究，是通過徵求僱主，畢業生和在學生的意見，評估物理治療學科和職業治療學科畢業生的共通和專業技能/能力。
- 根據完整的數據，這三個利益相關群體皆滿意理大畢業生的素質。認為他們已達到/將達到學科的預期學習成果：成為擁有臨床專業技能達標的香港公營或私營醫療保健機構員工。
- 調查結果顯示這兩個課程（物理治療學課程和職業治療學課程）有著共同需要改進的領域，包括批判性思維和臨床推理能力，口頭和書面溝通能力，創新和解決問題的技能，以及領導才能。調查小組提出了一系列的建議，以修訂和更新現有的課程，從而進一步加強這些能力的培養。

## **Acknowledgement**

The project team would like to acknowledge the support of the Outcome-Based Education Fund for this project. We would also like to express our deepest appreciation to Dr. Margaret Taplin, educational consultant for her valuable input to this project, to Mr. Wynants Ho for his tireless efforts in the data collection and analysis of this project, and to Dr. Fiona Yao for her great efforts in editing the final report, and to Mr. Thomas Chan for designing the cover of the report. Lastly, we would like to thank all the participants in the present project, from the PT and OT managers in the public and private sectors, to the graduates and current students in our programmes. Your valuable input to this project will contribute to better development of the educational programmes in the two professions.

# Chapter 1

## INTRODUCTION

The Hong Kong Polytechnic University (PolyU) adopted an outcome-based education (OBE) approach to education in 2004, responding to the recommendation of the University Grants Council (UGC) of Hong Kong. The Department of Rehabilitation Sciences (RS), a part of the PolyU community, embraced this opportunity by setting up an OBE framework to restructure its teaching of professional content, to be on par with current international standards for the education of Physiotherapy (PT) and Occupational Therapy (OT) professionals. For this purpose, in 2008 the department conducted a major evaluation of the employers' perceptions of graduates. An expansion to this evaluation was carried out in 2011/12 with the addition of graduates and current students' perceptions of the restructured programmes, as well as their perceptions of the impact of the OBE experience. This document reports on the aims and specific objectives of the 2011/12 evaluation, the details of the methods employed and the associated results, as well as students' attainment after the restructure of the PT and OT programmes, for the purpose of providing essential information for on-going programme revision and evaluation.

### 1.1 The project team:

A Project Team, comprising academic staff from the Occupational Therapy (OT) and Physiotherapy (PT) departments, was formed to steer, plan and oversee the implementation of the evaluation. A part-time Project Fellow and a full-time Project Associate were employed to assist in coordinating, organizing and implementing the CLA administration, as well as in the evaluation of the implementation and outcomes of the project.

### 1.2 Intended programme learning outcomes, as aligned with the PolyU Institutional Outcomes:

The Department of RS restructured its programmes' learning outcomes in careful alignment with the PolyU general learning outcomes (see *Appendix I*), focusing on both generic and programme-specific attributes.

The alignments between the generic learning outcomes of both PT and OT programmes are shown in *Appendix II*. Language proficiency, communication and problem solving skills, critical thinking skills, social responsibility, entrepreneurship, teamwork and leadership, lifelong learning skills and global outlook are all addressed.

The programme-specific outcomes are listed in the table in *Appendix III*. They include professional competencies, skills and attitudes, addressed in terms of: critical thinking in evaluation and design of care, effective and safe execution of care, teamwork and leadership skills, effective communication and interpersonal skills, and the awareness of the need for continuing life-long learning, global outlook and social responsibility.



### **1.3 Project design**

This study was designed to incorporate both quantitative and qualitative approaches, through the use of surveys (quantitative) and interviews (qualitative) to elicit views from groups as well as individuals. The data were analysed and triangulation of the questionnaire data and the interview data identified common themes from the perspectives of the different stakeholders of the PT and/or OT programmes.

### **1.4 Aims and objectives of the project**

The major objective of this project was to explore the influence of outcome-based education on PT and OT students, the stakeholders' perceptions of the learning outcomes obtained and their expectations of future graduates from the 334 education system.

*Specific study objectives include:*

- a. Identify and map out the scopes of intended learning outcomes (ILOs) as understood
- b. Understand students' perspectives of future roles in PT and OT careers
- c. Review PLOs of PT and OT curricula and teaching and learning strategies for 3-year and 4-year undergraduates courses
- d. Understand the generic and professional skills required by employers and their expectations of the courses.

## Chapter 2

### METHODOLOGY

This project collected both quantitative and qualitative data, by using surveys (quantitative) and interviews (qualitative) to elicit views from groups, and individuals. Common themes were identified from the various perspectives of stakeholders of the PT and/or OT programmes. A summary of the research design, specifically the instruments, target groups and constructs measured, is tabulated below.

#### 2.1 Summary of project design

| Instrument    | Target group   | Constructs measured  |
|---------------|--|--|
| Questionnaire | Employers of PolyU graduates 2008-2011<br><i>(combined and separated by PT/OT)</i>   | Employers' perceptions of graduate workplace performance in meeting requirements and standards<br><i>(generic competencies and professional knowledge)</i>   |
| Questionnaire | PolyU graduates, 2008-2010   | Graduates' perceptions of their workplace performance in meeting requirements and standards<br><i>(generic competencies and professional knowledge)</i>  |
| Questionnaire | PolyU undergraduates, Years 1-3, 2011/12   | Undergraduates' perceptions of their knowledge acquisition in meeting requirements and standards<br><i>(generic competencies and professional knowledge)</i> .   |
| Interviews    | Employers of PolyU graduates 2008-2011<br><i>(combined and separated by PT/OT)</i><br>PolyU graduates, 2008-2100<br>PolyU undergraduates, Years 1-3, 2011/12 | <ul style="list-style-type: none"> <li>• Perceptions of the quality of generic skills and professional knowledge acquired during the PT/OT programme</li> <li>• Recommendations for developing these skills further through the programme</li> <li>• Perception of the contribution of the PT/OT programme to their current/future level of workplace performance</li> <li>• Understanding of the terminology "OBE" and "intended learning outcomes".</li> </ul> |

## **2.2. Instruments**

Questionnaires and interviews were used to survey the stakeholders' views about the extent to which the restructured programme outcomes had been achieved. The questionnaire items were adopted from the 2008 evaluation. These items were mapped with the programmes' learning outcomes (PLOs) given in the definitive programme documents of PT and OT so as to check their match to the Institutional Learning outcomes (ILOs). Modifications were made to the 2008 questionnaire; the details of the revision and the matrix of the mapping are shown in *Appendix III and IV*.

The final version of the questionnaire consisted of three parts. Part I collected demographic information about the employer organization and the PolyU graduates employed by it. Part II consisted of 13 Likert-type items for the employers to rate the extent to which their PolyU graduate employees were able to meet their expectations regarding generic skills/competencies, and 13 items focusing on professional skills/competencies. The respondents were also invited to give an overall rating of their satisfaction with the undergraduate programmes provided by the Department of Rehabilitation Sciences. Part III consisted of 7 open-ended questions for respondents to list the aspects of their graduate employees' generic and professional skills/competencies with which they were most satisfied and suggestions for improvements to the programme. Parallel items were included in the questionnaires for graduates and undergraduates.

The interview questions were semi-structured and designed to supplement the questionnaire data by identifying further information lacking from the questionnaires or to expand further on issues raised. The specific objectives to be achieved through the interviews were to explore the influence of outcome-based education on PT and OT students, the stakeholders' perceptions of the learning outcomes obtained and their expectations of future graduates from the 334 education system:

- a. Identify and map out the scopes of intended learning outcomes (ILOs) as understood
- b. Understand students' perspectives of future roles in PT and OT careers
- c. Review ILOs of the PT and OT curriculum and teaching and learning strategies for 3-year and 4-year undergraduate courses.

Each interview was designed to be of about 30 minutes' duration. The interview questions for employers, graduates and undergraduates are shown in *Appendix VI to Appendix VIII*, in both English and Chinese.

## **2.3. Procedures and sample selection**

### ***2.3.1. Survey of employers***

The Public Opinion Programme (POP) at The University of Hong Kong was commissioned to conduct telephone interviews with targeted employers according to the employers' list given by the project team.

Target respondents in the “Employer” category, were current occupational therapists (OT), physiotherapists (PT) and/or department heads of various types of clinics or medical organizations, who were in a position to employ and/or supervise OT and PT graduates, in particular those who had graduated in the years 2008-2011. Telephone interviews were conducted by interviewers under close supervision. A total of 273 telephone numbers were provided by RS, with 267 cases being full contacts, and 6 being partial contacts, i.e. no specific contact person available. For those partial contacts, a representative who belonged to the personnel department or was familiar with the graduate performance was invited to participate in the survey. In other words, all respondents were verified as valid targets before conduction of the survey.

204 valid numbers remained after checking and filtering, which formed the final sample list. All contacts were randomized at the start of this study, to avoid bias to any groups of graduates. A cover letter under the joint letterhead of PolyU and HKUPOP (see *Appendix IX*) was sent to all target respondents, to promote participation, prior to the fieldwork commencement. Consent forms were signed by the participants (See template shown in *Appendix V*)

The actual fieldwork, deemed completed with exhaustion of the entire list, was conducted during business hours between 6 October and 14 November 2011. A total of 119 eligible respondents were successfully interviewed, 10 of whom answered the questionnaire twice due to their double identities as OT and PT, hence giving rise to a sample size of 129 for certain questions. Only 70 out of these 119 respondents were employing or had previously employed PolyU BSc (Hons) OT and/or BSc (Hons) PT graduates from the 2008-2011 cohorts. As shown from the calculation in Tables 1 & 2 in the result section, the overall effective response rate for this survey was 79.3% with a standard sampling error of less than 4.6 percentage points. In other words, the sampling error for all statistics based on the overall sample reported in percentages was less than plus/minus 9.2 percentage points at the 95% confidence level.

All data were collected using a Computer Assisted Telephone Interview (CATI) system, which allowed real-time data capture and consolidation. To ensure data quality, on top of on-site supervision, voice recordings, screen-capturing and camera surveillance were used to monitor the interviewers’ performances.

### ***2.3.2. Survey of graduates***

The initial aim was to survey graduates of 2009, 2010, and 2011. However, in view of the 2011 graduates having been in work for less than a year, they had to be excluded. The project team initially intended to include 2008 graduates because they had experienced OBE in their final year of study. However, it was extremely difficult to track down sufficient numbers of 2008 graduates, with the final sample consisting of only 3 for PT and 2 for OT, hence the 2008 group had to be eliminated.

The first graduates' survey was conducted during PolyU Information Days in September 2011, with a counter set up to invite the participation of eligible graduates, and the questionnaires were completed along with signed consent forms, on site.

The second set of graduate surveys was sent out from October 2011 through emails to PT and OT graduates (2008-2011). The first round of email invitations was met with little response, and a reminder email was sent two weeks later, allowing them a week to respond. In addition, questionnaires were distributed at the PT and OT graduation dinners, but again the response was poor. In view of the slow progress of the survey distribution, the graduates were asked to complete the questionnaires during interviews at their respective workplaces, starting from the end of February to April, 2012 (see Table 1 below).

**Table 1 Summary of means of questionnaire distribution (Graduates)**

| Methods of distributing questionnaires to graduates | Number of successful cases |    |
|---|----------------------------|----|
|   | PT                         | OT |
| 1. PolyU Info Day invitation                        | 27                         | 32 |
| 2. Email invitation                                 | 9                          | 3  |
| 3. During face-to-face interviews in workplace      | 11                         | 15 |
| 4. Total number                                     | 47                         | 50 |

### ***2.3.3. Survey of undergraduates***

The undergraduates' survey was conducted during mass lectures, in English, between October 2011 and January 2012, with response rates ranging from 82.6% to 100%.

The undergraduates were first briefed on the rationale and background information about this study. Then the students were asked to fill in both the consent forms and questionnaires in about 10 15minutes, and place the completed forms into collection boxes.

The Year 1 students were asked to complete their questionnaires at the end of Semester 1 or early in Semester 2, 2011/12, so as to allow them at least one semester of study on which to base their opinions. For Years 2 and 3 students, the surveys were conducted in October and November, considering the students' availability and willingness to respond after mid-term tests and well before final exams.

### ***2.3.4. Interviews with employers, graduates and undergraduates***

All interviews with the employers, graduates and undergraduates were conducted by the project associate. No pre-comments were made by the project leaders so as not to intervene with / pre-conceptualize the project associate before the conducting of interviews. Therefore, all the qualitative feedback was recorded as put forward by the interviewees, without undue

influence from others' intentional or unintentional personal comments / opinions.

All of the interviews were audio-recorded. All of the groups (employers, graduates and undergraduates) requested that video recording not be used. The interviews were all conducted in Cantonese, but simultaneous transcription was done in English and the transcripts were confirmed by the interviewees before they departed. The interviews were conducted in three different modes according to the participants' availability, namely face-to-face (group), face-to-face (individual), and by phone (see Table 2).

**Table 2. Methods of interviews**

| Group                 | face-to-face (group) | face-to-face (individual) | phone |
|-----------------------|----------------------|---------------------------|-------|
| <b>Employers</b>      |                      | √                         | √     |
| <b>Graduates</b>      | √                    | √                         | √     |
| <b>Undergraduates</b> | √                    |                           |       |

For the employers' group, the selection of interviewees was based on the criterion that they were currently supervising/ had supervised 2008 – 2011 graduates. Candidates were identified, based on the employers' lists used for the questionnaire sampling, as a convenient sample list. Among the three groups of employers, namely the Hospital Authority (HA), private hospitals and Non-profit Generating organizations (NGO), the HA is the group employing most of the graduates from both the PT and OT programmes. Therefore, some of the HA departmental managers were invited for our interviews first, and they also helped to arrange interviews with graduates in their organizations, which helped to increase substantially the number of graduates participating in the interviews.

The interviews with employers were conducted by phone or face-to-face, depending on their preferences, between February and May 2012. There were 8 hospitals / organizations participating in this study for PT programme and 6 for OT programme.

The interviews with graduates were conducted either as individual phone interviews (November - December 2011) or face-to-face interviews (February – April 2012). On submitting their questionnaires, the graduates were asked to provide phone numbers for the purpose of contacting them for the interviews, but only 3 successful phone interviews were carried out with PT graduates (2 from 2009 and 1 from 2010). The low response rate may have been due to the following reasons: 1) mismatch of time for interviews during office hours, 2) the graduate could not be reached by phone even on weekends, 3) insufficient lunch time for interview. In view of the low success rate, help was sought from the PT/OT senior staff on the employers' list. Emails (see sample in *Appendix X*) were sent to the selected employers and graduates to solicit their feedback.

The interviews with the undergraduates were conducted in groups of 4 or 5 during office hours within PolyU. The Year 3 undergraduate student group was the first interviewed from December 2011 to January 2012 to avoid clashes with their work placement. Soon after that, the interviews with the Year 1 and Year 2 groups were conducted between February 2012 and

April 2012. Despite the upmost efforts from the project team, difficulties in getting students to attend the interviews arose due to factors such as their coursework assignments and mid-term tests.

Ethical approval of this study had been sought from the Human Subjects Ethics Committee of the Hong Kong Polytechnic University on the 17<sup>th</sup> Aug 2011 (Project ID: HSEARS20110816002).

Chapter 3

RESULTS

The following sections present the data in various groupings. The first section describes the response rates of the different subject groups (Employer, Graduates and Undergraduates), then the results are presented by programmes (Physiotherapy and Occupational therapy) then by group (Employer, Graduate students or Undergraduate students of different years), and finally by type of study (questionnaire and interview). The full report of the survey conducted by the University of Hong Kong is contained in *Appendix XI*. The sections describing the results of the employer survey have been extracted from that report, including the tables and figures.

3.1. Overview and response rates

3.1.1. Initial contact with and response rates of employers

In total, 119 eligible respondents were successfully interviewed, 10 of whom answered the questionnaire twice due to their double identities as OT and PT, hence giving rise to a sample size of 129 for certain questions. Only 70 of these 119 respondents were employing or had previously employed any PolyU BSc (Hons) OT and/or BSc (Hons) PT graduates from the 2008-2011 cohorts at the time of the study. As shown from the calculations in Table 3 below, the overall effective response rate for this survey was 79.3% with a standard sampling error of less than 4.6 percentage points. In other words, the sampling error for all statistics based on the overall sample reported in percentages was less than plus/minus 9.2 percentage points at the 95% confidence level. The methods used and the frequency and percentage of the responding rate in contacting the target employers to ascertain their eligibility are tabulated in Table 4.

Table 3 Calculation of effective response rate

|                         |  |
|-------------------------|--|
| Effective response rate | Successful cases   |
| =                       |  |
|                         | Successful cases + Partial interview + Refusal cases by eligible respondents |
|                         | + Refusal cases by prorated-eligible respondents                             |
|                         | 119  |
| =                       |  |
|                         | 119 + 4 + 27 [(119 + 4 + 27) / (119 + 4 + 27 + 1)]*                          |
| =                       | 79.3%  |

\* Figure obtained by prorata



**Table 4 Contact information**

|   | Frequency  | Percentage  |
|---|------------|-------------|
| <b>Respondents' ineligibility confirmed</b>                                     | <b>8</b>   | <b>3.9</b>  |
| <i>Fax/ data line</i>   | 4          | 2.0         |
| <i>Invalid number</i>   | 3          | 1.5         |
| <i>Call-forwarding/ mobile/ pager number</i>                                    | 0          | 0.0         |
| <i>Non-residential number</i>   | 0          | 0.0         |
| <i>Special technological difficulties</i>                                       | 0          | 0.0         |
| <i>No eligible respondents</i>  | 1          | 0.5         |
| <b>Respondents' eligibility not confirmed</b>                                   | <b>46</b>  | <b>22.5</b> |
| <i>Line busy</i>  | 0          | 0.0         |
| <i>No answer</i>  | 14         | 6.9         |
| <i>Answering device</i>   | 3          | 1.5         |
| <i>Call-blocking</i>  | 0          | 0.0         |
| <i>Language problem</i>   | 1          | 0.5         |
| <i>Interview terminated before the screening question</i>                       | 27         | 13.2        |
| <i>Others</i>   | 1          | 0.5         |
| <b>Respondents' eligibility confirmed, but failed to complete the interview</b> | <b>31</b>  | <b>15.2</b> |
| <i>Known respondent refusal</i>   | 0          | 0.0         |
| <i>Appointment date beyond the end of the fieldwork period</i>                  | 23         | 11.3        |
| <i>Partial interview</i>  | 4          | 2.0         |
| <i>No specific respondents</i>  | 4          | 2.0         |
| <i>Miscellaneous</i>  | 0          | 0.0         |
| <b>Successful cases</b>   | <b>119</b> | <b>58.3</b> |

### 3.1.2. Response rates from graduates

The survey response rate and the number of interviews conducted with the Graduate students of both programmes, by year or graduation, are tabulated below in Table 5. The response rates were low from the more distant graduates of 2009, as compared with the recent ones. This is thought to be due to the greater responsibilities being carried by the distant graduates, who were too busy to be interviewed or fill in the questionnaires.

**Table 5 Total sample and response rate for questionnaire survey and interviews (Graduates)**

| Graduates      | Number of questionnaires completed (response rate %) | Number of interviews conducted | Number of Graduates in respective year (N) |
|----------------|--|--------------------------------|--|
| <b>PT 2009</b> | 4 (6.7%)   | 6                              | N = 60                                     |
| <b>PT 2010</b> | 12 (20%)   | 7                              | N = 60                                     |
| <b>PT 2011</b> | 31(51.7%)  | 13                             | N = 60                                     |
| <b>OT 2009</b> | 12 (30%)   | 5                              | N = 40                                     |
| <b>OT 2010</b> | 19 (41.3%)   | 7                              | N = 46                                     |
| <b>OT 2011</b> | 19 (41.3%)   | 10                             | N = 46                                     |

### **3.1.3. Response rates from undergraduates**

The undergraduates' survey response rates and the numbers of interviews conducted, by year of graduation, are tabulated below in Table 6. The response rates to surveys were higher for the undergraduates compared to the corresponding data from the Graduates in Table 5 for both programmes, as the undergraduates were more readily available in the classrooms.

**Table 6 Total sample and response rate for questionnaire survey and interviews (Undergraduates)**

| <b>Undergraduates</b> | <b>Number of questionnaires completed (response rate %)</b> | <b>Number of interviews conducted</b> | <b>Number of Graduates in cohort (N)</b> |
|-----------------------|---|---------------------------------------|--|
| <b>PT Year1</b>       | 59 (90.8%)  | 12                                    | N = 65                                   |
| <b>PT Year2</b>       | 59 (83.1%)  | 12                                    | N = 71                                   |
| <b>PT Year3</b>       | 61 (92.4%)  | 11                                    | N = 66                                   |
| <b>OT Year1</b>       | 38 (82.6%)  | 9                                     | N = 46                                   |
| <b>OT Year2</b>       | 45(97.8%)   | 12                                    | N = 46                                   |
| <b>OT Year3</b>       | 47 (100%)   | 10                                    | N = 47                                   |

The following sections present the results from the surveys carried out by the University of Hong Kong, Public Opinion Programme for Employers and the PolyU project team for the Graduates and Undergraduates. The full report from the University of Hong Kong study can be found in *Appendix XI*. The patterns emerging from the interviews carried out with the employers, graduates and undergraduates are also presented. The research findings are presented for the Physiotherapy Programme first, followed by the results for the OT programme. Then the combined results will be discussed in Chapter 4.

## **3.2 Physiotherapy (PT) Programme**

The results for the Physiotherapy programme are arranged first by subject groups (Employers, Graduates then Undergraduates), then subdivided according to the type of data (questionnaire then interview), with each further subdivided into sub-sections.

### **3.2.1 PT employers**

#### **3.2.1.1. Survey of PT employers**

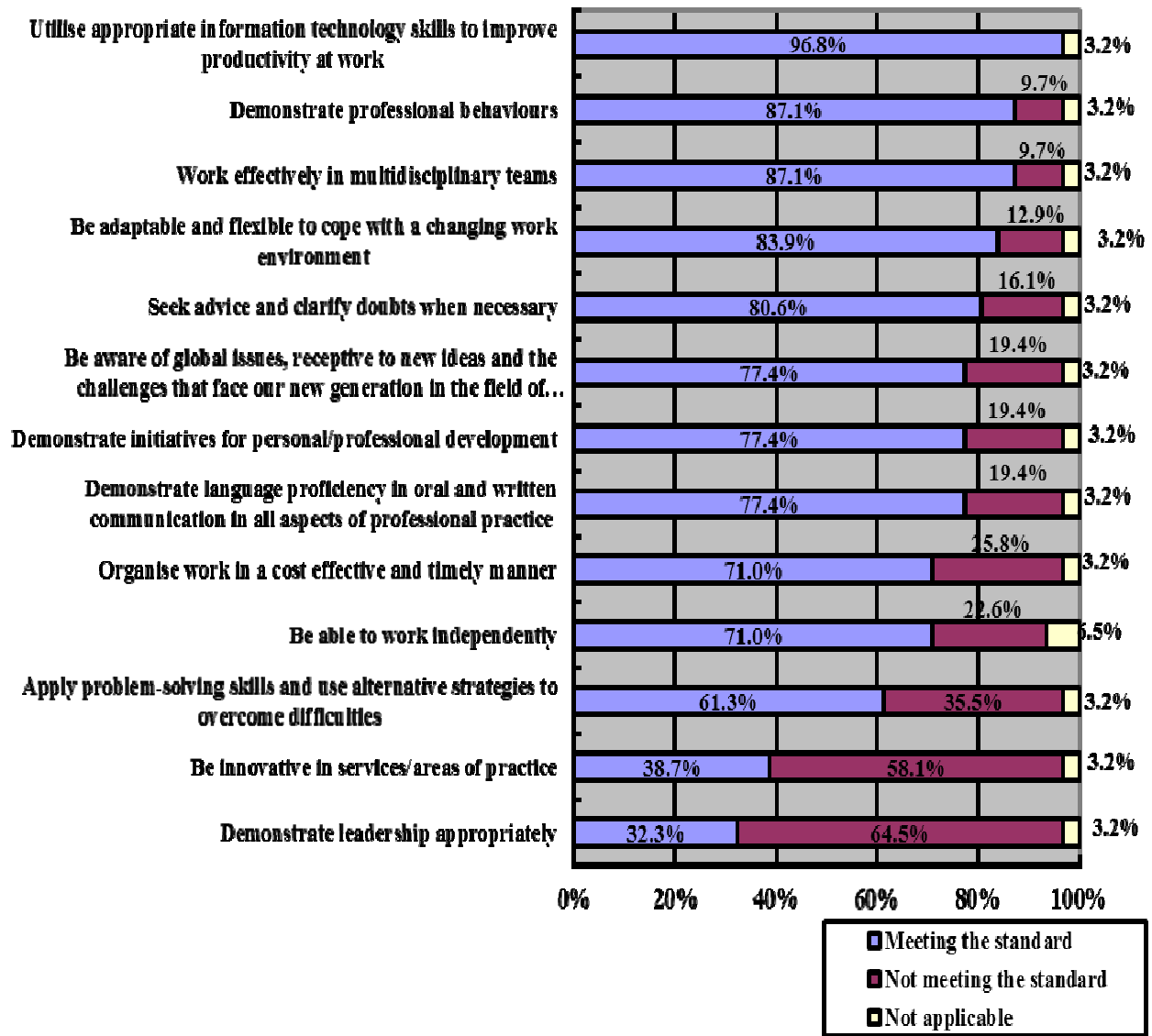
Quantitative data were collected from the Employers of PT graduates who graduated in the 2008-2011 period, to explore their perceptions of the graduates' qualities (Generic / Professional skills and competencies) and their overall perceptions and comments on the current programme, as well as suggestions for improvement. The following sections present these data.

#### ***3.2.1.1.1. Employers' perceptions of PT graduates' generic competencies***

The main part of this survey started by asking the respondents who were current or previous employers of the PT graduates of 2008 - 2011 (valid base: 62), to rate these employees' performance in areas concerning their **general skills / competencies** in grades of "far exceeding standard", "generally meeting standard", "slightly below standard", "far below standard" or "not applicable". The results show that all but two aspects of the graduates' performance were perceived as "generally meeting the standard" or even "far exceeding standard" by at least 60% of the valid sample. "Utilising appropriate information technology skills to improve productivity at work" topped the list, with an overwhelming 97% of the sample choosing the top 2 positive responses. This was followed by the performance of "demonstrating professional behaviours" (87%), "working effectively in multidisciplinary teams" (87%), "being adaptable and flexible to cope with a changing work environment" (84%) and "seeking advice and clarifying doubts when necessary" (81%). Other areas rated as meeting or exceeding standards by over 70% included "being aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy" (77%), "demonstrating initiatives for personal/professional development" (77%), "demonstrating language proficiency in oral and written communication in all aspects of professional practice" (77%), "organising work in a cost effective and timely manner" (71%) and "being able to work independently" (71%). In addition, 61% of respondents regarded the performance of graduates in "applying problem-solving skills and using alternative strategies to overcome difficulties" as meeting or exceeding standards. However, "demonstrating leadership appropriately" and "being innovative in services/areas of practice" were perceived as not meeting the standard (i.e. choosing "slightly below standard" or "far below standard") by 65% and 58% of the valid sample respectively. See Chart P1 on the next page for graphic presentation of details.

In order to obtain a comparable mean score for each of the performance items described above, a 4-point scale was assigned, with 1 representing "far below standard", 2 "slightly below standard", 3 "generally meeting standard" and 4 being "far exceeding standard". In other words, the higher the mean score, the more skilful / competent the employers perceived the graduates to be in that aspect. The results reveal that, by this mean analysis, the generic skills of "utilising appropriate information technology skills to improve productivity at work" was found to have the highest mean rating of 3.5 (subject to a sampling error of +/-0.2). "Being adaptable and flexible to cope with a changing work environment", "demonstrating professional behaviours", "seeking advice and clarifying doubts when necessary" and "working effectively in multidisciplinary teams" formed the next tier, each attaining a mean score of 3.1 (subject to a sampling error of +/-0.2). The lowest score of 2.1 was found with the generic skill of "Demonstrate leadership appropriately" and the lowest mean score was 2.4 for "be innovative in services/areas of practice". These data agree well with those in Summary Chart PT-1. See Summary Table PT-1 below for other results.

**Summary Chart PT-1: Performance of pt graduates on general competencies as perceived by employers (n=62).**



**Summary Table PT-1:**

**Performance of PT graduates on general competencies as perceived by employers (n=64)– Mean analysis (in the order of high to low mean scores)**

|   | Number of raters | Mean score (1-4) | Sampling error |
|---|------------------|------------------|----------------|
| Utilise appropriate information technology skills to improve productivity at work   | 30               | 3.5              | +/- 0.2        |
| Be adaptable and flexible to cope with a changing work environment  | 30               | 3.1              | +/- 0.2        |
| Demonstrate professional behaviours   | 30               | 3.1              | +/- 0.2        |
| Seek advice and clarify doubts when necessary   | 30               | 3.1              | +/- 0.2        |
| Work effectively in multidisciplinary teams   | 30               | 3.1              | +/- 0.2        |
| Be able to work independently   | 29               | 2.9              | +/- 0.2        |
| Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy | 30               | 2.9              | +/- 0.3        |
| Demonstrate initiatives for personal/professional development   | 30               | 2.9              | +/- 0.3        |
| Demonstrate language proficiency in oral and written communication in all aspects of professional practice                      | 30               | 2.9              | +/- 0.3        |
| Organise work in a cost effective and timely manner   | 30               | 2.8              | +/- 0.3        |
| Apply problem-solving skills and use alternative strategies to overcome difficulties  | 30               | 2.6              | +/- 0.3        |
| Be innovative in services/areas of practice   | 30               | 2.4              | +/- 0.3        |
| Demonstrate leadership appropriately  | 30               | 2.1              | +/- 0.3        |

### ***3.2.1.1.2. Employers' perceptions of PT graduates' professional competencies***

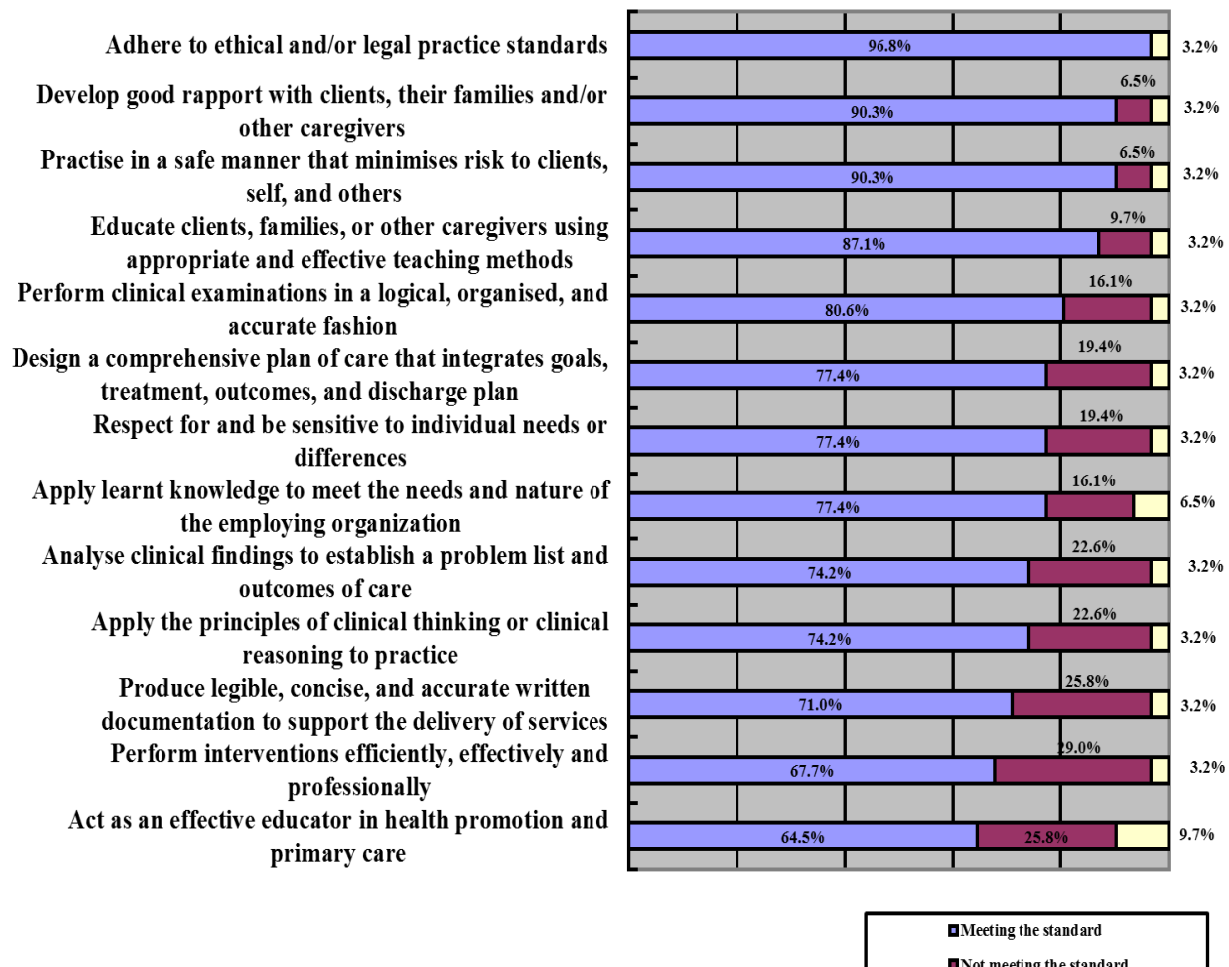
The second part of the questionnaire also aimed at current or previous employers of the PT graduates of PolyU (valid base: 62). When asked to assess the graduates' performance with respect to their **professional skills / competencies**, once again in terms of “far exceeding standard”, “generally meeting standard”, “slightly below standard”, “far below standard” and “not applicable”, an overwhelming 97% regarded the graduates' performance in “adherence to ethical and/or legal practice standards” as having met or exceeded the standard. Meanwhile, 90% each gave this level of rating to “developing good rapport with clients, their families and/or other caregivers” and “practising a safe manner that minimises risk to clients, self, and others”. Other qualities perceived as meeting/exceeding the standards by over 80% of the sample included “educating clients, families, or other caregivers using appropriate and effective teaching methods” (87%) and “performing clinical examinations in a logical, organised and accurate fashion” (81%). In general, all professional skills / competencies put to the test in this study were perceived as meeting/exceeding the standard by nearly 65% or

above of the employers interviewed. Out of all the professional skills surveyed, “Act as an effective educator in health promotion and primary care” received the fewest ratings for meeting/exceeding the standard. See Summary Chart PT-2 on the next page for graphic presentation of the data details.

Similar to the first section, by conducting a mean score analysis with assigned scores from 1 to 4, in which 1 represents “far below standard”, 2 “slightly below standard”, 3 “generally meeting standard” and 4 being “far exceeding standard”. The “Professional Competencies” assessed had mean scores ranging from 2.9 to 3.4, and not many significant differences were observed with respect to the relative rankings of individual items, given the sampling error. “Adherence to ethical and/or legal practice standards” still topped the list with a mean score of 3.4 and a sampling error of  $\pm 0.2$ . “Developing good rapport with clients, their families and/or other caregivers ranked second with a score of 3.2 (subject to a sampling error of  $\pm 0.2$ ), while “practising in a safe manner that minimises risk to clients, self, and others” ranked third with a score of 3.1 (subject to a sampling error of  $\pm 0.2$ ). See Summary Table PT-2 on the next page for more details.

#### Summary Chart PT-2:

**Performance of PT graduates on professional competencies/competencies as perceived by employers (n=64)**



**Summary Table PT-2:****Performance of pt graduates on professional competencies as perceived by employers (n=64) – Mean analysis (in the order of high to low mean scores)**

|  | Number of raters | Mean score (1-4) | Sampling error |
|--|------------------|------------------|----------------|
| Adhere to ethical and/or legal practice standards  | 30               | 3.4              | +/- 0.2        |
| Develop good rapport with clients, their families and/or other caregivers                          | 30               | 3.2              | +/- 0.2        |
| Practise in a safe manner that minimises risk to clients, self, and others                         | 30               | 3.1              | +/- 0.2        |
| Respect for and be sensitive to individual needs or differences                                    | 30               | 3.0              | +/- 0.2        |
| Educate clients, families, or other caregivers using appropriate and effective teaching methods    | 29               | 2.9              | +/- 0.1        |
| Apply learnt knowledge to meet the needs and nature of the employing organization                  | 30               | 2.9              | +/- 0.2        |
| Design a comprehensive plan of care that integrates goals, treatment, outcomes, and discharge plan | 30               | 2.9              | +/- 0.2        |
| Perform clinical examinations in a logical, organised, and accurate fashion                        | 28               | 2.9              | +/- 0.2        |
| Act as an effective educator in health promotion and primary care                                  | 30               | 2.9              | +/- 0.3        |
| Analyse clinical findings to establish a problem list and outcomes of care                         | 30               | 2.8              | +/- 0.2        |
| Apply the principles of clinical thinking or clinical reasoning to practice                        | 30               | 2.8              | +/- 0.2        |
| Perform interventions efficiently, effectively and professionally                                  | 30               | 2.8              | +/- 0.3        |
| Produce legible, concise, and accurate written documentation to support the delivery of services   | 30               | 2.8              | +/- 0.3        |

**3.2.1.1.3. Employers' perceptions of PT graduates' overall performance**

An additional item in the questionnaire sought the employers' opinions about the overall performance of the PolyU graduates in PT. The results showed that the majority of employers interviewed (82%) expressed satisfaction with the PT graduates' performance, with only 5% of them expressing dissatisfaction. Likewise, by conducting a mean score analysis with assigned scores from 1 to 5, where 1 represented the lowest level of satisfaction and 5 the highest, the sample mean obtained was 4.0, which literally meant "quite satisfied".

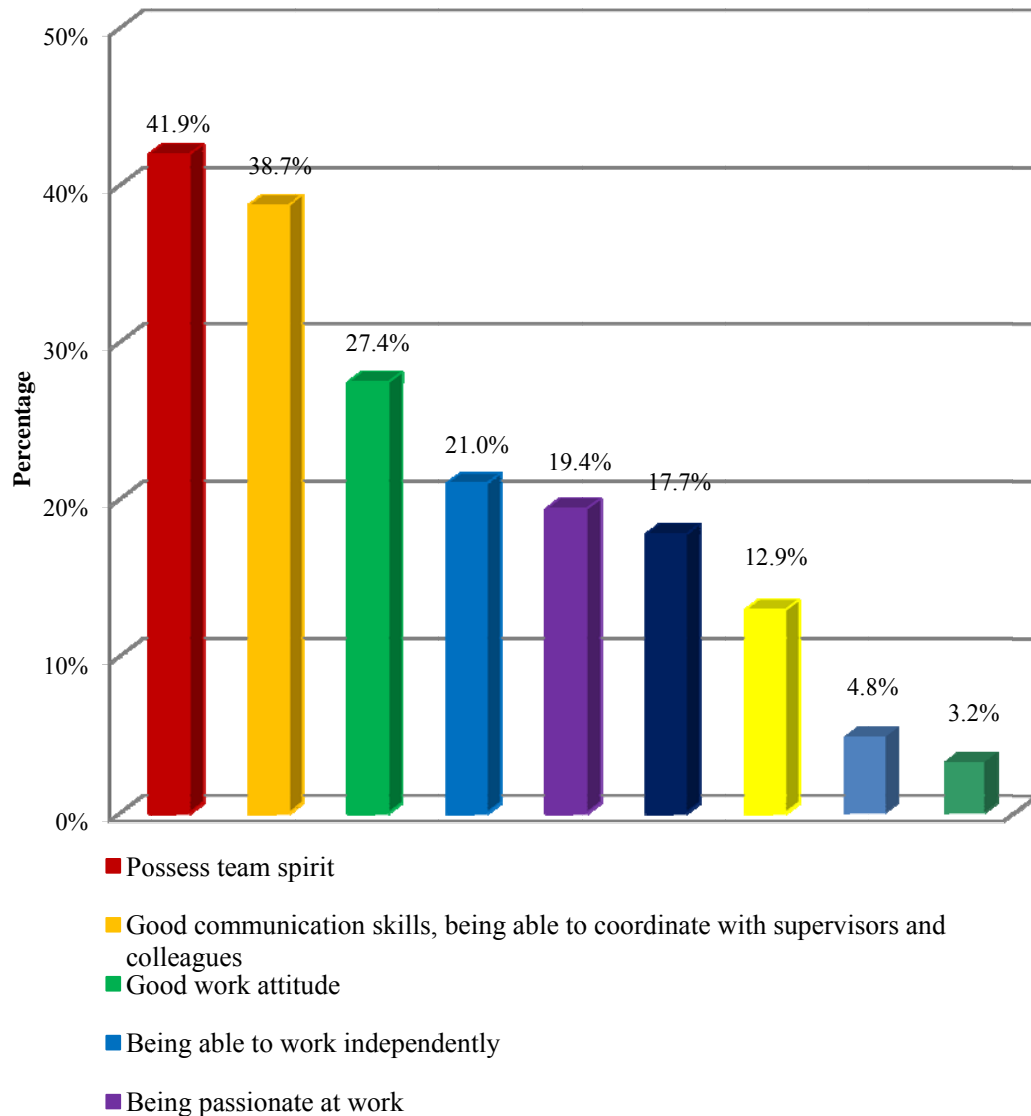
The next question was in open-ended format, asking all the employers, irrespective of whether they had recruited any PT graduates previously, to name the aspects of the graduates' general skills / competencies with which they were most satisfied.

The results revealed that the attribute "possession of team spirit" topped the list of the generic skills with which the employers were the most satisfied, cited by 42% of the respondents. "Good communication skills, being able to coordinate with supervisors and colleagues" came second and was rated as satisfactory by 39% of respondents. 27% cited "good work attitude", 21% cited "being able to work independently", 19% cited "being

passionate at work”, 18% cited “keen on continual education” and 13% cited “possession of good basic knowledge (e.g. knowledge of computer applications, writing and analytical skills)”, as being the generic skills with which the employers were satisfied. 5% of the respondents said they could not name any aspect and 3% had no comments. See Summary Chart PT-3 below.

**Summary Chart PT-3:**

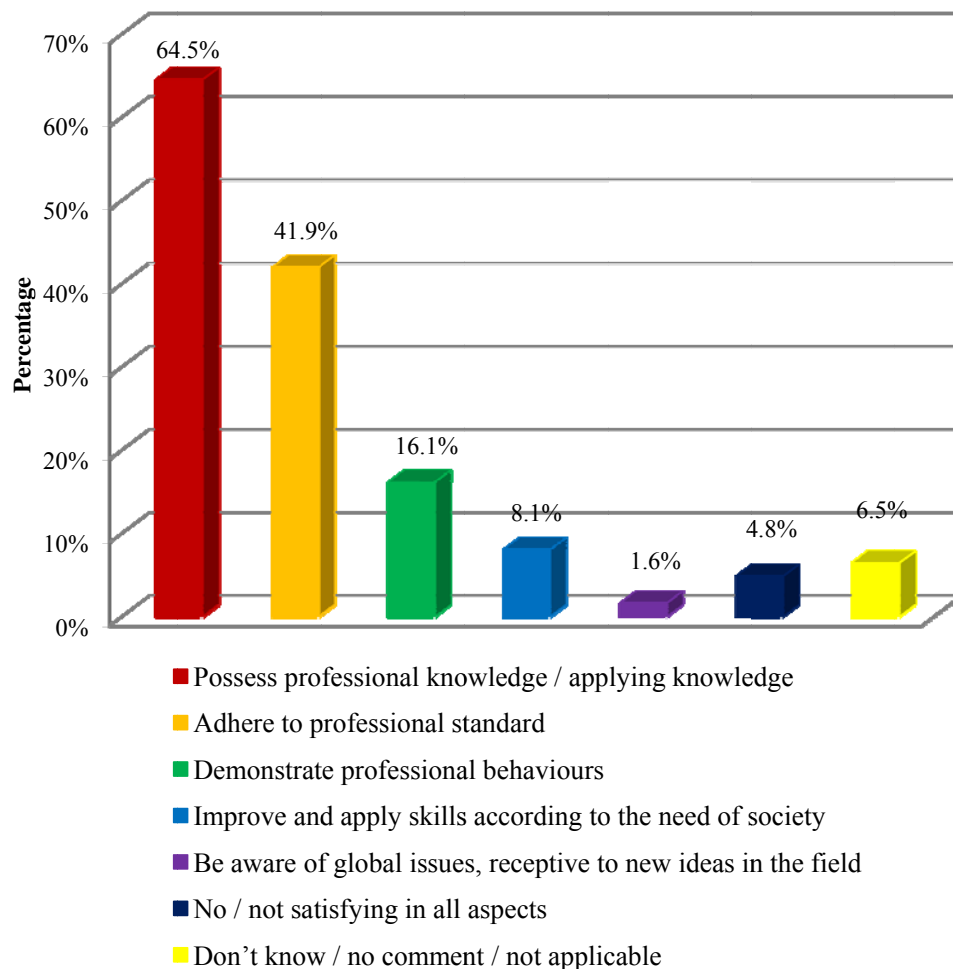
**Aspects of PT graduates’ general competencies with which employers (n=62) were most satisfied.**





All respondents were also asked to mention the aspects of their PT graduates' professional skills / competencies with which they were most satisfied. "Possession of professional knowledge / applying knowledge" ranked first of the list, mentioned by 65% of the respondents. 42% of the respondents also suggested that "adherence to professional standard" was another aspect with which they were satisfied. As well, 16% cited "demonstrating professional behaviours" and 8% cited "improving and applying skills according to the need of society" as their choice of the most satisfying Professional Skills of the graduates. A further 5% could not name any aspect and 7% had no comment. See Summary Chart PT-4 below.

**Summary Chart PT-4: Aspects of PT graduates' professional competencies with which employers (n=62) were most satisfied.**

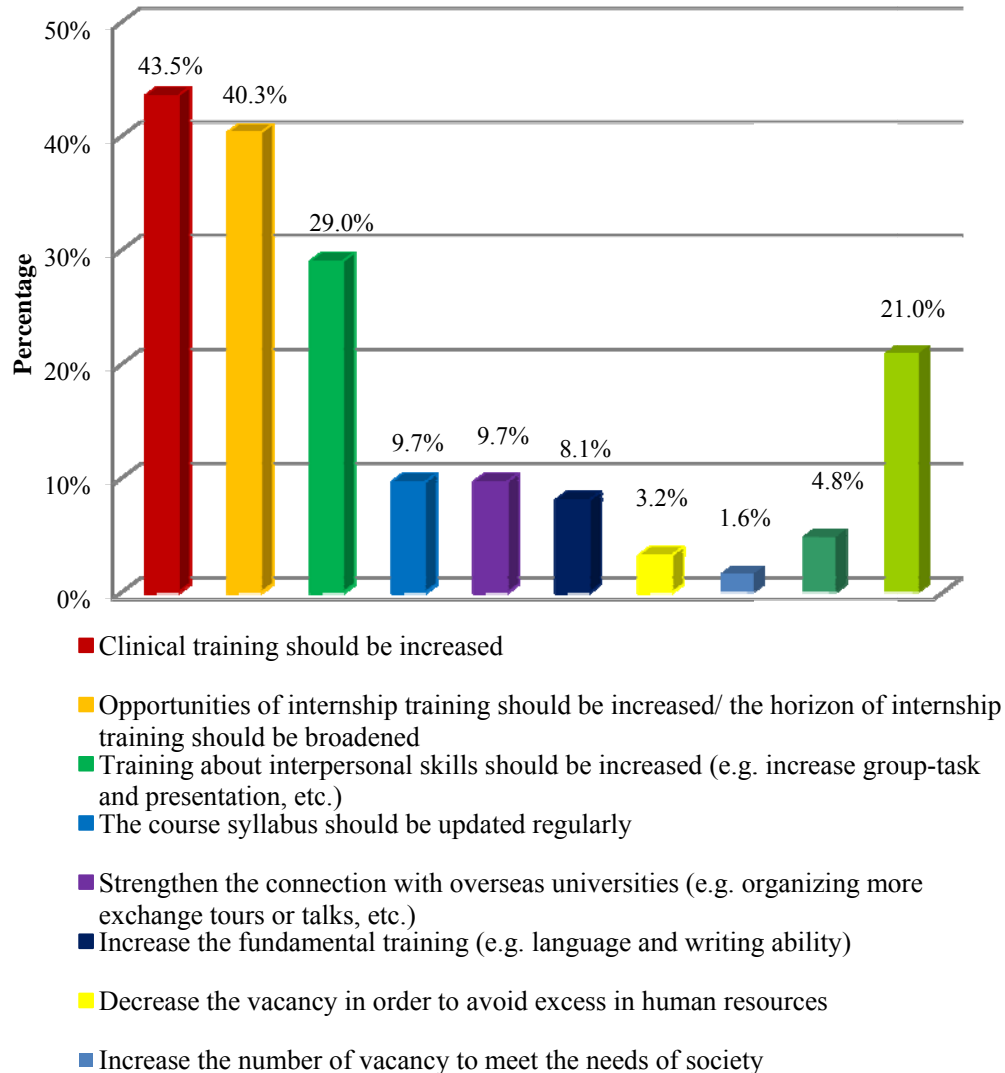


#### **3.2.1.1.4. Employers' overall comments on PT programme**

With respect to the overall comments on the current PT programmes, 44% of the employers suggested to "increase the clinical training". At the same time, 40% expressed that the "opportunities for internship should be increased or the horizon of internship should be

broadened”. 29% said “more training in interpersonal skills” should be provided (e.g. increase group task and presentation, etc.), while 10% each said “the course syllabus should be updated regularly” and the programmes should “strengthen the connection with overseas universities”, such as organizing more exchange tours or talks. About 21% of the respondents had no comments on the current PT programmes. See Summary Chart PT-5 on the next page.

**Summary Chart PT-5: Overall comments on PT programmes by employers (n=62)**

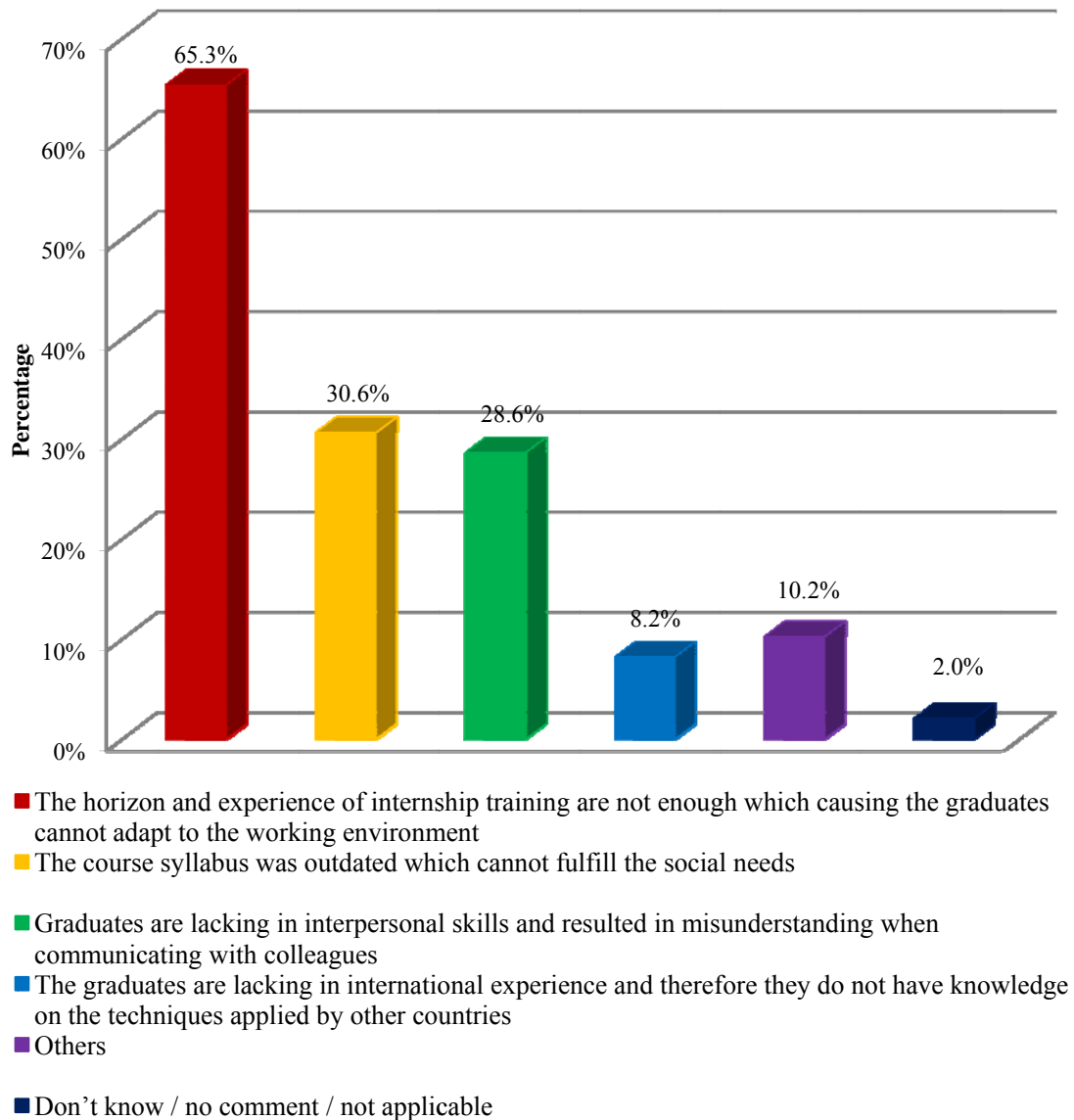


When asked to provide the reasons behind their comments on the programmes, nearly two-thirds of the “Employer” respondents said “the horizon and experience of internship training were not enough hence the graduates had difficulties adapting to the working environment” (65%). Another comment was that “the course syllabus was outdated which

failed to fulfil the social needs” (31%). The third most commonly cited problem was “graduates lack interpersonal skills, resulting in misunderstanding when communicating with colleagues” (29%). For other responses, please see Summary Chart PT-6 on the next page.

### Summary Chart PT-6:

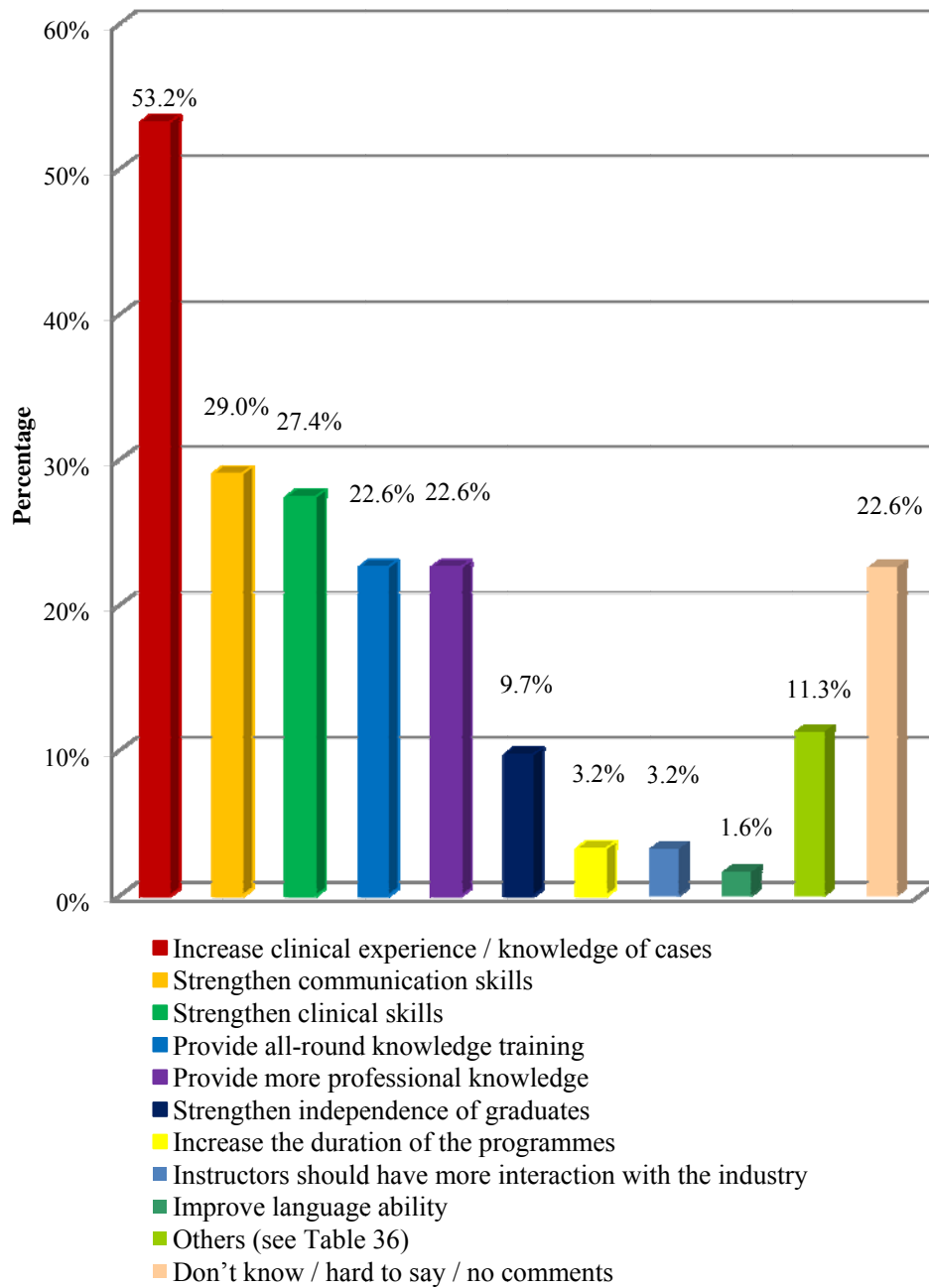
#### Reasons for specific comments on the PT programmes (n=62)



With respect to the suggestions for improving the existing PT programmes, 53% of the respondents advised the Rehabilitation Sciences Department (RS), which hosts the Physiotherapy degree programme, to “increase clinical experience / knowledge of cases” of the future students. Another 29% suggested to “strengthen communication skills”, 27% proposed to “strengthen clinical skills” and 23% each suggested to “provide all-round knowledge training”, and “provide more professional knowledge”. 23% had no comment. See Summary Chart PT-7 for more details.

### Summary Chart PT-7:

Suggestions for improvement of the PT programmes by employers (n=62)



### **3.2.1.2. Interviews with employers of PT graduates**

The following section describes patterns that emerged from the employers' responses during interviews. These are grouped in categories of concerns and separated into collective and individual comments.

#### **3.2.1.2.1. Employers' perceptions of PT graduates' generic competencies**

In responding to the first question of *"How do you perceive the generic skills (such as critical thinking, problem solving, written & verbal communication, teamwork.etc) of the graduates who are under your supervision?"*, the following answers were the most common.

The overall view of the PT employers in response to this question was that the graduates are generally adequate, although there are no distinct patterns in the strengths and weaknesses mentioned. One respondent commented that there have been no significant differences in graduates as a consequence of OBE while, on the other hand, another said the quality has improved since 2008, with the graduates having become more innovative and proactive. Three respondents commented that current graduates have good presentation skills, particularly with the use of multimedia to search for information and introduce programmes to patients, although another viewed that they lack confidence in these presentations. Two mentioned that they are able to communicate effectively in routine situations, although they both noted that some graduates have difficulties with patients who are emotional, demanding or difficult in other ways. Conversely, one respondent did not consider these communication skills to be adequate. Written communication, for example report and proposal-writing, does not seem to be as strong, with two respondents commenting on this weakness.

One employer mentioned that the graduates generally have good attitudes towards learning, while another claimed that the professional attitude is not strong: *...particularly in patient care due to the fact that they don't have clear understanding about their roles and responsibility of a physiotherapist.*

One respondent described the PolyU PT graduates as "dynamic and self-directed". On critical thinking, one of the employers said the graduates need more training because they have only limited exposure to case studies when they enter employment. Another perceived them to be good but to be restricted by their limited life experience and the need to learn to adapt.

Problem-solving skills received comments from three interviewees, one positive and two slightly negative:

- *"Problem solving is ok; they can find various resources to solve problems, and are able to find information from other departments to enrich projects, for example smoking signs in toilets - making better posters to alert the audience. They are very dynamic, and can follow directions and work by themselves".*
- *"One important thing to share is, graduates usually adopt a formula kind of mindset to handle the cases from the identification of dysfunction to the method of treatment.*

*In fact, this is the part that gets them into trouble in their treatments of patients since this kind of formula mindset may not be applicable all the time; in real-life situations, it is unlikely to be applicable in 4 out of 10 cases. In view of this, we can see there are two major trends for graduates' growth, either following the successful experience to adopt the formula and advance more, or to develop new ideas to solve the problem. Generally, fresh PolyU graduates do have the skill to hit the target in handling the cases".*

Another weakness, described by one respondent, was the graduates' inability to take into account the best interests of their patients, suggesting that they need to learn to look at cases from the sociological perspective and not only the clinical setting.

#### **3.2.1.2.2. Employers' perceptions of PT graduates' professional competencies**

In response to the question "How do you perceive the professional knowledge of the graduates who are under your supervision?" the following comments were made.

Five of the eight interviewees indicated the view that the graduates' basic knowledge is generally adequate, while a sixth commented that the standards vary considerably. However, three mentioned that the application of theory to practice needs improvement:

*They need time to pick up in order to handle the vast variations in treatments.*

Specifically, these five commented on incomplete knowledge of the specializations they are likely to encounter in clinical settings, as in the following example:

*Nowadays, as the dimensions of the field have expanded manifold, the existing placement design may not be able to cover the scope of the field. It is observed that graduates who have encountered similar experiences in their placements will have better confidence to handle a case in the job, although this does not imply that they have better skills to handle such a case.*

One employer stated that it generally takes 1-2 years for the graduates to develop maturity and build their knowledge of new programmes, interventions and evaluation methods sufficiently, while two others noted that the graduates should continue their study by undertaking courses offered by the Hospital Authority or other providers.

Another respondent identified one specific area in which the students were considered to be lacking:

*The duration for treatment in the hospital setting is far shorter than that in the community service setting. As such, the PT [or OT] needs to understand more thoroughly how to disseminate the cases by transferring the responsibility from PT /OT to the patients' family members or maids. Therefore, the university should not only train the graduates fragmentally for them to work in the hospitals. Rather, the graduates need to learn preventative care so that they can learn how to serve patients at different stages. In fact, a compartmental approach is not fit for community service, it has to be more activity-based, to plan programmes*

*holistically by collaborating with different professionals in order to implement the programmes.*

### **3.2.1.2.3. Employees' comments on PT graduates' overall performance**

On responding to the interview question, *“How do you perceive the overall performance (high / average / low /under-performed) of our graduates? Please explain your reasons for this view.”* the following comments were made:

Only five of the employer respondents addressed this question. Two rated the graduates as “average” and three as “average to high” with respect to knowledge, clinical competencies/practical skills and clinical reasoning. Two commented specifically on presentation skills for publicity and promotion being good.

One employer gave the following description of two high-performance graduates under his/her supervision, which gives a useful indication of the standard that is expected:

- *Can adapt to new environment*
- *Help to develop simple programmes under guidance*
- *Clinical experience in communication is high; provide tender, caring services for the patients. Some patients have applauded the good work of the two graduates to the supervisor.*

### **3.2.1.2.4. Employers' comments on PT programme**

The responses to the questions *“To what extent do you think our current programme can fulfill the needs of your organization? In relation to your answer, what do you see as the strengths and weaknesses of our programme?”* are summarized below:

As with earlier questions, there are no consistent patterns in the respondents' comments in relation to this one. Two mentioned that one of the programme's strengths is the good coverage of knowledge and practical skills, which are appropriate for entry level to the profession. Two said that the PolyU training facilitates critical thinking, quick analyses, and research skills. One said that PolyU provides training in individual specialties, which is in line with the needs of the organization.

Regarding the weaknesses, three employers commented on weak exposure to PT services in the community, as illustrated by the comment:

*... there is not adequate training in soft skills in the PT programme, graduates are usually not be able to communicate / to respond well enough with the clients/ patients in a professional way.*

There were also three comments that there is not enough time in the undergraduate programme for practical skills development. Two commented that graduates have a weak awareness of patients' mental and emotional health needs, especially in regard to handling difficult issues or demanding clients, or those who need multiple types of care. One

expressed the belief that students are protected during clinical placement, therefore find it difficult to handle high volumes of work in the real workplace. One employer noted a drop in the proportion of graduates employed in the NGO sector since 2008, suggesting that they might have insufficient understanding of the nature of NGO work.

Suggestions for improving the PT programme were invited by the prompt *“Can you give some recommendations to improve our current programme (OT/PT) in order to provide better training for our future graduates to meet workplace needs?”*

Two interviewees supported the use of overseas clinical placements, with one suggesting that these could take place in the form of two-week blocks during summer breaks. Other than this, there was no consensus about any of the recommendations, with each respondent commenting on a different aspect. These included:

- wider exposure in clinical placements, particularly to the NGO/private sector,
- more communication with clinicians:

*“Curriculum design would be better if there were more communication with clinicians in order to formulate a more practical curriculum to train the physiotherapist.”*

- more proactive training
- more use of case studies
- more attention to bio-psycho-social issues that should be addressed in lectures rather than only through exposure in clinical placements:

*“How to handle patients’ social / emotional needs, understand the backgrounds of patients, family relationships., social support... appropriate use of walking aids... for the patient’s home environment... PT is unique, we are more like coaches than instructors. A coach should cater for the clients’ needs in order to deliver the service appropriately...give hope to patients.”*

- supporting students to self-reflect on their weaknesses and future needs:

*“... let the graduates know what they have to do in order to build up their professional knowledge in their future workplace, also to be able to identify their weaknesses in some areas of the profession and therefore derive their training plans for career development.”*

- more active involvement by PolyU staff in the community:

*“... organize education seminars to enhance the communication between the two parties (i.e. PolyU and practitioners), to provide more support with theory, strategies etc. so that clinical educators can be better equipped.”*



### **3.2.2. PT graduates**

#### **3.2.2.1. Survey of PT graduates**

Questionnaire data were collected from the PT graduates to assess their perceptions of their own skills and solicit their comments and recommendations about the PT programme. The data are presented in the following sections.

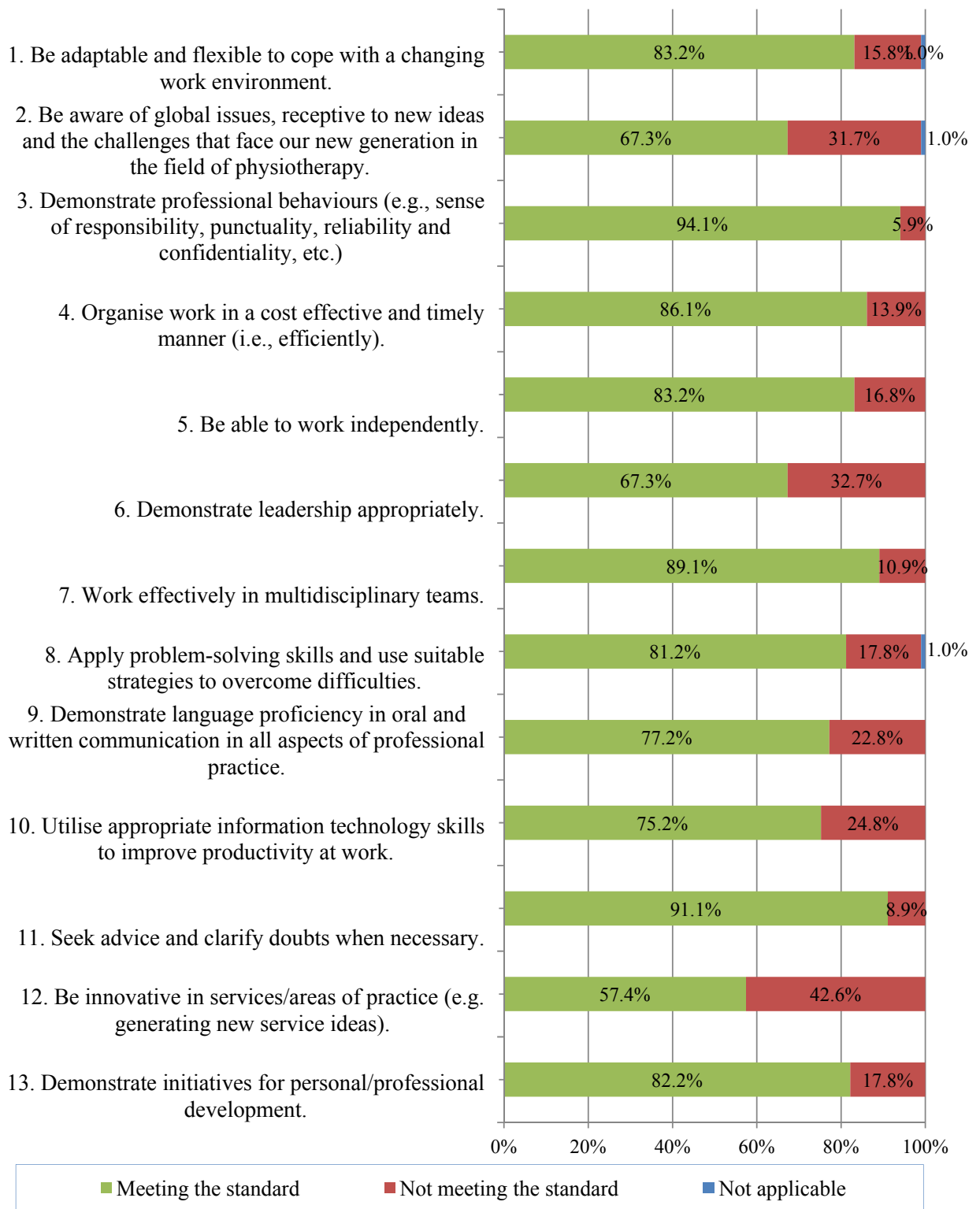
##### **3.2.2.1.1. PT graduates' perceptions of their generic competencies**

As in the employers' questionnaire, the graduate respondents were asked to rate their self-perceptions of their own performances as "far exceeding standard", "generally meeting standard", "slightly below standard", "far below standard" or "not applicable". The highest rated construct was 'demonstrating professional behaviors', on which 94.1% of the respondents rated themselves as "generally meeting" or "far exceeding" the standard. This was followed by "seeking advice and clarifying doubts" (91.1%) and "working effectively in multidisciplinary teams" (89.1%). More than 80% of the graduates rated themselves as meeting/exceeding the standard for "organizing work in a cost effective and timely manner" (86.1%), "being adaptable and flexible to cope with a changing work environment" (83.2%), "being able to work independently" (83.2%), "demonstrating initiative for personal/professional development" (82.2%) and "applying problem-solving skills and using strategies to overcome difficulties" (81.2%). The lowest was "being innovative in services/areas of practice" (57.4%). See Summary Chart PT-8 below for details.

From the mean scores it can be seen that five items were rated as 3 ("generally meeting standard") or more: "demonstrating professional behaviors" (3.3), "seeking advice and clarifying doubts when necessary" (3.1), "organizing work in a cost effective and timely manner" (3.1), "being able to work independently" (3.1), and "working effectively in multidisciplinary teams" (3.0). The lowest rating was for "being innovative in services/areas of practice" (2.5). See Summary Table PT-3 for the full set of results.

### Summary Chart PT-8:

PT graduates' ratings of their own performance on generic competencies (n=47)



**Summary Table PT-3:****PT Graduates' perceptions of their performance on generic competencies – Mean analysis (ordered from high to low mean scores) (n=47)**

| <b>PT Graduates (2009-2011)<br/>Generic competencies</b>  | <b>Number of<br/>raters</b> | <b>Mean<br/>Score (1-<br/>4)</b> | <b>Sampling<br/>error</b> |
|---|-----------------------------|----------------------------------|---------------------------|
| 3. Demonstrate professional behaviors (e.g., sense of responsibility, punctuality, reliability and confidentiality, etc.)           | 52                          | 3.3                              | +/- 0.2                   |
| 11. Seek advice and clarify doubts when necessary.  | 52                          | 3.1                              | +/- 0.1                   |
| 4. Organize work in a cost effective and timely manner (i.e., efficiently).   | 52                          | 3.1                              | +/- 0.2                   |
| 5. Be able to work independently.   | 52                          | 3.1                              | +/- 0.2                   |
| 7. Work effectively in multidisciplinary teams.   | 52                          | 3.0                              | +/- 0.2                   |
| 1. Be adaptable and flexible to cope with a changing work environment.  | 51                          | 2.9                              | +/- 0.2                   |
| 13. Demonstrate initiatives for personal/professional development.  | 52                          | 2.9                              | +/- 0.2                   |
| 8. Apply problem-solving skills and use suitable strategies to overcome difficulties.   | 51                          | 2.9                              | +/- 0.1                   |
| 9. Demonstrate language proficiency in oral and written communication in all aspects of professional practice.                      | 52                          | 2.9                              | +/- 0.1                   |
| 10. Utilize appropriate information technology skills to improve productivity at work.  | 52                          | 2.7                              | +/- 0.2                   |
| 6. Demonstrate leadership appropriately.  | 52                          | 2.7                              | +/- 0.2                   |
| 2. Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy. | 52                          | 2.7                              | +/- 0.2                   |
| 12. Be innovative in services/areas of practice (e.g. generating new service ideas).  | 52                          | 2.5                              | +/- 0.2                   |

**3.2.2.1.2. PT graduates' perceptions of their professional competencies**

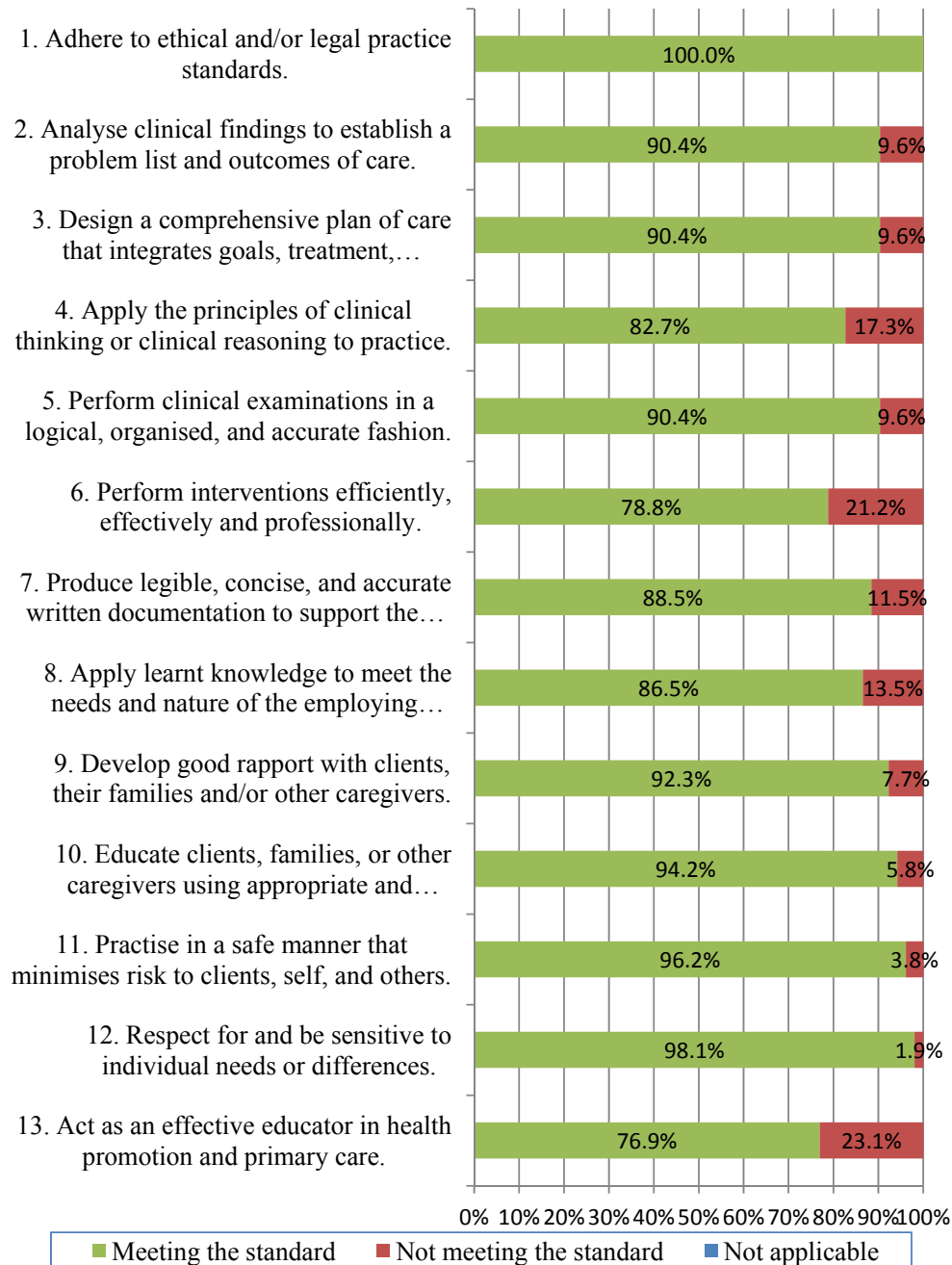
When asked to self-rate their professional skills/competencies, the graduates appear to have been very positive, with around 80% or more rating themselves as meeting/exceeding expectations on all of the items. 100% rated themselves as such for ‘adhering to ethical and/or legal practice standards’. This was followed closely by “respecting and being sensitive to individual needs or differences” (98.1%) and “practicing in a safe manner that minimizes harm to clients, self and others” (96.2%).” The two items with the least respondents rating themselves as meeting/exceeding standards were “performing interventions efficiently, effectively and professionally (78.8%) and “acting as an effective educator in health promotion and primary care” (76.9%). See Summary Chart PT-9 for details.

All of the items were given mean ratings of around 3.0 (“generally meeting standard”) or more. The two highest ratings were for “adhering to ethical and/or legal practice standards” (3.5) and “Practicing in a safe manner that minimizes risk to clients, self, and others” (3.4). The lowest ratings were for “acting as an effective educator in health promotion and primary

care” (2.9) and “performing interventions efficiently, effectively and professionally” (2.9). Summary Table PT-4 shows the details.

### Summary Chart PT-9:

**PT graduates’ perceptions of their own performance on professional competencies (n=47)**



**Summary Table PT-4:****PT graduates' perceptions of their own performance on professional competencies – Mean analysis (ordered from high to low mean scores) (n=47)**

| <b>PT Graduates (2009-2011)<br/>Professional skills/ competencies</b>                                  | <b>Number of raters</b> | <b>Mean<br/>score<br/>(1-4)</b> | <b>Sampling<br/>error</b> |
|--|-------------------------|---------------------------------|---------------------------|
| 1. Adhere to ethical and/or legal practice standards.  | 52                      | 3.5                             | +/- 0.1                   |
| 11. Practice in a safe manner that minimizes risk to clients, self, and others.                        | 52                      | 3.4                             | +/- 0.2                   |
| 12. Respect for and be sensitive to individual needs or differences.                                   | 52                      | 3.2                             | +/- 0.1                   |
| 10. Educate clients, families, or other caregivers using appropriate and effective teaching methods.   | 52                      | 3.1                             | +/- 0.2                   |
| 9. Develop good rapport with clients, their families and/or other caregivers.                          | 52                      | 3.1                             | +/- 0.2                   |
| 3. Design a comprehensive plan of care that integrates goals, treatment, outcomes, and discharge plan. | 52                      | 3.0                             | +/- 0.1                   |
| 8. Apply learnt knowledge to meet the needs and nature of the employing organization.                  | 52                      | 3.0                             | +/- 0.2                   |
| 5. Perform clinical examinations in a logical, organized, and accurate fashion.                        | 52                      | 3.0                             | +/- 0.1                   |
| 2. Analyze clinical findings to establish a problem list and outcomes of care.                         | 52                      | 3.0                             | +/- 0.1                   |
| 4. Apply the principles of clinical thinking or clinical reasoning to practice.                        | 52                      | 3.0                             | +/- 0.2                   |
| 7. Produce legible, concise, and accurate written documentation to support the delivery of services.   | 52                      | 3.0                             | +/- 0.1                   |
| 13. Act as an effective educator in health promotion and primary care.                                 | 52                      | 2.9                             | +/- 0.2                   |
| 6. Perform interventions efficiently, effectively and professionally.                                  | 52                      | 2.9                             | +/- 0.2                   |

### **3.2.2.2 Interviews with PT graduates**

Graduates of the PT programme were interviewed (n=26), and the patterns in the data are reported in the following sections.

#### ***3.2.2.2.1 Understanding of OBE and intended learning outcomes***

Responding to the question “Do you know what is “Outcome-Based Education”(OBE)? Do you know anything about ‘intended learning outcomes’?” all of the graduates in one group were able to recall the outcomes listed in definitive documents and subject syllabi. None of the other group members had any idea about either OBE or intended learning outcomes.

#### ***3.2.2.2.2 PT graduates’ perceptions of their generic competencies***

Responding to the questions “How do you perceive the generic skills (such as critical thinking, problem solving, written & verbal communication, teamwork..etc) you attained in PolyU? Do you think you developed these skills adequately to prepare you for the workplace, and what recommendations do you have for the further development of these skills in the programme?”, the graduates in all groups thought that, while the coverage of knowledge was sufficient to equip them to address fundamental workplace needs, the practical skills training was too rushed and the proportion of time spent on developing generic skills was not enough.

One of the areas in which the graduates considered their skills to be insufficient was clinical reasoning and its applications, including assessment and treatment, and critical thinking. They said that they had developed adequate problem-solving skills but lacked the ability to address problems holistically.

The graduates could recall that there had been a writing course to teach written communication skill, but they thought that the course was not effective in addressing their professional writing needs.

On the positive side, they felt they had been able to acquire teamwork skills through project learning.

They suggested that some generic skills, such as verbal communication, critical thinking and problem solving, can best be acquired through practice during the clinical placement – they particularly mentioned that the skills vary for different client groups. It was recommended that the development of generic skills could be better if students could solicit feedback about these from clinical educators during placement rather than just receiving feedback on their practical skills.

#### ***3.2.2.2.3 PT graduates’ perceptions of their professional knowledge***

Mixed comments were made in response to the questions “How do you perceive the professional knowledge you attained in PolyU? Do you think you developed these skills

*adequately to prepare you for the workplace, and what recommendations do you have for the further development of these skills in the programme?”*

Two groups made some general recommendations:

- *“More than enough in terms of the professional knowledge, which can be applied to many different cases”*
- *“No problem to learn basic principles [suitable for career entry]. Due to time constraint, it is impossible for students to learn every setting.”*
- *“Generally, patient caring, reasoning to justify techniques to be used is okay.”*

Another group listed some specific areas in which they felt deficient:

- *“Not enough in x-ray, imaging training. Lab test if ICU is not sufficient.”*
- *“Provide more real case examples for students to learn better about the professional knowledge.”*
- *“There is not enough time to learn pediatrics and neurology... [The former was described as] not too practical and inadequate for workplace needs.”*
- *“Not enough placement opportunity to apply the knowledge learnt in various areas.”*

It was pointed out that, since the skill practices in university were done with classmates who were physically healthy, these may not reflect the real case needs accurately enough. Another point made was that the application of professional skills varies from context to context - NGO, hospital, private clinic, etc.

As with the undergraduate student groups, the comment was made that many professional skills need to be learned on the job, such as caring for in-patients, communication with other colleagues and knowledge of actual cases and practical skills.

The graduates also mentioned that issues such as workload and time pressures in the workplace can affect their success in applying their professional knowledge. One suggestion was that, in Year 1, the placement time could be less, and the workload could be increased by the final year to a level similar to the real-world setting.

One group passed on a common feedback comment given by clinical supervisors, that knowledge about medication and pathology is not being taught well enough to cater for workplace needs; suggesting that the new graduates have knowledge, but not sufficient hands-on skills that can be used in the workplace. Another criticism they mentioned was that skills learnt in PolyU are different from those in the workplace, and that the knowledge taught is a bit superficial, and not quite up-to-date enough to address contemporary needs. The group suggested that real patients could be invited, to enable the students to have some exposure to hands-on experience. They also suggested a strengthening of knowledge about how to use machines, and updates on medical technology.

#### **3.2.2.2.4 PT graduates' evaluation of their overall performance**

Below is a summary of the graduates' responses to the questions *“How do you perceive your performance (high / average / low /under-performing) in your current position? To what extent did your study at PolyU contribute to how you are performing now? Please give reasons to elaborate your answer.”*

While the members of one group thought they had achieved a high level, attributing around 50% of the credit for this to PolyU and the other 50% to other sources, the remainder rated themselves as low to average. One reason given for this was that the cases presented in class were much simpler than those in the real-life setting, and other factors in real life will lower the performance level. One example cited was the difference between treating out-patients and in-patients.

Those who gave themselves a low rating commented that there is a big gap between the knowledge learnt in university and that needed in the workplace setting, hence continuous study to update knowledge is needed while at work.

#### **3.2.2.2.5 PT graduates' evaluation and recommendations for programme**

The respondents brought forward positive as well as negative comments when responding to the questions *“To what extent do you think our current programme can help to address the needs of the workplace? What are the positive and negative characteristics of the programme in this respect?”*

The positive characteristics the graduates mentioned included:

- *variety, in terms of knowledge*
- *evidence-based practice*
- *sufficient knowledge to fulfill basic needs of the profession.*

The negative aspects they mentioned were:

- *not enough clinical reasoning*
- *insufficient time to put the “big picture” of knowledge and skills together*
- *the need to update some new technologies, e.g. shock wave, EPT therapy and respiration and to deepen understanding of ventilator and related practical skills, and McKenzie skills*
- *a curriculum that is too packed*
- *lack of knowledge about radiology, ct brain scanning, MRI.*

Different aspects of the PT programmes were discussed by the respondents in response to the questions *“Can you give some recommendations about how we can provide better training in the OT/PT programme to help our future graduates to be prepared better to fit the workplace needs?”* There were no common patterns in the recommendations they made.



Placement:

- *more clinical placements in different settings (i.e. HA, NGO and private)*
- *overseas placement opportunities*
- *more clinical placement in Year 3; increase the quota for overseas exchange from 15 (2010), 10(2011) to half of the class.*

Links to clinical context:

- *more clinical scenarios*
- *while teaching certain subject content, conduct related seminars or visits in order to deepen students' understanding.*
- *explore the possibility of setting up some volunteer posts in different organizations for PT students to be exposed more widely in the industry.*
- *at least visit different workplace settings e.g. NGO, private, HA.*
- *invite more clinical staff as speakers or to conduct demonstrations.*

Further skills development:

- *Graduates should be trained not to exercise full sets of assessments but to use appropriate parts of the assessment whenever deemed applicable.*

Lifelong learning:

- *Remind students that the purpose of university education is to provide a fundamental understanding about the profession; future graduates should understand that they need to continue to advance their knowledge bases in their future working environments.*

Content:

- *Set exam questions that test critical thinking and not just memorizing the textbook content.*
- *Focus on clinical training more than theory teaching.*

### **3.2.3. PT undergraduates**

#### **3.2.3.1. Survey of PT undergraduates**

Quantitative data were collected from undergraduates (n=179) to measure their perceptions of the skills they had developed to date during their studies and the PT programmes in general.

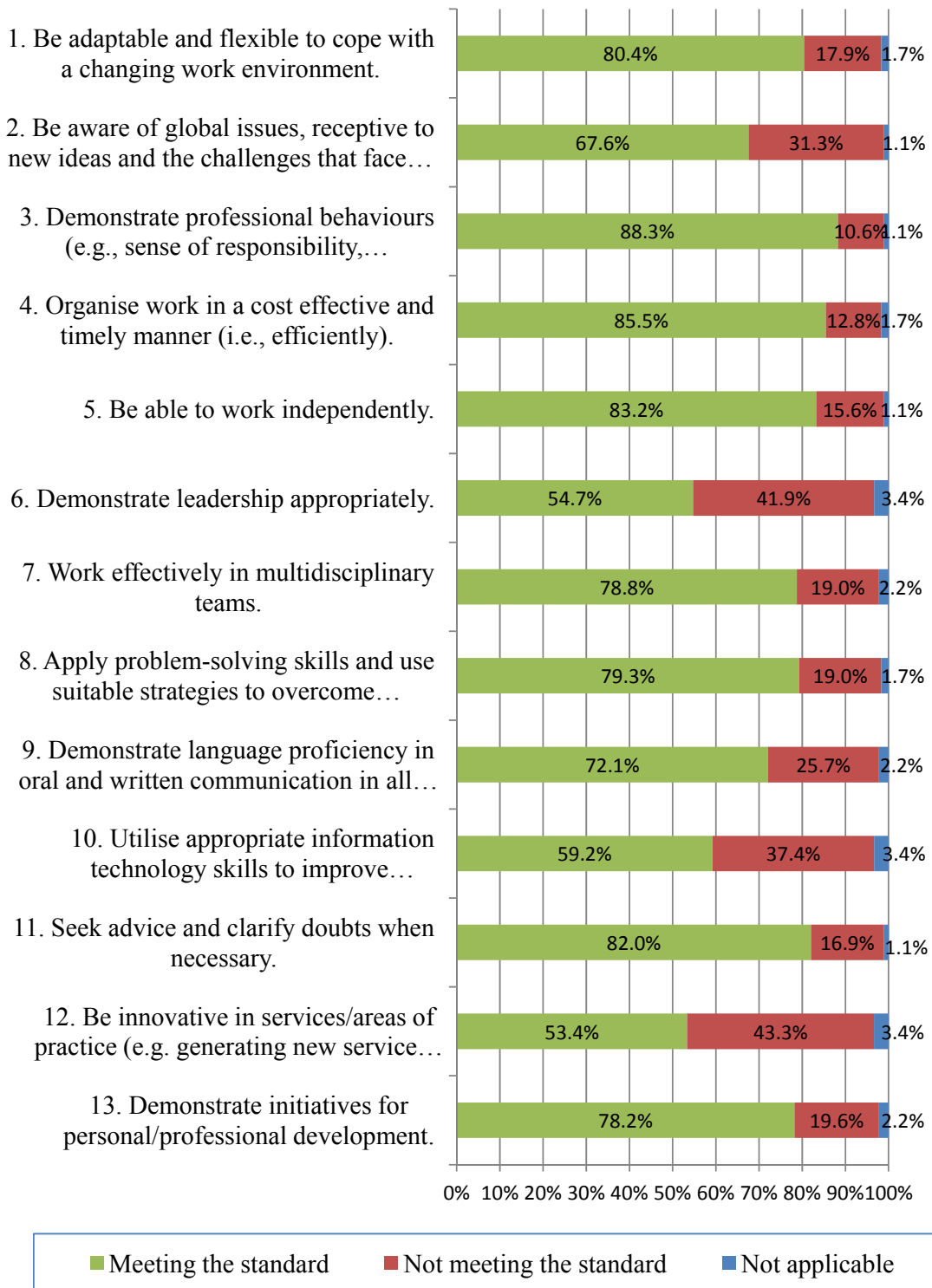
##### **3.2.3.1.1. PT undergraduates' perceptions of their generic competencies**

Summary Chart PT-10 shows the percentages of PT undergraduates who rated their performances on generic competencies as “generally meeting” or “far exceeding” the standard. It seems that the undergraduates were less confident than the graduate group, but nevertheless were reasonably confident, with around 80% or more rating themselves as meeting/exceeding standards on eight of the 13 items. Of these, the top three were “demonstrating professional behaviors” (88.3%), “organizing work in a cost-effective, timely manner (85.5%), and “being able to work independently” (83.2%). There were three items rated as meeting/exceeding standards by less than 60% of the students: “using appropriate information technology skills to improve productivity at work” (59.2%), “demonstrating leadership appropriately” (54.7%), and “being innovative in services/areas of practice” (53.4%).

From Summary Table PT-5, it can be seen again that the undergraduates were less confident of their performances than the graduates, with mean ratings of 3.0 (“generally meeting standard”) on only two items: “seeking advice and clarifying doubts when necessary” and “being able to work independently”. Most of the other items were rated within the range of 2.7 to 2.9, but the three with slightly lower ratings were: “utilizing appropriate information technology skills to improve productivity at work” (2.6), “demonstrating leadership appropriately” (2.6), and “being innovative in services/areas of practice” (2.5).

### Summary Chart PT-10:

PT undergraduates' ratings of their own performance on generic competencies (n=179)



**Summary Table PT-5:**

**PT undergraduates' perceptions of their performance on generic skills/ competencies – Mean analysis (ordered from high to low mean scores) (n=179)**

| <b>PT Undergraduates (All years)<br/>Generic Competencies</b>   | <b>Number of<br/>raters</b> | <b>Mean<br/>Score (1-4)</b> | <b>Sampling<br/>error</b> |
|---|-----------------------------|-----------------------------|---------------------------|
| 11. Seek advice and clarify doubts when necessary.  | 176                         | 3.0                         | +/- 0.1                   |
| 5. Be able to work independently.   | 177                         | 3.0                         | +/- 0.1                   |
| 8. Apply problem-solving skills and use suitable strategies to overcome difficulties.   | 176                         | 2.9                         | +/- 0.1                   |
| 7. Work effectively in multidisciplinary teams.   | 175                         | 2.9                         | +/- 0.1                   |
| 13. Demonstrate initiatives for personal/professional development.  | 175                         | 2.9                         | +/- 0.1                   |
| 1. Be adaptable and flexible to cope with a changing work environment.  | 176                         | 2.8                         | +/- 0.1                   |
| 9. Demonstrate language proficiency in oral and written communication in all aspects of professional practice.                      | 175                         | 2.7                         | +/- 0.1                   |
| 2. Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy. | 177                         | 2.7                         | +/- 0.1                   |
| 1. Utilize appropriate information technology skills to improve productivity at work.   | 173                         | 2.6                         | +/- 0.1                   |
| 6. Demonstrate leadership appropriately.  | 173                         | 2.6                         | +/- 0.1                   |
| 12. Be innovative in services/areas of practice (e.g. generating new service ideas).  | 172                         | 2.5                         | +/- 0.1                   |

### ***3.2.3.1.2. PT undergraduates' perceptions of their professional competencies***

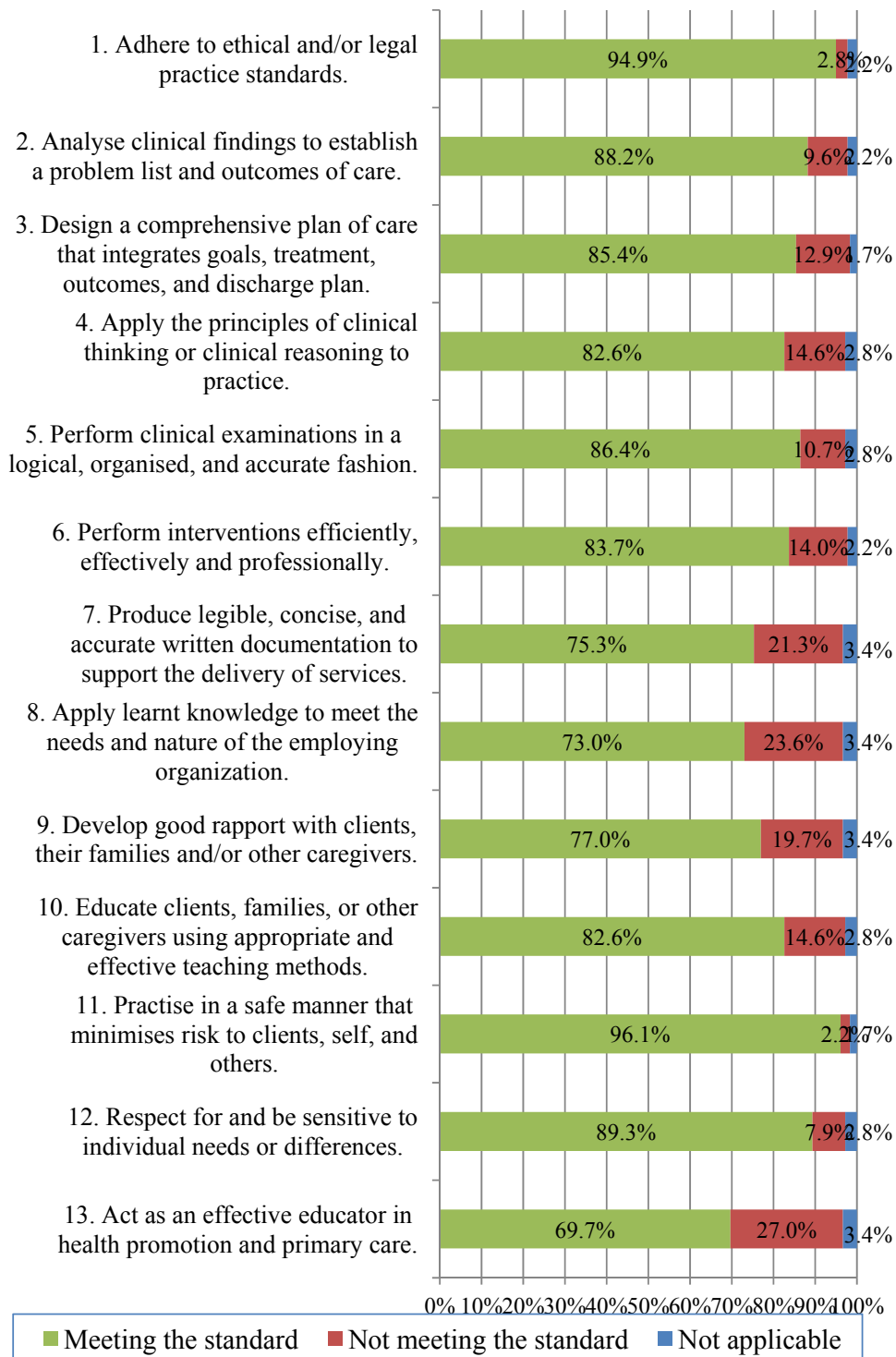
For professional competencies (see Summary Chart PT-11), the undergraduates expressed a high level of confidence in their performance. On eight of the 13 items, more than 90% of the students rated themselves as meeting/exceeding expectations, with more than 80% giving these ratings on three of the remaining items. The highest, “adhering to ethical and/or legal practice standards” was rated by 100% of the respondents. This was followed closely by “respecting and being sensitive to individual needs or differences” (98.1%), “practicing in a safe manner that minimizes risk to clients, self and others” (96.2%) and “educating clients, families, or other caregivers using appropriate and effective teaching methods” (94.2%). The lowest two items were “performing interventions efficiently, effectively and professionally” (78.8%) and “acting as an effective educator in health promotion and primary care (76.9%) – although it is encouraging that these percentages are still quite high.

Summary Table PT-6 shows the undergraduates' mean ratings of their professional skills/competencies. Ten of the 13 items were rated as 3.0 or more. The highest mean rating was for “practicing in a safe manner that minimizes risk to clients, self, and others” (3.4), followed by “adhering to ethical and/or legal practice standards” (3.3) and “respecting and being sensitive to individual needs or differences” (3.2). The three items that were rated slightly under 3.0 (all 2.8) were “producing legible, concise, and accurate written

documentation to support the delivery of services”, “acting as an effective educator in health promotion and primary care”, and “applying learnt knowledge to meet the needs and nature of the employing organization”.

### Summary Chart PT-11:

**PT undergraduates’ perceptions of their performance on professional competencies (n=179)**



**Summary Table PT-6: PT undergraduates' perceptions of their performance on professional competencies – Mean analysis (ordered from high to low mean scores)**

| <b>PT Undergraduates (All years)<br/>Professional Competencies</b>                                     | <b>Number of raters</b> | <b>Mean Score<br/>(1-4)</b> | <b>Sampling<br/>error</b> |
|--|-------------------------|-----------------------------|---------------------------|
| 11. Practice in a safe manner that minimizes risk to clients, self, and others.                        | 175                     | 3.4                         | +/- 0.1                   |
| 1. Adhere to ethical and/or legal practice standards.  | 174                     | 3.3                         | +/- 0.1                   |
| 12. Respect for and be sensitive to individual needs or differences.                                   | 173                     | 3.2                         | +/- 0.1                   |
| 5. Perform clinical examinations in a logical, organized, and accurate fashion.                        | 172                     | 3.1                         | +/- 0.1                   |
| 2. Analyze clinical findings to establish a problem list and outcomes of care.                         | 174                     | 3.1                         | +/- 0.1                   |
| 3. Design a comprehensive plan of care that integrates goals, treatment, outcomes, and discharge plan. | 175                     | 3.1                         | +/- 0.1                   |
| 6. Perform interventions efficiently, effectively and professionally.                                  | 174                     | 3.1                         | +/- 0.1                   |
| 10. Educate clients, families, or other caregivers using appropriate and effective teaching methods.   | 173                     | 3.0                         | +/- 0.1                   |
| 4. Apply the principles of clinical thinking or clinical reasoning to practice.                        | 173                     | 3.0                         | +/- 0.1                   |
| 9. Develop good rapport with clients, their families and/or other caregivers.                          | 172                     | 3.0                         | +/- 0.1                   |
| 7. Produce legible, concise, and accurate written documentation to support the delivery of services.   | 172                     | 2.8                         | +/- 0.1                   |
| 13. Act as an effective educator in health promotion and primary care.                                 | 172                     | 2.8                         | +/- 0.1                   |
| 8. Apply learnt knowledge to meet the needs and nature of the employing organization.                  | 172                     | 2.8                         | +/- 0.1                   |

### **3.2.3.2. Interviews with PT undergraduates**

The following sections present the common patterns that emerged from the interviews with the PT undergraduates (n=35).

#### **3.2.3.2.1. *Understanding of OBE and intended learning outcomes***

In response to the questions “*Do you know the term ‘outcome-based Education’? Do you know anything about “intended learning outcomes”?*”, the Year 1 students did not have any recollection of this term. One group said they were aware of their teachers talking about learning outcomes in classes. Some of the Year 2 students were able to explain OBE as setting learning outcomes, integrating these into the learning and then assessing the extent to which they are achieved. All of those interviewed were at least able to recall their teachers introducing the learning outcomes in classes.

While the Year 3 students could not recall the term OBE, all but two of those interviewed were aware that learning outcomes were mentioned in classes.

#### **3.2.3.2.2 *PT undergraduates’ comments on their generic competencies***

In responding to the questions of “*How well do you perceive that you are acquiring the generic skills such as critical thinking, problem solving, written and verbal communication, teamwork, etc) in your PolyU course?*”, the students from the different year groups made comments that reflect their different levels of experience.

The Year 1 students considered that their course provides sufficient opportunities to develop critical thinking and problem-solving skills in the professional context and project work provides opportunities to develop teamwork. They considered that more time and opportunities are required to develop written and oral communication. As well, they commented that these generic competencies are very much specific to the profession and not transferable to other contexts.

Similar reflections were made by the Year 2 students, about the learning experiences that facilitate problem solving and teamwork. They were particularly positive about authentic case studies as a means of developing problem-solving skills. One group, however, commented that the placement experience has not enabled them to predict how well they might be able to apply generic competencies in their future workplaces.

The Year 3 students were positive that the presentations they had made over the three years had helped them to develop presentation skills. On the other hand, they felt that most of the teamwork skills they had developed had been acquired outside the programme, particularly in secondary school. Regarding critical thinking, they thought there had not been enough opportunity to practice this skill and that it had only become a focus from the second semester of Year 2, which they considered to be a bit late. They also commented that there was not enough guidance to help them to understand critical thinking processes. Having said that, they thought clinical placement was a good opportunity to develop critical thinking,

though the opportunities existing were greatly varied. One group commented that project learning may not have been very effective in developing critical thinking. On verbal and written communication, they commented that they had not received enough training to develop such skills, other than a little bit in communicating with clients during placement. They commented that, since theirs is a people-oriented profession, communication skills should be emphasized more. One group commented that, due to the limited class time, problem-solving skills could only be touched on. These students did comment that their teachers had worked hard to help students to develop generic skills, but that they anticipated the cases to be more complex in the real working context.

#### ***3.2.3.2.3. PT undergraduates' comments on their professional knowledge***

Responding to the question *“How well do you perceive that you are acquiring professional knowledge in your PolyU course?”*, the students' comments again reflected their different amounts of experience in the course.

Both the Year 1 and Year 2 students considered the framework to have been laid for their professional knowledge base, for future development. However, they felt that the professional knowledge and skills they had developed were quite general and might not be applicable to the changing nature of the workplace. They regarded the clinical context as the place for these to be developed. One group of Year 2 students commented that they had heard from recent graduates that some of the technology and skills taught in the programme are outdated. Another group indicated that they would like to have more real case studies.

The Year 3 students reflected that they had received a holistic coverage of professional knowledge, but commented that this might not all be applicable to the workplace context. They described the paradox that there seemed to be too much professional knowledge for them to acquire during their studies but that they felt what they had acquired was too basic for entry level into the profession. One group cited the example of needing to learn about three or four joints per semester, with a timetable too packed to allow for sufficient self-study.

#### ***3.2.3.2.4. PT undergraduates' comments on their future generic competency development***

The students' responses to the question *“How do you expect you will perform on these generic skills in your future workplace? Please explain your answer.”*, showed some common patterns across year groups.

At this stage, the Year 1 students expected an average performance. While they believed their PolyU learning experiences enabled them to begin to develop these skills, they felt that many workplace factors, including workload, complexity of cases and communication with patients, will affect their ability to actually apply the skills, which will require ongoing professional development in the workplace.

The Year 2 students also predicted a low to average performance, on the basis that these clinical skills can really only be developed fully in the clinical setting and that, even during their placements, they did not get sufficient opportunities to apply these skills. One group



indicated that there was insufficient time for them to practice generic skills. In another group, the comment was made that some placement experiences had caused them to lose confidence in their ability to apply generic skills.

The Year 3 students also rated their potential in this respect as low to average. This was because they thought three years of school is not enough to prepare them for adequate performance. Like their Year 2 counterparts, they also commented that it is not possible for the course to prepare them fully for the generic skills they will need to apply in the workplace to take into account factors like paperwork, workload or clients' expectations. They also commented that the development of these skills is ongoing over a long period of time. In fact, one group suggested that supervision given at the beginning of their professional careers should smooth the university-workplace transition. Another issue of concern was that they expect pressures of workload and tight schedules in the workplace will inhibit their ability to apply their generic skills.

#### ***3.2.3.2.5 PT undergraduates' comments on their future professional knowledge development***

Students' perceptions of PT professional knowledge changed across year groups, as shown in their answers to the questions *"To what extent do you think our current programme can help you to fulfil the needs of the workplace? What are the positives and negatives about the programme in this respect?"*

The Year 1 students felt that the programme had so far only provided a preliminary look at the whole process, and that more time is needed for them to be able to fulfill workplace needs. They were positive about the impacts of their opportunities to experience different settings: HA, NGO, private and overseas. On the negative side, they thought that the first year of study had been too intensive to enable them to develop and consolidate their practical skills sufficiently. They also felt that the knowledge is a little disjointed at this stage, without any sense of how to draw it all together, for example to decide which tests are appropriate to use in a particular situation.

The Year 2 students made the same comments about the process having been started in the PT programme but that lifelong learning is needed. One group commented favorably on the full coverage of all aspects of PT, although they considered that three years are not enough to develop a professional PT.

The Year 3 students described the positive aspects as: full coverage of the subject content knowledge, the learning that occurs during the placement, the various approaches to teaching and learning that enhance the development of their self-study skills and the use of small-group teaching in practical lessons. The negative aspects they listed included that subject knowledge is not updated, different clinical contexts bring students different learning experiences, and the use of an e-learning platform to communicate does not reflect the workplace reality. One group criticized the coverage and depth of subject knowledge and said they would like more training and coaching in practical sessions. An interesting comment was made that most of the skills that address workplace needs are developed in

clinical placements but that the continuous assessment method in the placement makes students reluctant to ask questions and hence they miss opportunities to develop the skills adequately.

#### **3.2.3.2.6. PT Undergraduates' recommendations for programme**

This section summarises the students' responses to the questions "*Can you give some recommendations about how we can make better provision in the OT/PT programmes to help our future graduates to be prepared better to fit the workplace needs?*"

The Year 1 students recommended more coaching to enable them to put their knowledge and skills into practice in the real clinical setting. They also called for a closer facilitator-to-student ratio (for example, 1:3 or 1:4 as opposed to 1:6) and more bridging between secondary school and university. As well, they suggested closer communication between PolyU and the clinical experience settings, and prompter feedback on which to base their development. One group suggested an increased use of case studies, to give the students more opportunities to develop critical thinking skills. The same group also suggested that critical thinking strategies need to be actually taught, rather than just providing opportunities for them to develop by themselves and assessing. The students in one of the groups commented positively about guest lectures and field studies.

The Year 2 students suggested allowing more electives to be taken in other disciplines and providing longer and more overseas placements to enable them to broaden their learning. One group suggested that there could be more consistency in the skill sets taught by different lecturers, even within the same subject. They requested to be taught new treatments/care technology such as short wave.

The Year 3 students gave a number of recommendations..

For generic competencies:

- more opportunities to collaborate with students from other specializations to develop communication skills

For professional knowledge:

- have a full final-year placement
- for PTDx-MSK, deeper content, more bedside teaching, and clinical exposure to deepen students' understanding before commencing this subject
- have more than one assessment task for the practical and set assessment criteria and standards higher
- have less focus in the exams on recalling from memory and more on testing students' critical-thinking skills
- adopt feedback from clinical educators to revise the teaching materials and content to best meet workplace needs

### **3.3. Occupational Therapy (OT) Programmes**

The following section presents the data from the survey and interviews conducted with stakeholders from the Occupational Therapy Programme. The quantitative and qualitative results are presented by stakeholder group.

#### ***3.3.1 OT employers***

##### **3.3.1.1 Survey of employers of OT graduates**

Quantitative data, in the form of survey questionnaires, were collected from the Employers of graduates from the OT programme. The data are presented separately for generic and professional skills, followed by general comments and recommendations for the OT programmes.

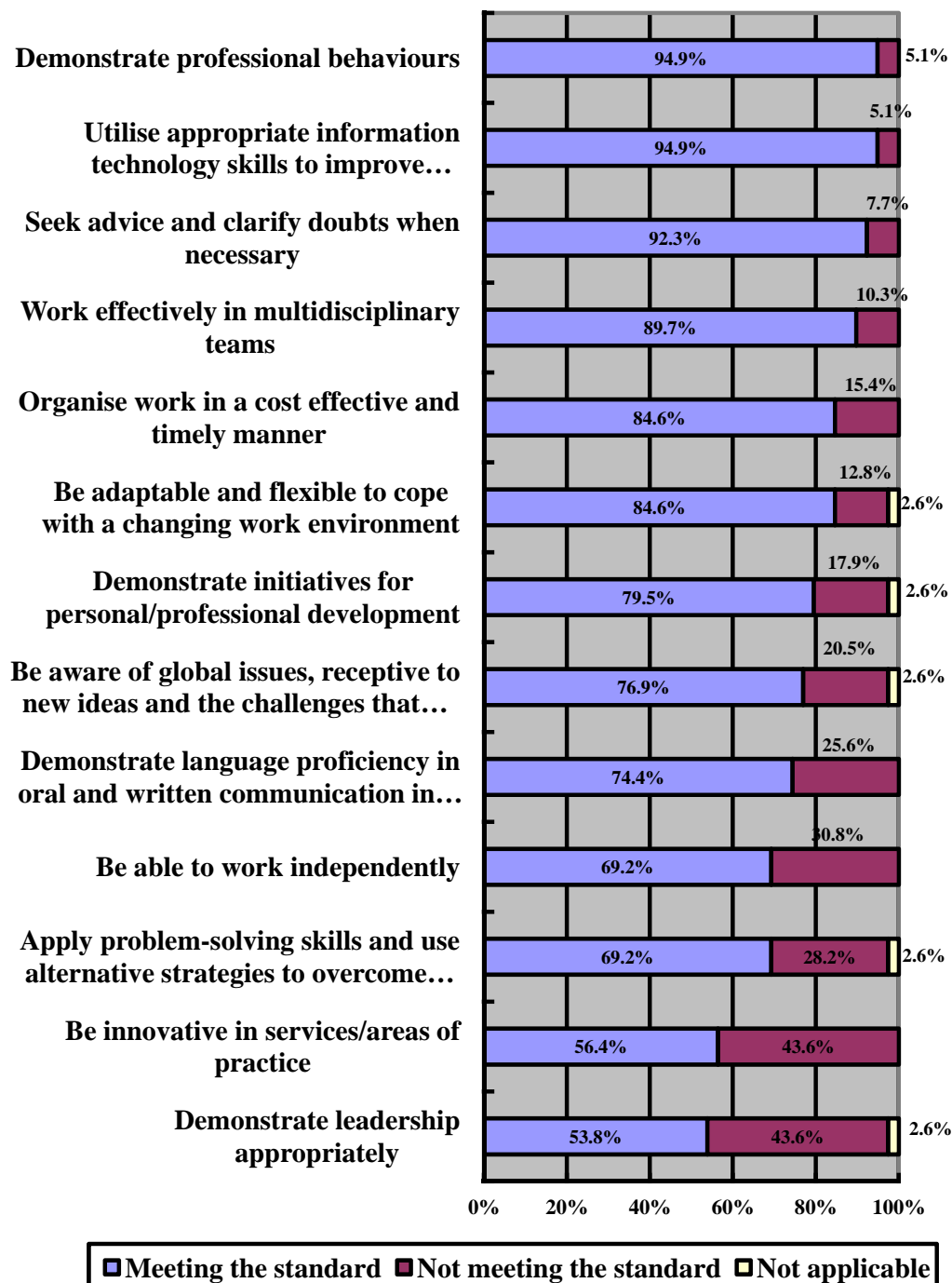
###### ***3.3.1.1.1 Employers' perceptions of OT graduates' generic competencies***

For the OT graduates of 2008 - 2011 (valid base of employers: 67), again in terms of “far exceeding standard”, “generally meeting standard”, “slightly below standard”, “far below standard” and “not applicable”, the results showed that all but two performance aspects of generic skills / competencies were perceived as “generally meeting or far exceeding” expectations by at least two-thirds of the valid sample. Both “demonstrating professional behaviours” and “utilising appropriate information technology skills to improve productivity at work” topped the list, with an overwhelming 95% of the sample rating both of these as meeting/exceeding standards. They were closely followed by the performance of “seeking advice and clarifying doubts when necessary” (92%), and then “working effectively in multidisciplinary teams” (90%), “organising work in a cost effective and timely manner” (85%) and “being adaptable and flexible to cope with a changing work environment” (85%). Other areas rated as meeting or exceeding standard by over 70% included “demonstrating initiatives for personal/professional development” (80%), “being aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy” (77%) and “demonstrating language proficiency in oral and written communication in all aspects of professional practice” (74%). See Summary Chart OT-1 for details.

In order to obtain a comparable mean score for each of the performance items described above, scores from 1 to 4 were artificially assigned to each answer of the 4-point scale above, with 1 representing “far below standard”, 2 “slightly below standard”, 3 “generally meeting standard” and 4 being “far exceeding standard”. In other words, the higher the mean score, the more highly the employers rated the graduates as having met expected standards in that aspect. The results of this mean analysis indicated that “demonstrating professional behaviours” was given the highest mean rating of 3.4 (subject to a sampling error of +/-0.2). “Utilising appropriate information technology skills to improve productivity at work” and “working effectively in multidisciplinary teams” closely followed behind with respective

mean ratings of 3.3 and 3.2 (subject to a sampling error of +/-0.2)., “Being adaptable and flexible to cope with a changing work environment” , “organising work in a cost effective and timely manner” and “seeking advice and clarifying doubts when necessary” formed the next tier, each with a mean rating of 3.1 (subject to a sampling error of +/-0.2). See Summary Table OT-1 for other results.

**Summary Chart OT-1:**  
**OT Graduates’ generic competencies as perceived by employers (n=67)**



**Summary Table OT-1:****OT Graduates' generic competencies as perceived by employers (n=67) – Mean analysis (in order of high to low mean scores)**

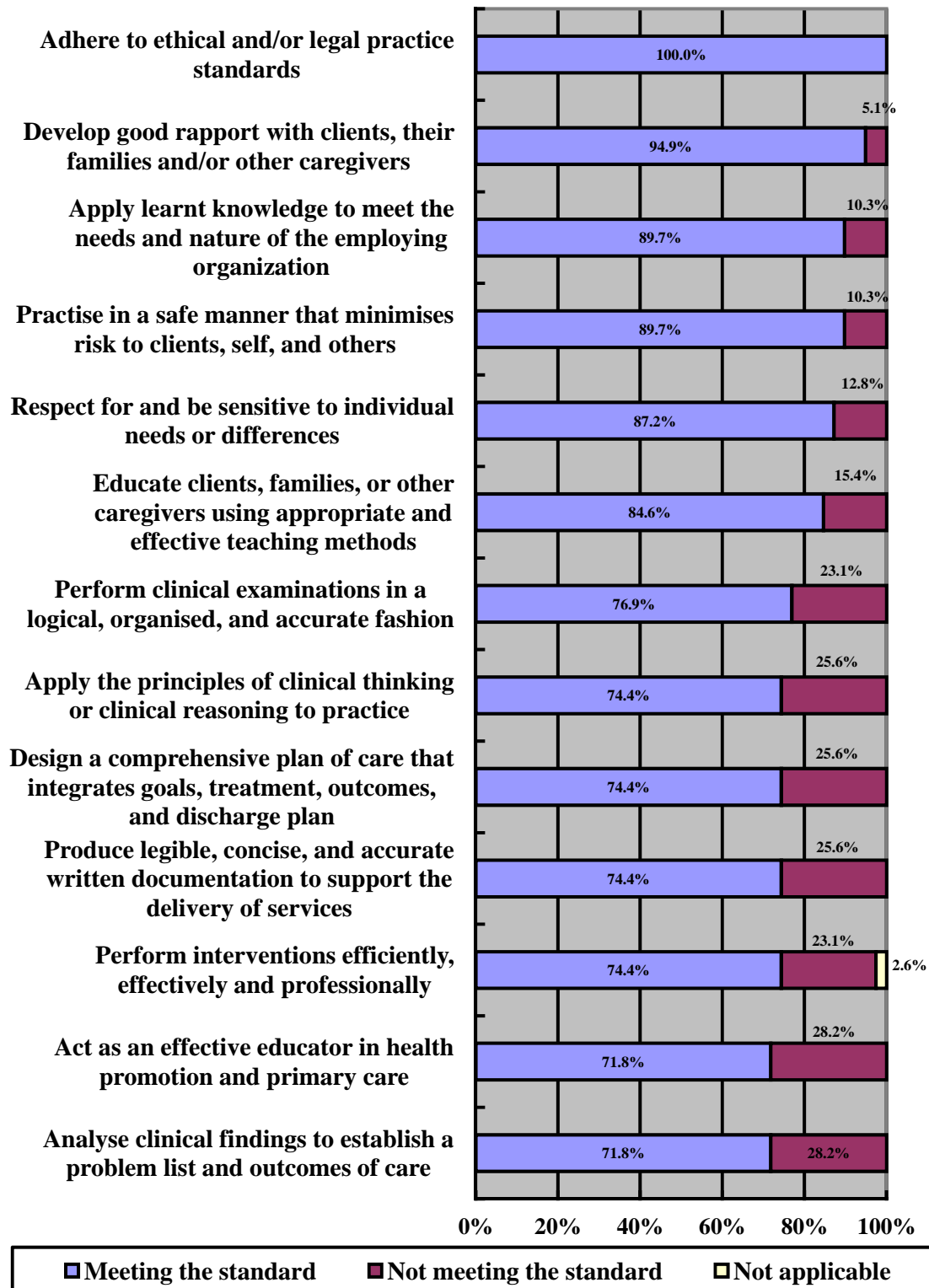
|   | Number of raters | Mean score (1-4) | Sampling error |
|---|------------------|------------------|----------------|
| Demonstrate professional behaviours   | 39               | 3.4              | +/- 0.2        |
| Utilise appropriate information technology skills to improve productivity at work   | 39               | 3.3              | +/- 0.2        |
| Work effectively in multidisciplinary teams   | 39               | 3.2              | +/- 0.2        |
| Be adaptable and flexible to cope with a changing work environment  | 38               | 3.1              | +/- 0.2        |
| Organise work in a cost effective and timely manner   | 39               | 3.1              | +/- 0.2        |
| Seek advice and clarify doubts when necessary   | 39               | 3.1              | +/- 0.2        |
| Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy | 38               | 3.0              | +/- 0.2        |
| Demonstrate initiatives for personal/professional development   | 38               | 3.0              | +/- 0.2        |
| Demonstrate language proficiency in oral and written communication in all aspects of professional practice                      | 39               | 2.9              | +/- 0.2        |
| Apply problem-solving skills and use alternative strategies to overcome difficulties  | 38               | 2.8              | +/- 0.2        |
| Be able to work independently   | 39               | 2.8              | +/- 0.2        |
| Be innovative in services/areas of practice   | 39               | 2.6              | +/- 0.2        |
| Demonstrate leadership appropriately  | 38               | 2.5              | +/- 0.2        |

**3.3.1.1.2 Employers' perceptions of OT graduates' professional competencies**

When asked to assess the OT graduates' performance with respect to their professional skills / competencies, once again in terms of "far exceeding standard", "generally meeting standard", "slightly below standard", "far below standard" and "not applicable", all respondents (100%) regarded the graduates' performance in "adherence to ethical and/or legal practice standards" as having met or even exceeded the expected standard. A further 95% gave these ratings for "developing good rapport with clients, their families and/or other caregivers" while 90% thought the same for each of "applying learnt knowledge to meet the needs and nature of the employing organization" and "practicing a safe manner that minimises risk to clients, self, and others". Other qualities perceived as meeting the standards by over 80% of the sample included "showing respect for and being sensitive to individual needs or differences" (87%) and "educating clients, families, or other caregivers using appropriate and effective teaching methods" (85%). In general, all professional skills / competencies put to the test in this study were perceived as meeting/exceeding the expected

standard by 70% to 100% of the employers interviewed. See Summary Chart OT-2 on the next page for details.

**Summary Chart OT-2: OT graduates' professional competencies as perceived by employers (n=67).**



As in the study of the PT programme, a mean score analysis with assigned scores from 1 to 4, in which 1 represented “far below standard”, 2 “slightly below standard”, 3 “generally meeting standard” and 4 “far exceeding standard” found that no significant change was observed with respect to the relative rankings of individual items. Among these, “adherence to ethical and/or legal practice standards” still topped the list with a mean score of 3.6 and a sampling error of +/-0.2. “Developing good rapport with clients, their families and/or other caregivers” and “practising in a safe manner that minimises risk to clients, self, and others” ranked equal second with a mean rating of 3.2 (subject to a sampling error of +/-0.2). See Summary Table OT-2 below for more details.

**Summary Table OT-2: \$\$**

**OT graduates’ professional competencies as perceived by employers (n=67) – Mean analysis (in order of high to low mean scores)**

|  | Number of raters | Mean score | Sampling error |
|--|------------------|------------|----------------|
| Adhere to ethical and/or legal practice standards  | 39               | 3.6        | +/- 0.2        |
| Develop good rapport with clients, their families and/or other caregivers                          | 39               | 3.2        | +/- 0.2        |
| Practise in a safe manner that minimises risk to clients, self, and others                         | 39               | 3.2        | +/- 0.2        |
| Respect for and be sensitive to individual needs or differences                                    | 39               | 3.1        | +/- 0.2        |
| Apply learnt knowledge to meet the needs and nature of the employing organization                  | 39               | 3.0        | +/- 0.2        |
| Educate clients, families, or other caregivers using appropriate and effective teaching methods    | 39               | 3.0        | +/- 0.2        |
| Apply the principles of clinical thinking or clinical reasoning to practice                        | 39               | 2.9        | +/- 0.2        |
| Perform clinical examinations in a logical, organised, and accurate fashion                        | 39               | 2.9        | +/- 0.2        |
| Perform interventions efficiently, effectively and professionally                                  | 38               | 2.9        | +/- 0.2        |
| Produce legible, concise, and accurate written documentation to support the delivery of services   | 39               | 2.9        | +/- 0.2        |
| Act as an effective educator in health promotion and primary care                                  | 39               | 2.8        | +/- 0.2        |
| Analyse clinical findings to establish a problem list and outcomes of care                         | 39               | 2.8        | +/- 0.2        |
| Design a comprehensive plan of care that integrates goals, treatment, outcomes, and discharge plan | 39               | 2.8        | +/- 0.2        |

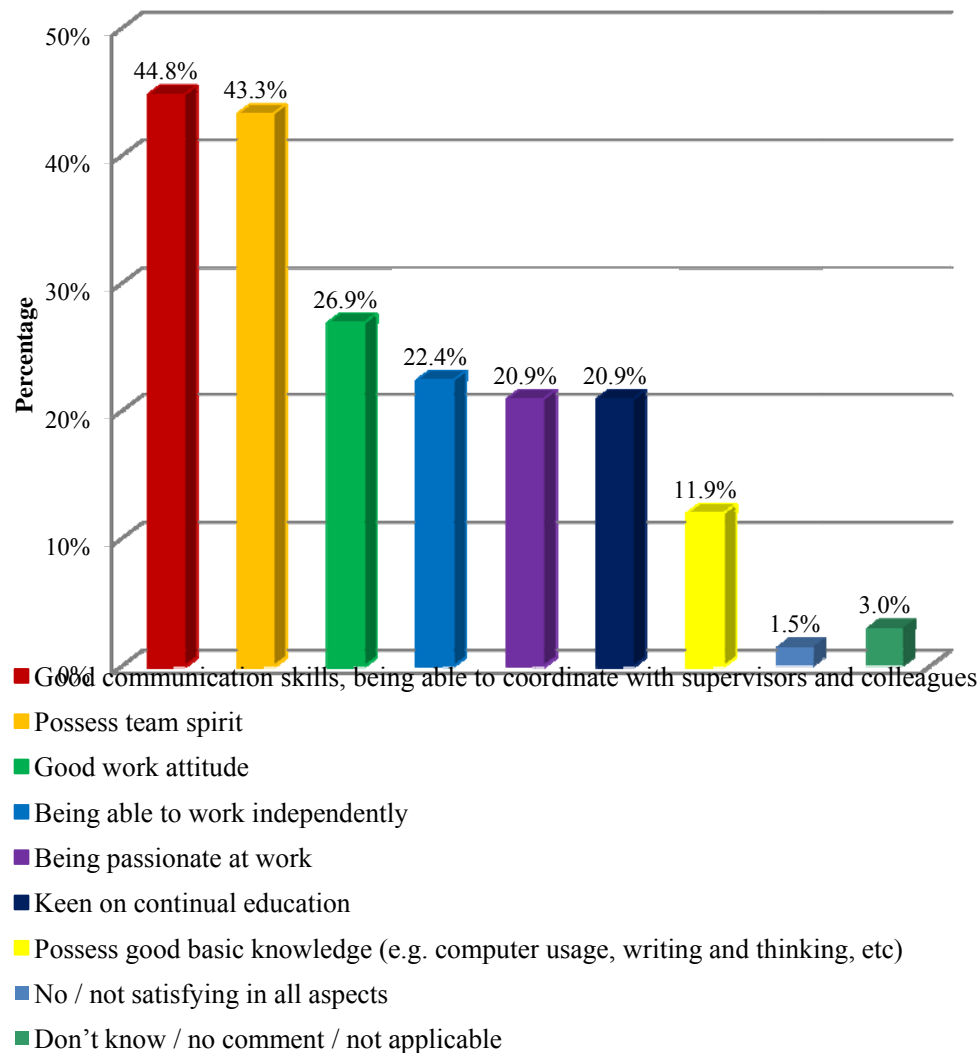
### ***3.3.1.1.3 Employers’ perceptions of OT graduates’ overall performance***

When asked to rate their satisfaction with the PolyU OT graduates’ overall performance, the majority of employers interviewed (78%) expressed satisfaction, with only 5% of them expressing dissatisfaction. By conducting a mean score analysis with assigned scores from 1 to 5, where 1 represented the lowest level of satisfaction and 5 the highest, the sample mean obtained was 3.9, indicating the interviewees were “quite satisfied”.

The next question was in open-ended format, asking all the employers, regardless of whether they had recruited OT graduates previously, to name the aspects of general skills / competencies with which they were the most satisfied. The results revealed that the attribute “good communication skills, being able to coordinate with supervisors and colleagues” topped the list, with 45% of the respondents saying they were satisfied/very satisfied with this. “Possession of team spirit” came second, rated satisfactory/very satisfactory by 43%. Another 27% gave these rating to “good work attitude”, 22% to “being able to work independently”, 21% each to “being passionate at work” and “keen on continual education”, and 12% to “possession of good basic knowledge (e.g. knowledge of computer applications, writing and analytical skills)”. 3% had no comment. See Summary Chart OT-3 below.

### Summary Chart OT-3:

**OT graduates’ general competencies with which employers (n=67) were most satisfied.**

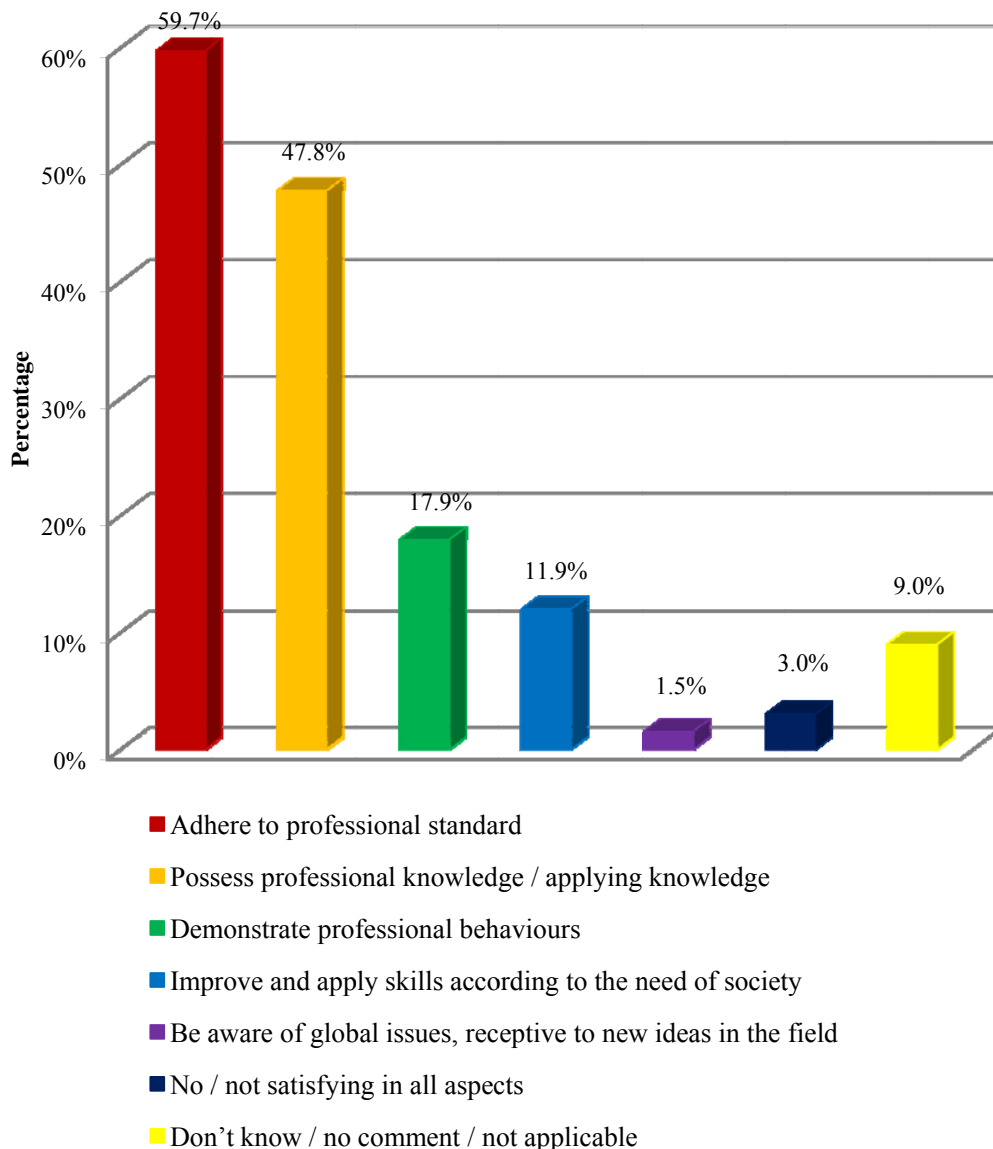




The respondents were also asked to rate their satisfaction with aspects of the OT graduates' professional skills / competencies. "Adherence to professional standard" received the most satisfactory ratings, mentioned by 60% of the respondents. Nearly half of the respondents (48%) also rated "possession of professional knowledge / applying knowledge" as satisfactory. A further 18% indicated they were satisfied with the graduates' "demonstrating professional behaviours" and 12% with their "improving and applying skills according to the needs of society". 3% did not name any aspect and 9% had no comment. See Summary Chart OT-4 below.

**Summary Chart OT-4:**

**OT graduates' professional competencies with which employers (n=67) were most satisfied**

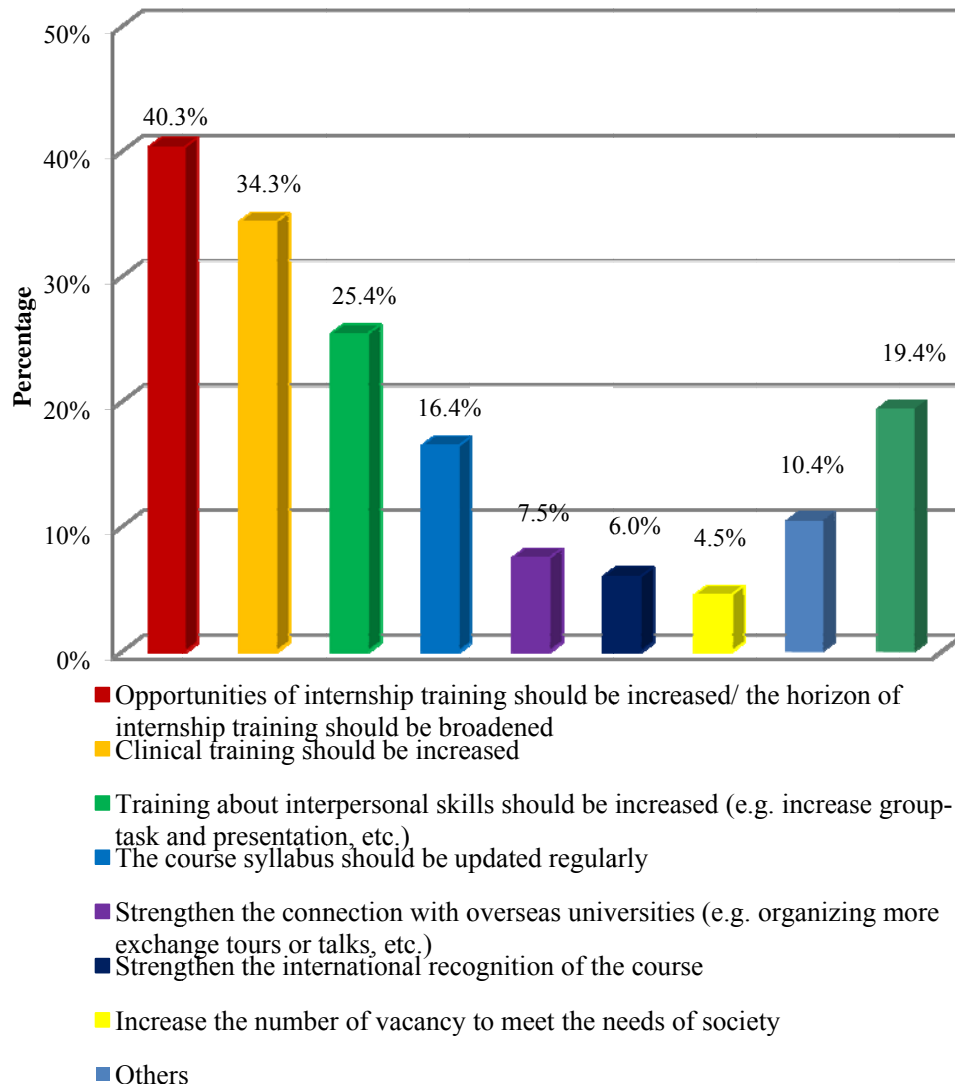


#### 3.3.1.1.4 Employers' overall comments on OT programme

With respect to the overall comments on the current OT programmes, 40% of the employers expressed that the “opportunities for internship should be increased or the horizon of internship should be broadened”. At the same time, 34% suggested to “increase the clinical training”, 25% said “more training in interpersonal skills” should be provided (e.g. increase group task and presentation, etc.), and 16% said “the course syllabus should be updated regularly”. On a different topic, 8% said that the programmes should “strengthen the connection with overseas universities”, such as organizing more exchange tours or talks. About 19% of the respondents made no comments on the current OT programmes. See Summary Chart OT-5 below.

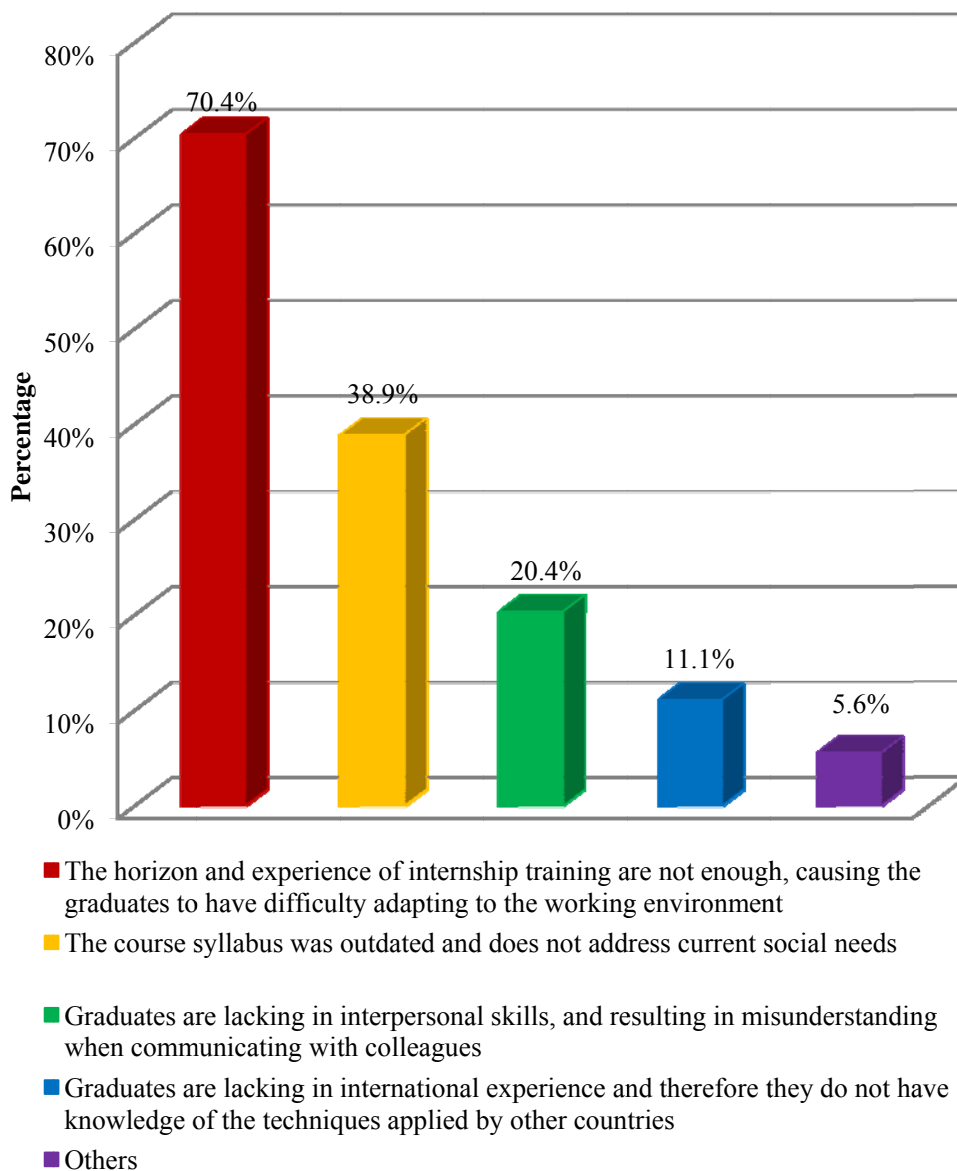
#### Summary Chart OT-5:

##### Employers' overall comments on OT programmes (n=67)



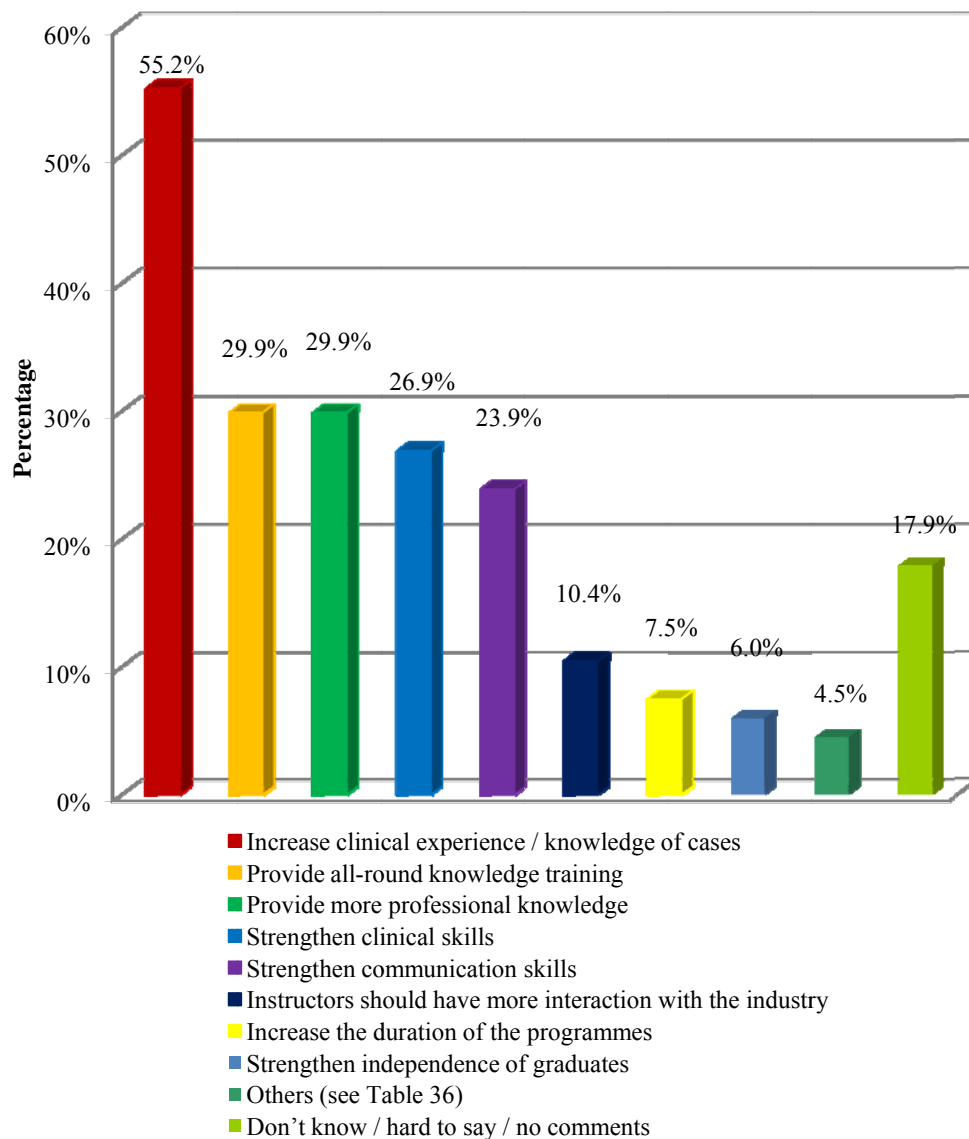
When asked to provide the reasons behind their comments on the programmes, 70% of these respondents said the horizon and experience of internship training were not enough hence the graduates had difficulties adapting to the working environment. They also mentioned that the course syllabus was outdated and hence failed to fulfil current social needs (39%). The third most commonly cited problem was graduates lacking interpersonal skills, resulting in misunderstandings when communicating with colleagues (20%). For other responses, please see Summary Chart OT-6 below.

**Summary Chart OT-6: Reasons for employers' specific comments on the OT programme (n=67)**



With respect to the suggestions on how to improve the existing OT programmes, 55% of the respondents advised RS to “increase clinical experience / knowledge of cases”. 30% each suggested to “provide all-round knowledge training” and “provide more professional knowledge”. Another 27% proposed to “strengthen clinical skills” while 24% suggested to “strengthen communication skills”. See Summary Chart OT-7 for more responses.

**Summary Chart OT-7:**  
**Employers’ suggestions for improving the OT programme (n=67)**



### 3.3.1.2 Interviews with employers of OT graduates

The following section summarises the responses from employers during interviews. They are grouped by skill category, and include collective and individual comments.

#### 3.3.1.2.1 Employers' perceptions of OT graduates' generic competencies

During the interviews, the employers were asked, *“How do you perceive the generic skills (such as critical thinking, problem solving, written & verbal communication, teamwork..etc) of the graduates who are under your supervision?”*

Six of the ten interviewees agreed that the students' generic competencies, in general, are satisfactory. Specifically mentioned were problem solving, teamwork and critical thinking. In fact, two commented that the PolyU graduates have improved in recent years:

- *“Communication with supervisors is much better than in the past.”*
- *“...has improved from 2008 to 2011. Graduates are more innovative and proactive.”*

In any case, as one respondent pointed out, the graduates' competencies are supported further by on-the-job training.

Two of the employers interviewed commented that graduates' written communication in Chinese and English are weak, particularly with respect to proposals, reports and group plans; however another described these skills as average. One pointed out that there is a difference between clinical writing and the formats practiced in PolyU. A further two commented that some are good and some are inadequate, there being:

*“a need to improve verbal communication with patients and understanding of patients' needs.”*

Another weakness mentioned was management skills, although this was only mentioned by one respondent. Other gaps mentioned include:

- Problem solving:
  - *“In terms of problem-solving skills and the ability to view a case from multiple perspectives, they are a bit limited as fresh graduates. One important thing to share is that graduates usually adopt a formula kind of mindset to handle cases, from the identification of disfunction to the method of treatment. In fact, this is the part that gets them into trouble in their treatments of patients since this kind of “formula” mindset may not be applicable all the time, in real life situations, unlikely to be applicable 4 out of 10 cases. In view of this, we can see there are two major trends for graduates to grow, either following the successful experience to adopt the formula and advance more, or to develop new ideas to solve the problem. Generally, fresh PolyU graduates do have the skill to hit the target in handling the cases.”*

- *“In terms of problem-solving skill, graduates are not able to view patients’ cases holistically. For example, to consider other factors such as family, individual and social rather than just focusing on biological knowledge and physical context.”*
- Critical thinking:
  - *“Graduates can reach the basic knowledge level. However, they are not ready to work independently. On-the-job coaching is needed for about 3 months to train the graduates to work accordingly.”*
- Understanding the patients’ best interests:
  - *“In the social care field it is expected to pay more concern to the best interests of the patient, however, this is not being addressed in the PolyU training”*

#### **3.3.1.2.2 Employers’ perceptions of OT graduates’ professional competencies**

Responding to the question *“How do you perceive the professional knowledge of the graduates who are under your supervision?”*, all ten of the employers interviewed felt that the OT graduates’ professional knowledge is acceptable, but that they still need more coaching with clinical skills, including people-oriented aspects, specialist areas, awareness of patient safety and self-protection. One respondent commented that the standard is similar to that of previous graduates. In spite of this criticism, another pointed out that students vary and the weaknesses mentioned are at least partially attributable to the fact that, as the scope of the field expands, it is increasingly difficult for the practical placement design to enable students to cover all aspects. It is also encouraging to note that another respondent made a positive comment that the students know how to search for information in their areas of deficiency. The following statement highlighted the need to expand the students’ experiences to meet the changing needs of the community:

*“The duration for treatment in the hospital setting is far shorter than that in the community service setting. As such, the PT or OT needs to understand more thoroughly how to disseminate the cases by transferring the responsibility from PT /OT to the patients’ family members or maids. Therefore, the university should not only train the graduates fragmentally for them to work in the hospitals. Rather, the graduates need to learn preventative care so that they can learn how to serve patients at different stages. In fact, a compartmentalized approach is not suitable for community service, it has to be more activity-based, to plan programmes holistically by collaborating with different professionals in order to implement the programmes.”*

#### **3.3.1.2.3 Employers’ perception of OT graduates’ overall performance**

Responding to the questions *“How do you perceive the overall performance (high / average / low /under-performed) of our graduates? Please explain your reasons for this*

view”, eight of the ten employers voiced the opinion that, although the graduates’ performance level is average, it is reasonable for entry-level professionals who will be working under close supervision, since the on-the-job training they receive is needed to move them from average to high. Because they make provisions for this on-the-job training, the employers do not have as high a level of expectations for the entry level as they would if this training did not exist.

#### **3.3.1.2.4 Employers’ comments on OT programmes**

There was no clear consensus in response to the questions “*To what extent do you think our current programme can fulfill the needs of your organization? In relation to your answer, what do you see as the strengths and weaknesses of our programme?*” Different respondents commented on different aspects.

Two specific strengths were mentioned:

- *The students are adequate in academic knowledge.*
- *Collaborations between the University and employers, for example through joint research, enable the two groups to learn from each other.*

Comments on the weaknesses included:

- *The University can provide all-round preparation but cannot address needs for certain specializations or different types of clients.*
- *The clinical placement does not provide enough chances for students to participate in NGO settings. This comment was made by two respondents, with one noting a significant drop between 2008 and 2011 in the proportion of graduates taking up employment in the NGO sector, possibly because of their lack of awareness of the nature and career potential of this sector.*
- *Even though the placement is adequate, the students still think they are not competent enough.*
- *Graduates’ understanding of the clinical setting is not enough, especially for the first two months of employment.*

Recommendations included:

- *Increase the practical component, for example case-based learning.*
- *Provide more skills practice.*
- *Invite more input from clinicians.*
- *Develop a wider understanding of the needs of clients from different backgrounds.*
- *Develop a wider understanding of mental and emotional health needs.*

#### ***3.3.1.2.5 Employers' suggestions for improvements to OT programme***

Suggestions for improving OT programmes were prompted by the questions “*Can you give some recommendations to improve our current programme (OT/PT) in order to provide better training for our future graduates to meet workplace needs?*”

The most common recommendation was for increased communication between the University teachers and the clinical practitioners (mentioned by 5 respondents). One suggestion for implementing this was to increase joint teaching. According to one of the interviewees, this kind of communication is needed particularly in the pediatric specialization; even though some opportunities do exist for students to have exposure to pediatrics during placement, it was observed that the PolyU teachers rarely visit this section and hence might not be as up-to-date about this specialization as desirable.

Three respondents suggested giving students a wider exposure to different clinical settings, even if this occurs through volunteer work or the use of electives.

Two of the employers mentioned the need to develop students' understanding of patients' mental and emotional health needs. They recommended that this be addressed in lectures, not only observed during placements.

One employer suggested at least one practicum to be spent in the NGO sector. Two interviewees commented on overseas placements, but had opposing views. One felt that the experience is too different from the Hong Kong situation, while the other believed that a six-month overseas placement could help to develop a higher sense of response and the ability to pick up routines more quickly.



### **3.3.2. OT graduates**

#### **3.3.2.1 Survey of OT graduates**

This section presents the quantitative data collected from a total of 50 OT graduates from 2009 -2011.

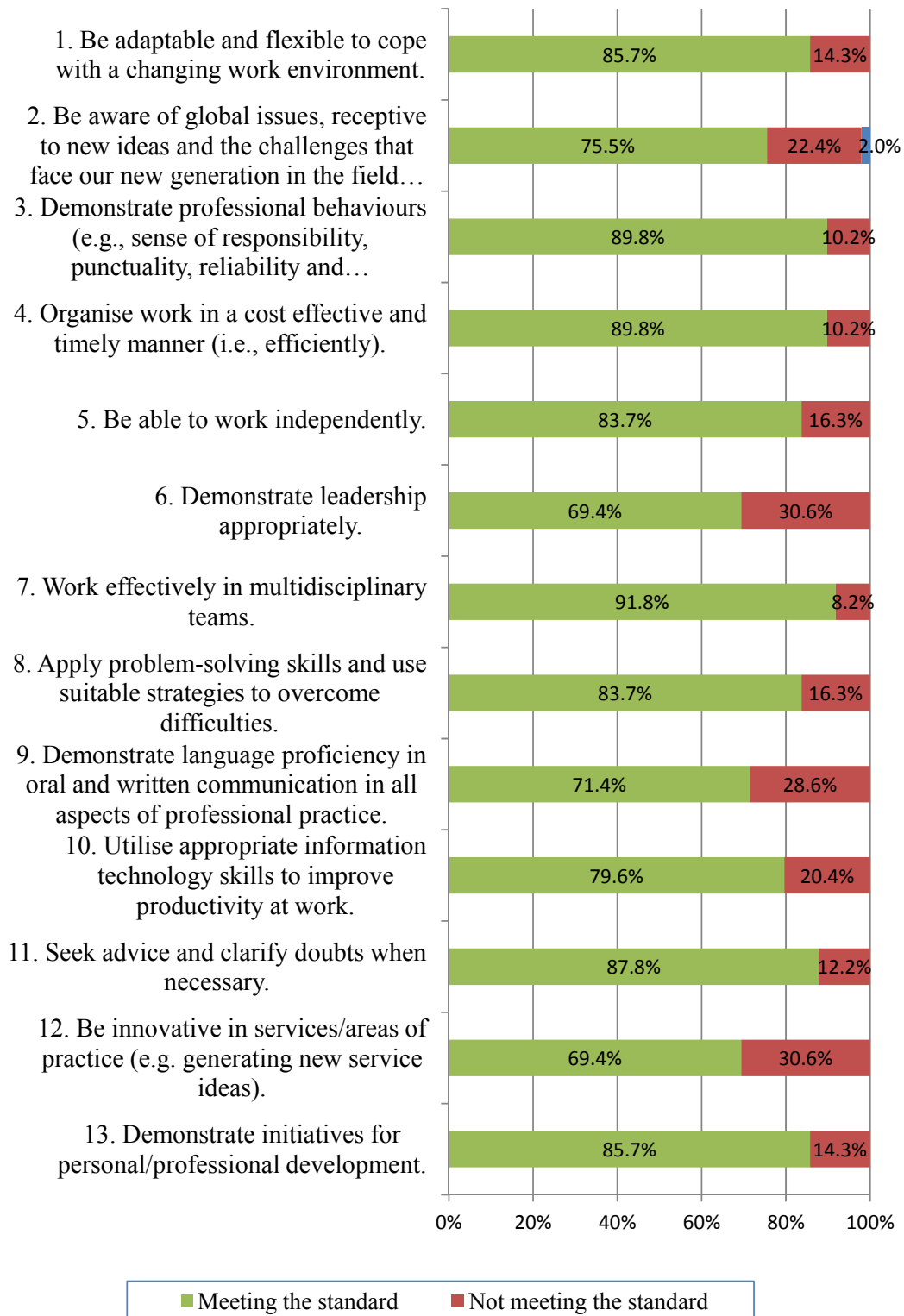
##### **3.3.2.1.1 OT graduates' perceptions of their generic competencies**

Summary Chart OT-8 shows the percentages of OT graduates who rated their generic skills / competencies as “generally meeting” or “far exceeding” expectations. Eight of the 13 items were given these levels of ratings by 80% or more of the graduate respondents: “working effectively in multidisciplinary teams (91.8%), “demonstrating professional behaviors” (89.8%), “organizing work in a cost effective and timely manner” (89.8%), “seeking advice and clarifying doubts when necessary (87.8%), “being adaptable and flexible to cope with a changing work environment” (85.7%), “demonstrating initiatives for personal/professional development (85.7%), “being able to work independently” (83.7%), and “applying problem-solving skills and using suitable strategies to overcome difficulties” (83.7%). The two items that were rated as “generally meeting” or “far exceeding” expectations by the least graduates were “demonstrating leadership appropriately” (69.4%) and “being innovative in services/areas of practice” (69.4%).

There were six items rated as 3 (“generally meeting standard”) or more: “demonstrating professional behaviors” (3.2), “working effectively in multidisciplinary teams” (3.1), “seeking advice and clarifying doubts when necessary” (3.1), “organizing work in a cost effective and timely manner” (3.0), “being able to work independently” (3.0) and “demonstrating initiatives for personal/professional development” (3.0). The lowest ratings were for “demonstrating leadership appropriately” (2.7) and “demonstrating language proficiency in oral and written communication in all aspects of professional practice” (2.7). These results are shown in Summary Table OT-3.

### Summary Chart OT-8:

OT graduates' ratings of their own performance on generic competencies (n=60)



**Summary Table OT-3:**

**OT graduates' perceptions of their own generic competencies – Mean analysis (in the order of high to low mean scores) (n=60)**

| <b>OT Graduates (2009-2011)<br/>Generic skills/ competencies</b>  | <b>Number of<br/>raters</b> | <b>Mean<br/>Score (1-4)</b> | <b>Sampling<br/>error</b> |
|---|-----------------------------|-----------------------------|---------------------------|
| 3. Demonstrate professional behaviours (e.g., sense of responsibility, punctuality, reliability and confidentiality, etc.)          | 49                          | 3.2                         | +/- 0.2                   |
| 7. Work effectively in multidisciplinary teams.   | 49                          | 3.1                         | +/- 0.1                   |
| 11. Seek advice and clarify doubts when necessary.  | 49                          | 3.1                         | +/- 0.2                   |
| 4. Organize work in a cost effective and timely manner (i.e., efficiently).   | 49                          | 3.0                         | +/- 0.2                   |
| 5. Be able to work independently.   | 49                          | 3.0                         | +/- 0.2                   |
| 13. Demonstrate initiatives for personal/professional development.  | 49                          | 3.0                         | +/- 0.2                   |
| 8. Apply problem-solving skills and use suitable strategies to overcome difficulties.   | 49                          | 2.9                         | +/- 0.1                   |
| 1. Be adaptable and flexible to cope with a changing work environment.  | 49                          | 2.9                         | +/- 0.1                   |
| 10. Utilize appropriate information technology skills to improve productivity at work.  | 49                          | 2.9                         | +/- 0.2                   |
| 2. Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy. | 48                          | 2.8                         | +/- 0.1                   |
| 12. Be innovative in services/areas of practice (e.g. generating new service ideas).  | 49                          | 2.8                         | +/- 0.2                   |
| 6. Demonstrate leadership appropriately.  | 49                          | 2.7                         | +/- 0.2                   |
| 9. Demonstrate language proficiency in oral and written communication in all aspects of professional practice.                      | 49                          | 2.7                         | +/- 0.2                   |

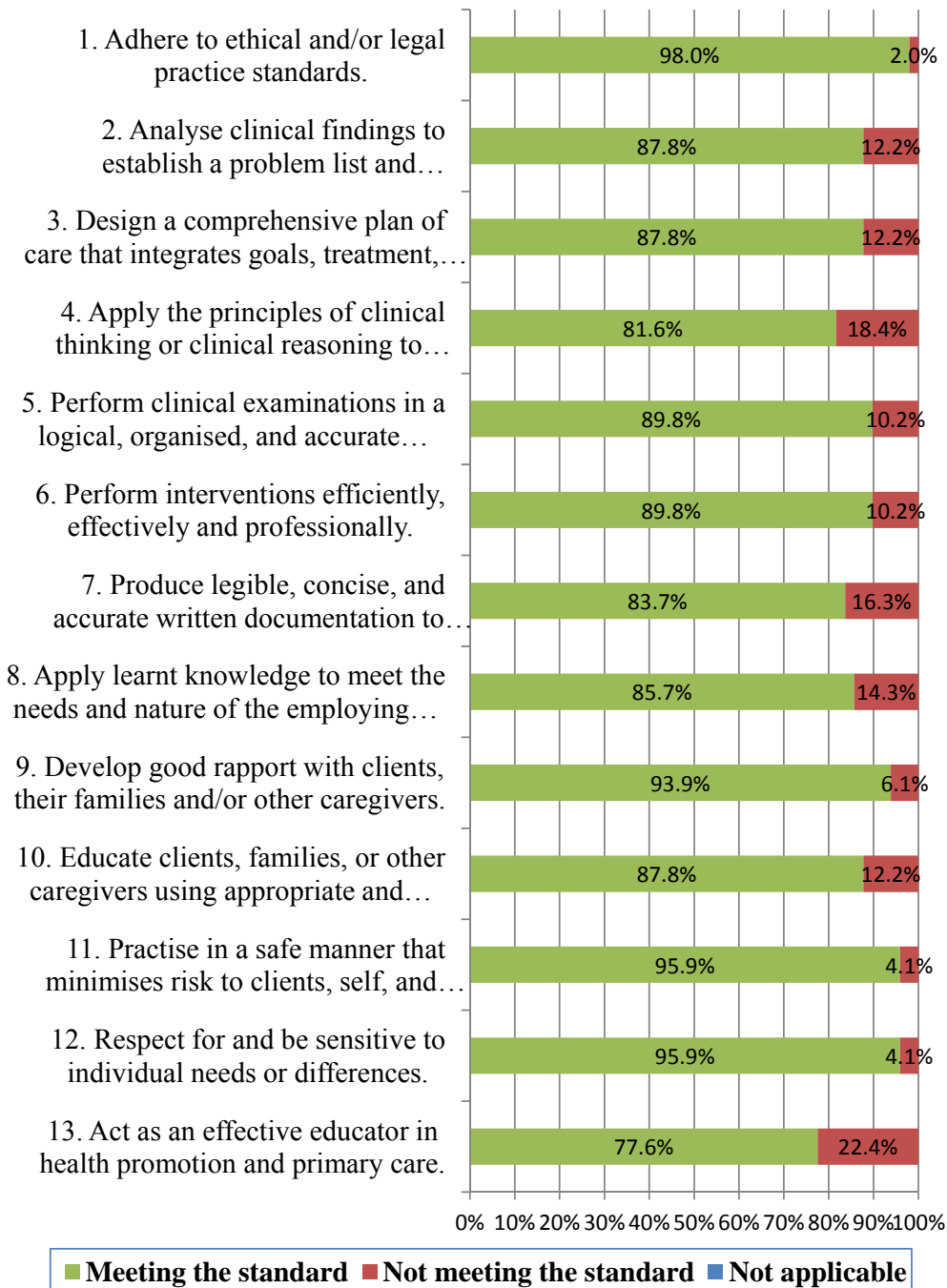
### ***3.3.2.1.2 OT graduates' perceptions of their professional competencies***

When asked to self-rate their professional skills/competencies, more than 90% of the graduates rated themselves as meeting/exceeding expectations on four of the items (“adhering to ethical and/or legal practice standards”, 98.0%; “practicing in a safe manner that minimizes risk to clients, self and others, 95.9%; “respecting and being sensitive to individual needs or differences”, 95.9%; “developing good rapport with clients, their families and/or other caregivers”, 93.9% ) and more than 80% on eight of the remaining nine items. The lowest was “acting as an effective educator in health promotion and primary care”,

although this was still rated by 77.6% of the respondents. See Summary Chart OT-9 for details.

Ten of the 13 items were given mean ratings of 3.0 (“generally meeting standard”) or more. The highest ratings were for “adhering to ethical and/or legal practice standards” (3.5) and “practicing in a safe manner that minimizes risk to clients, self, and others” (3.4). The three lowest, all with means of 2.9, were “acting as an effective educator in health promotion and primary care”, “applying learnt knowledge to meet the needs and nature of the employing organization” and “applying the principles of clinical thinking or clinical reasoning to practice”. The mean ratings for all items are shown in Summary Table OT-4.

**Summary Chart OT-9: OT graduates' perceptions of their own performance on professional competencies (n=60)**



**Summary Table OT-4:****OT graduates' perceptions of their own professional competencies – Mean analysis (in order of high to low mean scores) (n=60)**

| <b>OT Graduates (2009-2011)<br/>Professional competencies</b>  | <b>Number of<br/>raters</b> | <b>Mean<br/>score (1-4)</b> | <b>Samplin<br/>g error</b> |
|--|-----------------------------|-----------------------------|----------------------------|
| 1. Adhere to ethical and/or legal practice standards.  | 49                          | 3.5                         | +/- 0.2                    |
| 11. Practice in a safe manner that minimizes risk to clients, self, and others.                        | 49                          | 3.4                         | +/- 0.2                    |
| 9. Develop good rapport with clients, their families and/or other caregivers.                          | 49                          | 3.3                         | +/- 0.2                    |
| 12. Respect for and be sensitive to individual needs or differences.                                   | 49                          | 3.2                         | +/- 0.1                    |
| 10. Educate clients, families, or other caregivers using appropriate and effective teaching methods.   | 49                          | 3.1                         | +/- 0.2                    |
| 3. Design a comprehensive plan of care that integrates goals, treatment, outcomes, and discharge plan. | 49                          | 3.0                         | +/- 0.2                    |
| 6. Perform interventions efficiently, effectively and professionally.                                  | 49                          | 3.0                         | +/- 0.1                    |
| 5. Perform clinical examinations in a logical, organized, and accurate fashion.                        | 49                          | 3.0                         | +/- 0.1                    |
| 2. Analyze clinical findings to establish a problem list and outcomes of care.                         | 49                          | 3.0                         | +/- 0.1                    |
| 7. Produce legible, concise, and accurate written documentation to support the delivery of services.   | 49                          | 3.0                         | +/- 0.2                    |
| 13. Act as an effective educator in health promotion and primary care.                                 | 49                          | 2.9                         | +/- 0.2                    |
| 8. Apply learnt knowledge to meet the needs and nature of the employing organization.                  | 49                          | 2.9                         | +/- 0.2                    |
| 4. Apply the principles of clinical thinking or clinical reasoning to practice.                        | 49                          | 2.9                         | +/- 0.1                    |

### **3.3.2.2 Interviews with OT graduates**

This section presents summaries and general patterns emerging from the interviews with the OT graduates.

#### ***3.3.2.2.1 Understanding of OBE and intended learning outcomes***

When asked the questions “Do you know what is “Outcome-Based Education” (OBE)? Do you know anything about “intended learning outcomes’?”, only three of the graduates were able to recall having heard the terms OBE and learning outcomes mentioned in their studies.

#### ***3.3.2.2.2 OT graduates’ perceptions of their generic competencies***

*“How do you perceive the generic skills (such as critical thinking, problem solving, written & verbal communication, teamwork etc) you attained in PolyU? Do you think you developed these skills adequately to prepare you for the workplace, and what recommendations do you have for the further development of these skills in the programme?”*

The general consensus expressed by the graduate groups was that their preparation was average to above-average. They felt that communication and presentation skills were not sufficient. In fact, they expressed the view that their generic competencies were obtained more outside than within the PolyU programme; one group explained that these skills had already been acquired in secondary school, but that PolyU did provide appropriate frameworks such as project learning and placements that helped them to apply the skills. Generally, their view was that generic skills were developed mostly during the placement. They also commented that activities such as role-plays helped to raise their awareness, but since these were mostly quite different from real cases, they did not really help them to be able to apply the skills in the real workplace. While group projects provided some opportunity to use teamwork skills, they felt that teamwork skills in the workplace are different from those acquired in the university context. One group suggested that a tendency towards teacher-directed teaching inhibited the development of critical thinking skills.

One group of the most recently graduated interviewees commented that the development of generic competencies is an ongoing process and that, during their first six months of employment, they had developed their generic skills on the job.

The interviewees’ recommendations included more opportunities to be able to interact with other people during placement, more language courses to strengthen communication skills in the work context, such as report writing, more opportunity to apply the knowledge that has been taught, and opportunities for developing basic problem-solving skills in case studies during lessons.

#### **3.3.2.2.3 OT graduates' perceptions of their professional knowledge**

*“How do you perceive the professional knowledge you attained in PolyU? Do you think you developed these skills adequately to prepare you for the workplace, and what recommendations do you have for the further development of these skills in the programme?”*

The graduate interviewees felt that sufficient foundational knowledge had been taught to address the theory but that they were not as adequately prepared in practical skills training, which cause difficulties for some of them during their early careers in coping with various cases. They did comment, however, that the level of skills acquired depended on the quality of coaching received from various clinical educators. As well, they pointed out that specialty knowledge can be learnt in the workplace. They would have preferred real patients' cases in order to acquire the knowledge in action.

#### **3.3.2.2.4 OT graduates' evaluation of their overall performance**

*“How do you perceive your performance (high / average / low /under-performing) in your current position? To what extent did your study at PolyU contribute to how you are performing now? Please give reasons to elaborate your answer.”*

Most of the graduates perceived their performance levels to be average. They felt that what they had developed was sufficient to handle daily work, but that they still had room for improvement. Again, however, it was emphasized that performance development can only occur in the workplace, and not in the university programme.

It was noted that the graduates prior to 2011 had been exposed to more experiences in different fields, which enabled them to have more self-confidence.

#### **3.3.2.2.5 OT Graduates' evaluation and recommendation for programme**

*“To what extent do you think our current programme can help to address the needs of the workplace? What are the positive and negative characteristics of the programme in this respect?”*

Positive comments were associated with variety, in terms of knowledge and evidence-based practice. It was felt that the PolyU programme's contribution was good enough to start their careers, with some basic assessment and crucial parts of assessments having been taught.

On the negative side, they said there is too much professional knowledge to be taught in depth in the undergraduate programme. The placement system did not help to deepen their understanding of specialties, and there was insufficient balance of practical and academic work. They also mentioned that they were not able to gain a complete picture of the practical skills processes.



*“Can you give some recommendations about how we can provide better training in the OT/PT programme to help our future graduates to be prepared better to fit the workplace needs?”*

There were no patterns in the recommendations made by the graduates, but rather a list of individual suggestions. These included:

- *more specialist skills teaching*
- *better training, e.g. half-day workshop on Saturday, for students to practice under supervision*
- *real cases studies, real case tutorials, lecturers to conduct demonstrations with real cases*
- *increase placements to more than 3 and in different settings (70% HA, few NGO, private –none)*
- *more proportion of clinical placement in Year 3*
- *longer duration (>4-6 weeks) of clinical placement for NGO / private setting (for example morning placement, afternoon – course work)*
- *invite OTs to share their clinical experiences during lessons, or even to teach a few sessions*
- *allow students to select their specialties during placement, and consolidate their learning in that particular specialty in the final year.*

### **3.3.3 OT Undergraduates**

#### **3.3.3.1 Survey of OT undergraduates**

The following sections present the quantitative data collected by survey from the OT undergraduates (three year groups, n=130).

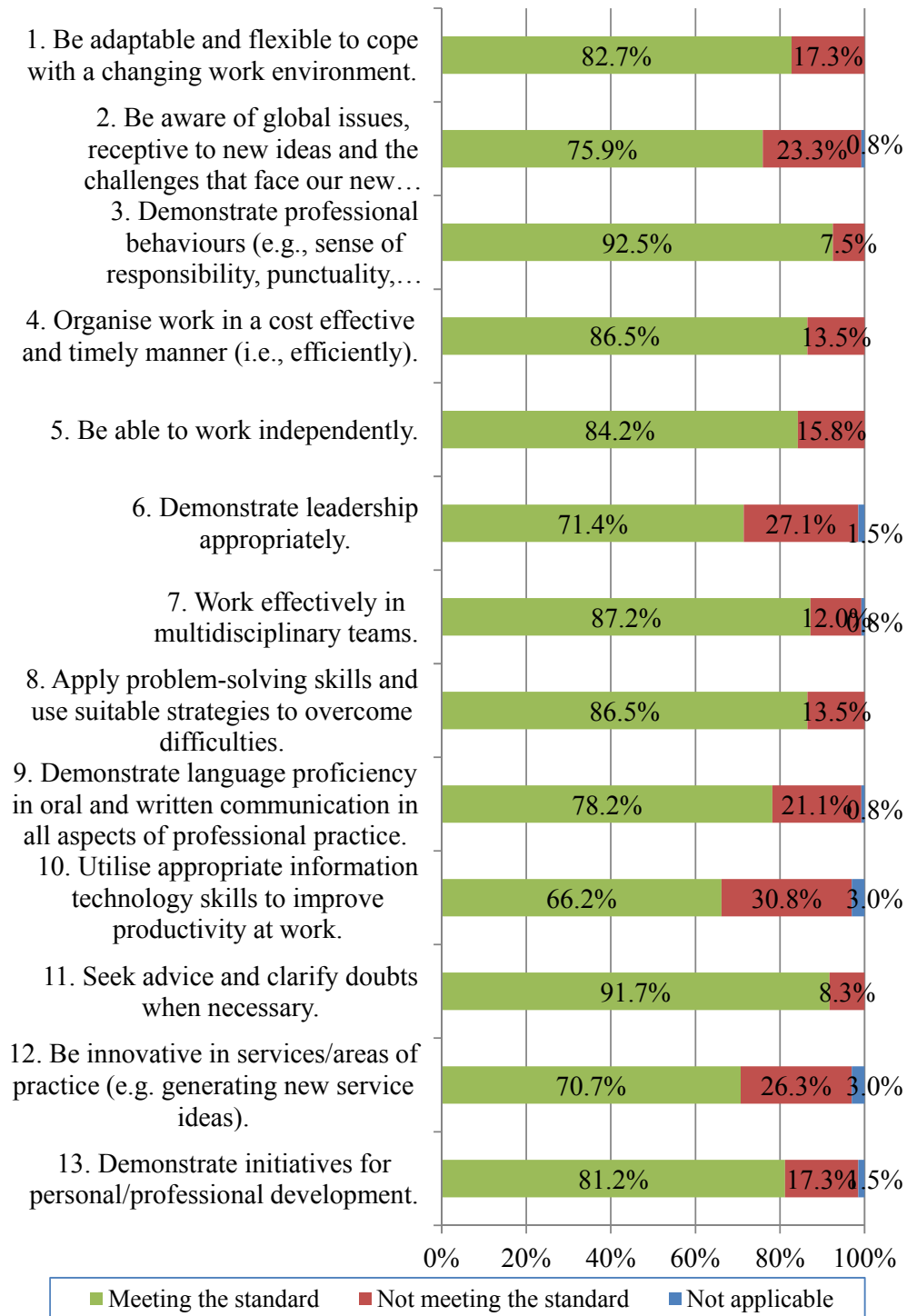
##### **3.3.3.1.1 OT undergraduates’ perceptions of their generic competencies**

Around 80% or more of the OT undergraduates rated themselves as “generally meeting” or “far exceeding” the standard on nine of the 13 items (Summary Chart OT-10). The highest was “working effectively in multidisciplinary teams” (91.8%), followed closely by “demonstrating professional behaviors” and “organizing work in a cost effective and timely manner” (both 89.8%). The lowest two items were: “demonstrating leadership appropriately” and “being innovative in services/areas of practice” (both 69.4%).

Summary Table OT-5 shows the OT undergraduates’ mean ratings for generic skills/competencies. They gave mean ratings of 3.0 or more for six items: “seeking advice and clarify doubts when necessary” (3.2), “working effectively in multidisciplinary teams” (3.1), “applying problem-solving skills and use suitable strategies to overcome difficulties” (3.1), “demonstrating initiatives for personal/professional development” (3.1), “being able to

work independently” (3.0), and “demonstrating language proficiency in oral and written communication in all aspects of professional practice” (3.0). The remaining items were only slightly below 3.0, with two rated 2.9 and two rated 2.8

**Summary Chart OT-10: OT undergraduates’ ratings of their own generic competencies (n=130)**



**Summary Table OT-5:**

**OT undergraduates' perceptions of their own generic competencies – Mean analysis (in order of high to low mean scores)**

| <b>OT Undergraduates – All Years<br/>Generic competencies</b>   | <b>Number of<br/>raters</b> | <b>Mean<br/>Score (1-4)</b> | <b>Sampling<br/>error</b> |
|---|-----------------------------|-----------------------------|---------------------------|
| 11. Seek advice and clarify doubts when necessary.  | 133                         | 3.2                         | +/- 0.1                   |
| 7. Work effectively in multidisciplinary teams.   | 132                         | 3.1                         | +/- 0.1                   |
| 8. Apply problem-solving skills and use suitable strategies to overcome difficulties.   | 133                         | 3.1                         | +/- 0.1                   |
| 13. Demonstrate initiatives for personal/professional development.  | 131                         | 3.1                         | +/- 0.1                   |
| 5. Be able to work independently.   | 133                         | 3.0                         | +/- 0.1                   |
| 9. Demonstrate language proficiency in oral and written communication in all aspects of professional practice.                      | 132                         | 3.0                         | +/- 0.1                   |
| 1. Be adaptable and flexible to cope with a changing work environment.  | 133                         | 2.9                         | +/- 0.1                   |
| 12. Be innovative in services/areas of practice (e.g. generating new service ideas).  | 129                         | 2.9                         | +/- 0.1                   |
| 2. Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy. | 132                         | 2.8                         | +/- 0.1                   |
| 6. Demonstrate leadership appropriately.  | 131                         | 2.8                         | +/- 0.1                   |
| 10. Utilize appropriate information technology skills to improve productivity at work.  | 129                         | 2.8                         | +/- 0.1                   |

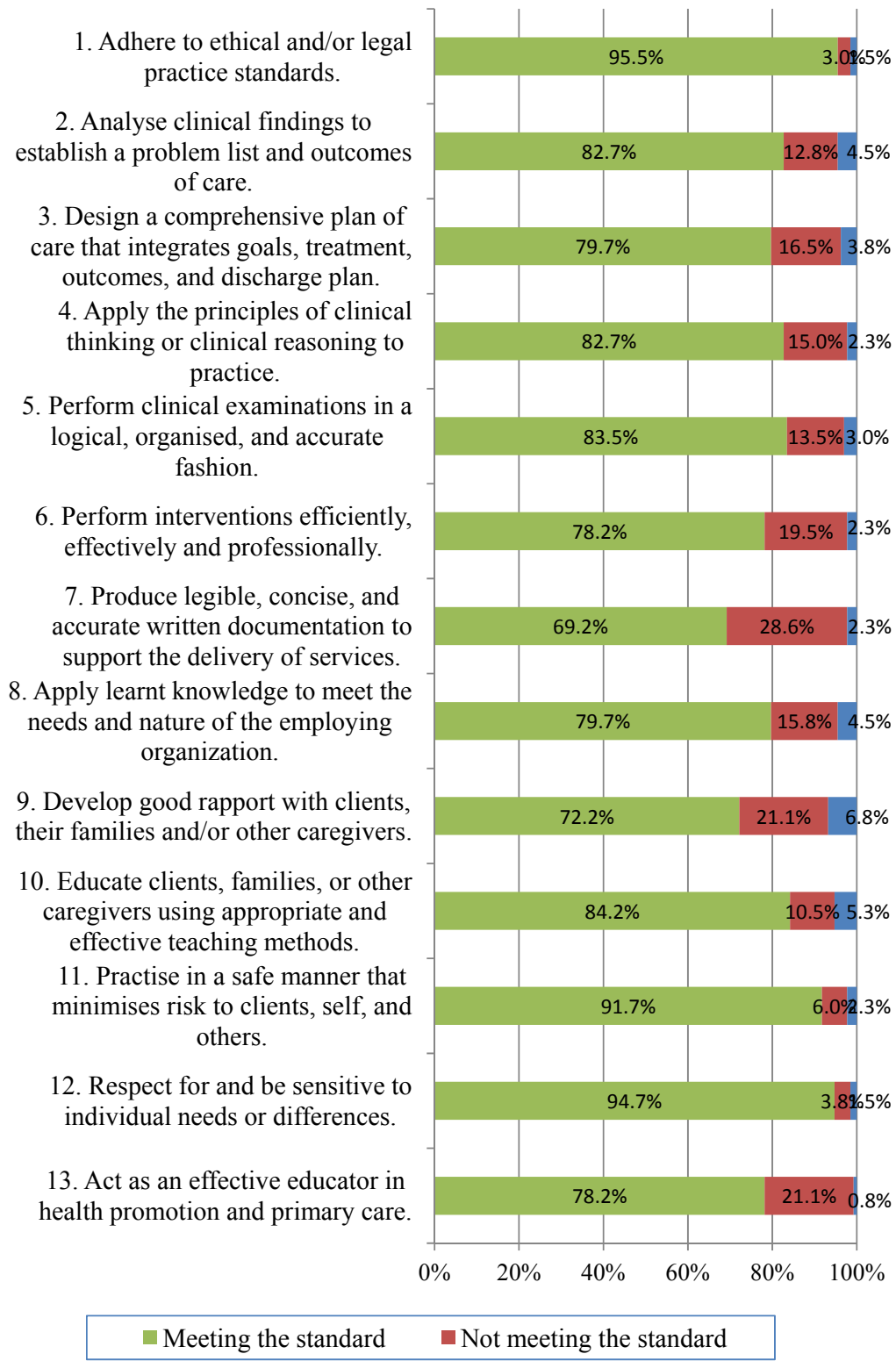
### ***3.3.3.1.2 OT undergraduates' perceptions of their professional competencies***

The undergraduates' ratings of their professional skills/competencies (Summary Chart OT-11) reflect a high level of confidence, with more than 80% rating themselves as meeting/exceeding standards on 12 of the 13 items. Four items were given this rating by more than 90% of the students: “adhering to ethical and/or legal practice standards” (98.0), “practicing in a safe manner that minimizes risk to clients, self and others” (95.9%), “respecting and being sensitive to individual needs or differences” (95.9), and “developing good rapport with clients, their families and/or other caregivers” (93.9%). The lowest rating was for “acting as an effective educator in health promotion and primary care” (77.6%)

The mean ratings of professional skills/competencies (Summary Table OT-6) again suggests the students' confidence, with 10 of the 13 items having mean ratings of 3.0. The highest mean rating was for “practicing in a safe manner that minimizes risk to clients, self, and others” (3.4), followed closely by “adhering to ethical and/or legal practice standards” (3.3), and “respecting and being sensitive to individual needs or differences” (3.2). The group of items rated slightly below 3.0 (all 2.8) included: “Producing legible, concise, and accurate written documentation to support the delivery of services”, “acting as an effective educator in health promotion and primary care”, and “applying learnt knowledge to meet the needs and nature of the employing organization”.

### Summary Chart OT-11:

OT undergraduates' ratings of their own professional competencies (n=130)



**Summary Table OT-6:**

**OT undergraduates' perceptions of their own professional competencies – Mean analysis (in the order of high to low mean scores)**

| <b>OT Undergraduates – All Years<br/>Professional competencies</b>                                     | <b>Number of<br/>raters</b> | <b>Mean<br/>Score (1-4)</b> | <b>Sampling<br/>error</b> |
|--|-----------------------------|-----------------------------|---------------------------|
| 11. Practice in a safe manner that minimizes risk to clients, self, and others.                        | 175                         | 3.4                         | +/- 0.1                   |
| 1. Adhere to ethical and/or legal practice standards.  | 174                         | 3.3                         | +/- 0.1                   |
| 12. Respect for and be sensitive to individual needs or differences.                                   | 173                         | 3.2                         | +/- 0.1                   |
| 5. Perform clinical examinations in a logical, organized, and accurate fashion.                        | 172                         | 3.1                         | +/- 0.1                   |
| 2. Analyze clinical findings to establish a problem list and outcomes of care.                         | 174                         | 3.1                         | +/- 0.1                   |
| 3. Design a comprehensive plan of care that integrates goals, treatment, outcomes, and discharge plan. | 175                         | 3.1                         | +/- 0.1                   |
| 6. Perform interventions efficiently, effectively and professionally.                                  | 174                         | 3.1                         | +/- 0.1                   |
| 10. Educate clients, families, or other caregivers using appropriate and effective teaching methods.   | 173                         | 3.0                         | +/- 0.1                   |
| 4. Apply the principles of clinical thinking or clinical reasoning to practice.                        | 173                         | 3.0                         | +/- 0.1                   |
| 9. Develop good rapport with clients, their families and/or other caregivers.                          | 172                         | 3.0                         | +/- 0.1                   |
| 7. Produce legible, concise, and accurate written documentation to support the delivery of services.   | 172                         | 2.8                         | +/- 0.1                   |
| 13. Act as an effective educator in health promotion and primary care.                                 | 172                         | 2.8                         | +/- 0.1                   |
| 8. Apply learnt knowledge to meet the needs and nature of the employing organization.                  | 172                         | 2.8                         | +/- 0.1                   |

### 3.3.3.2 Interviews with OT undergraduates

As with the other groups, interviews were conducted with OT undergraduates from all three year-groups, addressing the broad areas of “understanding of OBE and intended learning outcomes”, “perceptions of their own acquisition of skills / knowledge and performance” and recommendations. These data are presented in the following sections.

#### 3.3.3.2.1 Understanding of OBE and intended learning outcomes

In response to the questions “Do you know the term “outcome-based Education?” and “ Do you know anything about ‘intended learning outcomes’?”, none of the Year 1 or Year 2 students exhibited familiarity with either of the terms; however, when questioned further they indicated that they did know about the concept of learning outcomes introduced

in their classes. The Year 3 students did understand the concept of OBE and were able to describe it appropriately.

#### ***3.3.3.2.2 OT undergraduates' comments on their generic competencies***

The following are responses recorded from students from the three year groups to the questions “*How well do you perceive that you are acquiring the generic skills such as critical thinking, problem solving, written and verbal communication, teamwork, etc) in your PolyU course?*”

The Year 1 students, who were interviewed at the end of the academic year, indicated that some of their learning experiences, such as project learning, case studies and presentations, were useful for developing communication and teamwork skills. They were less confident that they had the opportunity to develop critical thinking skills.

The Year 2 students' responses varied from “inadequate” to “fair” to “adequate”. Different groups had different perceptions – for example one group thought they were above average on critical thinking due to experiences during their placements, while another group considered themselves to be inadequate in this competency.

Some comments were made, particularly in relation to problem solving and communication, that they had theoretical information but lacked practical application. For written communication they mentioned that they had received general skills for English writing but lacked specific skills to fit workplace needs.

The Year 3 students, reflecting from the end of their course, were positive that they had improved, particularly in written and verbal communication and analytical thinking. They considered problem -solving skills to have been a particular priority of the OT programme and also to have been developed during placements. They indicated that they had opportunities within PolyU to develop teamwork but that there were fewer opportunities during their placements. Some students indicated that critical thinking was the least developed of the competencies, since it is something that they have to develop for themselves under their teachers' guidance, but they did think there is potential to develop it through clinical practice.

#### ***3.3.3.2.3 OT undergraduates' comments on their professional knowledge***

The following records the OT undergraduates' responses to the question “*How well do you perceive that you are acquiring professional knowledge in your PolyU course?*”

The Year 1 students commented favorably that they understood the intended learning outcomes for each of their subjects, feeling that this helped to contribute to their understanding of what professional knowledge they still need to develop. However, at this early stage of their studies they did not feel that they had received very much relevant professional skill training – although they did acknowledge that it is probably too early to

expect this in Year 1. They suggested that site visits would be valuable in helping to enhance professional skills.

The Year 2 students said they had received adequate theory but had not yet developed or internalized the competencies and needed more chances to apply these skills.

The Year 3 students indicated that there were far more outcomes than could be acquired in a three-year course and that they felt confident they had achieved around 50% of them. They felt that it is only in the workplace that they can develop the professional knowledge and practical application of the theory, because even the cases considered in their course were general.

#### ***3.3.3.2.4 OT undergraduates' comments on their future generic competency development***

The undergraduates' responses to the question "*How do you expect you will perform on these generic skills in your future workplace? Please explain your answer.*" are presented below.

Only one of the Year 1 students commented that the workplace setting was still too much of an unknown for them to be able to predict future performance on generic competencies. The others felt quite confident that they would be having sufficient opportunities to develop the appropriate competencies through the remainder of their course, despite the fact that they perceived the gap between university and workplace to be large.

The Year 2 students were quite pessimistic, saying that they anticipated they would be "fair" to "average" as there were not enough chances to practice, other than during their placements.

The Year 3 students also rated themselves "low" to "average". This does not, however, seem to be a reflection on the OT programme because they explained that, even though they had the opportunity in PolyU to develop their generic competencies to a certain extent, it still takes time in the actual workplace context to develop them to a higher level. One group described it as a process of lifelong learning.

#### ***3.3.3.2.5 OT undergraduates' comments on programme***

The following section summarises the students' responses to the questions "*To what extent do you think our current programme can help you to fulfill the needs of the workplace? What are the positives and negatives about the programme in this respect?*"

According to the Year 1 students, the PolyU course cannot hope to address all of the relevant workplace needs. They did, however, mention that clinical visits in different settings over the three years would be valuable.

The Year 2 students thought the subjects taught were comprehensive in coverage and provided a chance to apply knowledge during placement. On the negative side, they felt they

were being hampered by a tight schedule, lack of depth and inadequate communication between the department and clinical educators.

The Year 3 students were positive about the theoretical knowledge and the chance to mature through the course. They were positive that the cases they had experienced gave them some link to the workplace and that the placement time was sufficient. One group commented that the OT programme is more practical than other programmes in PolyU and provides a good bridge to the workplace. On the negative side, one group thought the programme is too advanced and that there is a need for stress management support to help them to cope. The other group commented that there is not enough opportunity for overseas exchange to broaden students' learning experience.

#### ***3.3.3.2.6 OT Undergraduates' recommendations for programme***

Responding to the questions "*Can you give some recommendations about how we can make better provision in the OT/PT programmes to help our future graduates to be prepared better to fir the workplace needs?*", the following remarks have been summarised from the three year groups of OT undergraduates.

The Year 1 students were concerned with very practical organizational skills, such as their need for clearer handout notes and more tutorial time to develop skills and knowledge.

The Year 2 students requested more placement opportunities in a variety of clinical settings.

The Year 3 students recommended more assessment training. Before placement they would have liked a group of specialists to conduct a preparatory session rather than the current pre-clinical seminar; they would have liked more information about the hospital structure and frequent cases that occur in particular settings. One group suggested modifying the placement to 4 times per week for 6 weeks. They also suggested that it would be useful if they could continue to access online course materials after graduation, to support their transition to the workplace.



## **Chapter 4**

### **DISCUSSION**

#### **4.1 Main issues common to both PT and OT programmes**

In all year groups of the undergraduate student interviewees, it was clear that they were familiar with the concepts of OBE and had experienced them in their classes, although most of them were not familiar with the actual term “OBE”. The graduates were mostly not familiar with either the terms or the concepts. The results of the surveys and interviews were very consistent in the areas identified as strengths and weaknesses of the two programmes.

##### ***4.1.1 Generic competencies***

The PT and OT employers’ groups showed similar perceptions regarding a number of generic competencies. Both groups had the highest percentages of respondents rating ‘utilize appropriate information technology skills to improve productivity at work’ and ‘demonstrate professional behaviors’ as generally meeting/far exceeding the employers’ standards. At the other end, the same three items appeared for both groups: ‘apply problem-solving skills and use alternative strategies to overcome difficulties’, ‘be innovative in services/areas of practice’ and ‘demonstrate leadership appropriately’. These patterns appear to be similar to the 2008 findings. Generally, there were roughly equal proportions of the OT and PT employers rating the graduates as meeting/exceeding expectations. The exceptions were the items: ‘demonstrate professional behaviours’, ‘seek advice and clarify doubts when necessary’, ‘organize work in a cost effective and timely manner’, ‘be innovative in services/areas of practice’ and ‘demonstrate leadership appropriately’, where the numbers of OT employers giving ratings of meeting/exceeding expectations were higher than for those in the PT group. When actual mean ratings are compared, however, there are only small differences.

In the interviews, both the PT and OT employers commented on the quality of the new graduates’ abilities to prepare and make presentations. Both groups were generally positive about the students’ problem-solving skills, but pointed out that there are some weaknesses when it comes to applying these skills in the workplace. The OT employers commented that the graduates’ critical thinking skills were weaker – the PT employers did not comment on these skills.

Overall, the PT and OT graduate groups’ questionnaire responses indicated confidence with both their generic and professional skills/competencies. Both groups gave high ratings for the generic skills/competencies of “demonstrating professional behaviours”, “seeking advice and clarifying doubts when necessary”, “working effectively in multidisciplinary teams”, “being able to work independently” and “organizing work in a cost effective and timely manner”. For both groups, the lower end of the ratings included similar items, including “being innovative in services/areas of practice”, “demonstrating leadership

appropriately”, and “demonstrating language proficiency in oral and written communication in all aspects of professional practice”.

With regard to professional competencies, there were similarities in the highest-ranked items, including “adhering to ethical and/or legal practice standards”, “practicing in a safe manner that minimizes risk to clients, self and others”, and “respecting and being sensitive to individual needs or differences”. Both groups rated themselves lowest for “acting as effective educators in health promotion and primary care”. One apparent difference was for “performing interventions efficiently, effectively and professionally”, on which 76.9% of the PT graduates and 89.8% of the OT graduates rated themselves as meeting/exceeding standards.

In the interviews there was further evidence of some commonalities between the PT and OT graduates. Both groups supported the questionnaire finding in considering that teamwork skills had been developed well during their PolyU studies, although one of the OT groups claimed that the nature of teamwork in the university is not the same as in the workplace. They did not feel confident about their critical thinking or presentation skills. Like the employers, the graduates representing both groups felt that their problem-solving skills were adequate but they had some limitations with regard to applying them in the workplace setting.

Like the graduates, the undergraduate questionnaire analyses indicated similarities for both generic and professional skills/competencies, with 80% or more of both groups rating themselves as meeting/exceeding expectations on nearly all of the items. Both groups’ results suggested that they saw their strengths as: “demonstrating professional behavior”, “organizing work in a cost effective and timely manner” and “working independently”. For both groups the lower ratings were for “demonstrating leadership appropriately” and “being innovative in services/areas of practice”. Both groups gave low ratings for “acting as an effective educator in health promotion and primary care”

One discrepancy occurred on the item “working effectively in multidisciplinary teams”. 91.8% of the OT graduates rated themselves as meeting/exceeding standards for this, but only 78.8% of the PT graduates (means 3.1 and 2.9 respectively). Another slight discrepancy appeared in the item “utilizing appropriate information technology skills to improve productivity at work”, with 59.2% of the PT and 79.6% of the OT graduates rating themselves as meeting/exceeding expectations (means 2.6 and 2.8 respectively).

Of the professional skills/competencies, those with which both groups of undergraduates were clearly confident were “adhering to ethical and/or legal practice standards”, “respecting and being sensitive to individual needs or differences” and “practicing in a safe manner that minimizes risk to clients, self and others”.

The undergraduate students in both PT and OT revealed in the interviews that they considered their presentation and teamwork skills to be adequate but their critical thinking skills to be weak.

#### ***4.1.2 Professional competencies***

Again with the professional skills/competencies, many similarities can be seen between the PT and OT groups. In the employers' survey for both groups there were very high proportions of respondents (90% or more) who indicated the graduates were meeting/exceeding expectations on the same group of items: 'adhere to ethical and/or legal practice standards', 'develop good rapport with clients, their families and/or other caregivers', and 'practice in a safe manner that minimizes risk to clients, self and others'. In the least such rated group for both PT and OT were the items of 'perform interventions efficiently, effectively and professionally' and 'act as an effective educator in health promotion and primary care' – although there were still mostly around or above 70% of respondents rating these as meeting/exceeding expectations. The only marked discrepancies between the OT and PT groups were on three items: 'respect for and sensitivity to individual needs or differences', 'apply learnt knowledge to meet the needs and nature of the employing organization', and 'perform interventions efficiently, effectively and professionally', where the numbers of OT employers giving a meeting/exceeding expectations were higher than for those in the PT group. The differences in mean ratings for both groups were, however, negligible on all items.

In the interviews, both the PT and OT employer groups commented that they think the PolyU graduates' theoretical knowledge is strong but that their practical application of skills needs improvement. Both also mentioned a weakness in the students' ability to write reports and proposals, both in English and Chinese. Another weakness identified by both employer groups was in relation to the new graduates' abilities to communicate with patients and understand their holistic needs, including mental and emotional factors. Both groups made it clear, however, that these practical skills can really only develop and mature in the workplace, hence the students' performance are satisfactory for entry level to the profession given that they will be exposed to ongoing professional development to enhance those skills that are deficient.

The PT and OT employers agreed that students could benefit from more opportunities to experience the full range of clinical placements and for overseas placements. They would also like to see more interaction between the University and clinical personnel for mutual updating of knowledge and experience.

Like the employers, both PT and OT graduate groups thought that their theoretical knowledge was strong on graduation but that their practical application needed attention when they entered the workplace. Both groups thought that there was too much content in the undergraduate programme, but having said that, they still said they felt under-prepared to enter the workplace. Also like the employers, the graduates commented that the practical skills can really only develop in the workplace overtime.

The PT and OT undergraduate students interviewed also made the same point as the employers and graduates, that their theoretical knowledge was strong but they lacked sufficient practical skills. Both groups thought there was too much content to be covered in the curriculum to allow them time to practice skills sufficiently. However, like the other

stakeholder groups, they also mentioned that these skills can really only be developed over time in the workplace.

Both groups of students thought that increased opportunities for overseas placements would help them to be better prepared for their future workplaces.

## **4.2 Overall satisfaction with both programmes**

To get a sense of whether the graduates are being prepared adequately it is useful to look at the stakeholders' ratings of overall satisfaction. These reported levels of satisfaction are encouraging, with both PT and OT being rated as satisfactory or above by close to 80% of the respondents.

The mapping of questionnaire items to current outcomes (see *Appendices III-IV*) in the process of validating the instruments indicated that the current PT and OT programme outcomes were well represented, even though they had evolved somewhat since the questionnaire was developed in 2008. Some of the consistently highest-ranked professional skills outcomes included:

- *demonstrating fundamental knowledge, skills and understanding of clients' health and social needs*
- *practicing safely and effectively, including collaboration with clients and colleagues in various aspects of planning and delivering care*
- *recognizing responsibility to deliver appropriate service and practice, and for generic skills:*
- *personal and professional ethics and a sense of social and civic responsibility*
- *appropriate attitudes towards lifelong learning.*

It must be noted, also, that even the outcomes that were at the lower ends of the rankings were still considered to be in the range of satisfactory achievement.

An overview of the complete data set suggests further that the three stakeholder groups were satisfied the PolyU students had achieved or were on the road to achieving the programme outcomes to a level that would equip them for entry level to the respective professions.

A limitation of the design was that the stakeholder groups were asked only to rate the students' and graduates' performances on the outcomes in relation to their expectations for an entry-level professional, and not their perceptions of whether these outcomes are actually aligned with the professions' needs. However, the interview data reveal some useful insights into the stakeholders' opinions about this. Overall, there were very few comments to suggest

any lack of alignment, and only a few that give a hint of outcomes that may require some attention. For example, it was generally suggested that clinical setting knowledge and skill outcomes could be more specific to the workplace. Clinical writing was one such skill that was mentioned specifically. This point will be conveyed to the academic faculty and this skill can be further enhanced in the professional subjects, as well as reinforced in the clinical placements.

Another suggestion that came through consistently from the interviews was to increase opportunities for exchange study, particularly overseas. This is consistent with the survey data that ‘global outlook’, even though still rated as satisfactory, was one of the lower ranked items. There are also other ways to improve the students’ global outlook besides creating more overseas placements. The department can create more opportunities for students to attend talks or seminars presented by overseas speakers, have more opportunities of exchange activities with overseas students and encourage students to be more aware of global issues in healthcare and current affair matters.

### **4.3 Comparisons to 2008 study**

From the outset, the decision was made to use the same items as used in the 2008 survey in order to gain some insight into changes that have taken place across the years, particularly with the growth of outcomes based education in the two departments. It must be noted, due to changes in the nature of the professions themselves and the roles of practitioners within them, it is not necessarily appropriate to make direct comparisons between the statistics generated by the two studies. Furthermore, the 2011 study, in collecting additional survey data from recent graduates and undergraduates as well as interview data from all three stakeholder groups, has provided a much more comprehensive and well-rounded view of the current situation than was obtained in the 2008 study. Nevertheless, it can be seen from a general overview of the employers’ survey data for the two years that the results are similar across most of the constructs measured.

### **4.4 Limitations of the study**

While the present study was very comprehensive, it still focused mainly on the participants’ subjective opinions. The concept of “outcome-based education” should be to focus on the “outcomes” which may be evaluated in more objective ways. For example, graduates’ professional competencies can be evaluated by external experts, such as in the process of quality assurance, clinical audits or accreditation evaluation. The opinions of employers or graduates may still be subjective or biased according to their own perspectives. Furthermore, it is difficult to determine whether the respondents were considering the performances of their graduate employees in their current states at the time of the data collection, or remembering them as new graduates. As well, the study did not account for possible variations in the levels of employers’ expectations of their employees, hence some may have given lower ratings than others in terms of professional skills and competencies.

The present project was mainly a cross-sectional study and it is not clear whether the graduates may continue to grow and develop their competencies in a satisfactory manner, since our programmes aim to train them to be life-long learners. It would be interesting to conduct a longitudinal study of the graduates to monitor their career development for a few more years, and see whether those areas identified as weaknesses may improve with time and experience.

At the beginning, it was also intended to gain some information about the comparison of the 3-year and 4-year programmes. However, as the project ends in Dec 2012 and the new 4-year programme has just started in September 2012, it is difficult to obtain students' valid opinions about this programme. This aspect may need to be addressed in another study in the future

## **Chapter 5**

### **RECOMMENDATIONS**

The present study has provided a comprehensive overview of how the various stakeholders such as the employers, the graduates and undergraduates have perceived about the quality and effectiveness of the PT and OT programmes. The results from the surveys and the direct personal interviews were very consistent and the opinions of different groups of stakeholders were also well matched to each other. In the following sections, recommendations are presented for improvements to the curriculum design of the two programmes, based on the suggestions made by the study participants.

#### **5.1 Recommendations for OT programme**

The OT employers felt that they were not satisfied with “possession of good basic knowledge (e.g. knowledge of computer application, and writing and analytic skills) (12%) (Chart OT-3). Some of their other perceptions are consistent with the results of the OT graduates, e.g. insufficient writing skills, and good professional behavior of generic competencies, and lack of awareness of the global needs of society and new ideas (vs “be innovative in services” of general competencies” mentioned by employer in Table OT1) .

The overall comments on the OT programme mainly included more bed-side and clinical teaching to strengthen clinical skills, training in problem solving and written communication, and updating the syllabus regularly to broaden the students’ views. Other suggestions have already been carried out in the new 4-year programme for the DSE, such as increasing the duration of the programme, providing all-round knowledge training, and more interaction with the industry by recruiting more teachers from the clinical field. The syllabus for the 4-year programme has already been updated with input from clinical representatives from the field.

Although 80% of the undergraduates surveyed rated themselves as meeting/exceeding standards on 12 of the 13 items, the OT graduates rated themselves as average in their professional skills/competencies. There were also different views from different years of OT undergraduates; overall the satisfaction rate became lower from Year 1 to Year 3.

Overall, the lowest rating given by the OT undergraduates was for “acting as an effective educator in health promotion and primary care”. This was consistent with the view expressed by the OT employers, so should be considered as an aspect to be strengthened in the OT curriculum.

There was a discrepancy between the views of the OT undergraduates and the OT graduates. While the OT undergraduates thought that they were more satisfied with the knowledge they had learnt, the graduates rated this item as average.

Both the OT undergraduates and the OT employers gave slightly lower ratings for “producing legible, concise, and accurate written documentation to support the delivery of

services”. The year 2 students mentioned that they lacked specific skills for English writing to fit workplace needs.

Both Year 1 and Year 2 OT students were unfamiliar with the meaning of the terminology “outcome-based education” but they did know about the concept of learning outcomes in subjects introduced in their classes. Year 1 students did not feel that they had the opportunity to develop critical thinking skills in class.

The comments on problem-solving and written communication should be addressed. Problem-based learning can be carried out in subject-based undergraduate teaching. Written communication in professional terms should be reinforced in individual applied subjects. To reduce the gap between the school and clinical field, and to improve the clinical skills, the proportion of bed-side clinical teaching in these subjects, together with more tutorial time, should be increased. In response to some comments by the employers and Year 2 undergraduates, more clinical placements of different varieties, e.g. in the NGOs or primary healthcare, should be conducted in future. A preparatory session rather than a pre-clinical information seminar may also benefit the students before their clinical placements.

Year one students suggested that more site visits should be arranged as they can help them to acquire more professional skill and knowledge, although they did acknowledge that it is too early for them to develop in year one.

Both Year 2 and Year 3 students mentioned that there are far more outcomes than they can be acquire and that they need more chances to apply these skills. A longer programme duration may be a future solution.

## **5.2 Recommendations for PT programme**

Generally, the employers and students have reflected that there is room for improvement in clinical reasoning skills and critical thinking. These skills also need to be matched with effective communication skills in terms of verbal and written communication in the clinical setting. More variety of clinical cases is also needed, according to the students and graduates. These areas can be further strengthened in the new 4-year curriculum. In fact, there have already been some measures to enhance these skills in the curriculum review conducted in 2011-12 in preparation for the 4-year programme. It will be useful to monitor the progress of the new 4 year curriculum closely and to evaluate the outcomes in the next few years.

In the new 4-year programme, there have been major changes in terms of the arrangement of the clinical placements, although the total number of weeks is the same. There will be a more continuous period of placements in the 4<sup>th</sup> year. This will hopefully enhance the learning and improvement of professional competencies in the students.

Consistently, the PT employers, graduates and students have identified the need to be more innovative, along with problem-solving ability, leadership and global outlook to be areas that need major improvement. While the programme should try to address these issues and make efforts to improve the academic content to meet these goals, weaknesses in these areas may also be universal to all students who have limited work and life experience in



general. If the graduates are able to develop adequate skills as life-long learners, they should continue to improve in terms of creativity, problem-solving skills and leadership as they mature and gain experience in the working world.

As the PolyU changes to the 4-year programme structure, there is increased emphasis on the overall personal growth and development of all students. They are required to take subjects in leadership and service learning, and inter-professional collaboration is enhanced through freshman seminars and other general education subjects. These changes may also help to nurture their generic competencies in terms of critical thinking, creativity, leadership and global outlook.

## **Chapter 6**

### **CONCLUSION**

The concept of outcome-based education places more emphasis on designing teaching programmes in order to achieve clearly defined learning outcomes. This approach is also widely adopted in healthcare education programmes in many developed countries such as the UK and Australia (Harrison and Mitchell, 2006; Scicluna et al, 2012). The idea is that teaching content and assessment methods must be aligned well in order to achieve the intended learning outcomes. The PolyU's OBE approach is also constructed in a similar way.

In the PT and OT programmes in the Department of Rehabilitation Sciences, the aim is to produce competent graduates who perform to a good standard in the workplace – namely the healthcare organisations in the public and private sectors in Hong Kong. We set out to evaluate the extent to which the generic and professional competencies are achieved by the graduates, by seeking the opinions of employers, graduates and undergraduate students.

An overview of the complete data set suggests that the three stakeholder groups were satisfied that the PolyU students had achieved or were on the road to achieving the programme outcomes to a level that would equip them for entry level to the respective professions. The results generally suggest that employers are satisfied with the performance of the graduates, and graduates are also generally satisfied with their education standards achieved. Areas for improvement have been identified for both programmes, and these include critical thinking and clinical reasoning skills, verbal and written communication skills, innovative and problem solving skills as well as leadership. The results show that the programmes need to continue to revise and update the curriculum in order to further enhance these competencies. The results obtained in the study will be presented to the departmental staff as well as the various stakeholders, in order to provide information for future curriculum reviews and restructuring.

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2. BSc (Hons) in Physiotherapy, (2012-2016), (4-year programme)
3. BSc (Hons) in Occupational Therapy , (2012-2015), (3-year programme)
4. BSc (Hons) in Occupational Therapy , (2012-2016), (4-year programme)

# Appendix I

## Learning Outcomes for PolyU Graduates at Undergraduate Level

### *Policy and Guidelines*

\*Retrieved on 12<sup>th</sup> October, 2011 from

[http://www.polyu.edu.hk/obe/institutional\\_policies/Learning\\_Outcomes\\_for\\_PolyU\\_Graduates\\_at\\_Undergraduate\\_Level.pdf](http://www.polyu.edu.hk/obe/institutional_policies/Learning_Outcomes_for_PolyU_Graduates_at_Undergraduate_Level.pdf)

### **Background**

1.1 It is the continuing mission and pledged role of the University to foster academic excellence in a professional context, to provide a professionally-oriented and holistic education, and to produce preferred graduates who are all-round students with professional competence. This overarching educational objective is further specified in the form of graduate attributes in the University's strategic plans.

1.2 In the Strategic Plan for 2008-12, the University has updated the list of desired graduate attributes it had specified in the previous strategic plan. The attributes expected of PolyU graduates at undergraduate level thus now include professional competence, global outlook, interest in local and international affairs, problem solving, critical and creative thinking, communication and interpersonal skills, sense of social and national responsibility, cultural appreciation, lifelong learning, biliteracy and trilingualism, entrepreneurship, teamwork and leadership.

1.3 This document clarifies the policy and guidelines for developing graduate attributes in undergraduate programmes, and defines student learning outcomes with reference to the desired graduate attributes.

### **Policy and Guidelines**

2.1 The graduate attributes and the associated institutional learning outcomes articulated in this document apply to students enrolled on all undergraduate programmes, irrespective of the mode of delivery (whether they are full-time or part-time or via CyberU) and funding model (whether they are funded by UGC or self-financed) of the programme, and including programmes offered outside Hong Kong.

2.2 Academic programmes are expected to make significant contribution to the development of PolyU's intended learning outcomes in their students. On the other hand, it is acknowledged that some learning outcomes may be difficult to be developed in the formal curriculum of a programme. It is therefore not necessary and not advisable for a programme to include all institutional learning outcomes as programme outcomes. Departments and programme teams are expected to interpret the institutional learning outcomes in the context of their discipline and consider them alongside the industry's expectations and accreditation requirements of their programmes when reviewing programme outcomes. Programmes should identify for themselves which outcomes they could contribute to, and to what degrees and in what ways; learning outcomes that can be reasonably expected as outcomes of the programme should be incorporated as programme outcomes.

2.3 For intended learning outcomes that are deemed difficult to be achieved in the formal curriculum of a programme, departments may rely on the co-curricular activities organised by the Faculty/Department and the Student Affairs Office (SAO) as well as activities offered by other units such as Chinese Mainland Affairs Office (CMAO), Culture Promotion and Events Office (CPEO), Industrial Centre (IC), Information

Technology Service Office (ITS), International Affairs Office (IAO), Library (LIB) to achieve the outcomes. Departments should be specific with respect to which learning outcomes are expected to be achieved mainly through co- and extra-curricular activities. Departments have the responsibility to communicate this expectation to students, and to guide, encourage, and/or support them to attend relevant co- and extra-curricular activities. In relation to this, departments are reminded not to overburden students with excessive curricular activities thus preventing their participation in co- and extra-curricular activities.

### **Institutional Learning Outcomes**

3.1 Graduate attributes specified in the Strategic Plan are further articulated as institutional learning outcomes to clarify the expected level of attainment for undergraduate-level graduates. Where appropriate, programmes are expected to contextualise the learning outcomes so that they become a meaningful and integral part of student's learning experience obtained from the programme.

3.2 These institutional learning outcomes can be broadly understood as covering four domains of development, representing four broad qualities expectable in PolyU graduates, which are development as competent professionals, creative problem solvers, effective communicators, and responsible global citizens.

3.3 **Competent professionals:** PolyU graduates at undergraduate level are expected to possess the disposition and capabilities that enable them to function effectively in their chosen professions. More specifically, they will:

Demonstrate fundamental knowledge and skills required for functioning effectively as an entry-level professional, and be able to integrate and apply them effectively in practice. (**Professional competence**)

Be able to work collaboratively within a team, and have an understanding of leadership and be prepared to lead a team. (**Teamwork and leadership**)

Be aware of the global trends and opportunities in their professions. (**Global outlook**)

Demonstrate an understanding of the elements of entrepreneurship, such as active discovery and exploitation of opportunities, prudent risk taking and experimentation of novel ideas or methods. (**Entrepreneurship**)

Recognise the need to better themselves through continual learning and be able to plan and reflect on their own learning, as well as being able to use lifelong learning skills

such as information literacy for learning autonomously for professional or personal development. (**Lifelong learning**)

**3.4 Creative problem solvers:** PolyU graduates at undergraduate level are expected to be problem solvers capable of critical and creative thinking. More specifically, they will:

Be able to identify, define, and resolve problems pertinent to their future professional practice or daily life. (**Problem solving**)

Be able to examine and critique the validity of information, arguments, and different viewpoints, and reach a sound judgment on the basis of credible evidence and logical reasoning. (**Critical thinking**)

Be able to generate and experiment with novel ideas, methods, and approaches. (**Creative thinking**)

**3.5 Effective communicators:** PolyU graduates at undergraduate level are expected to be effective communicators with good interpersonal skills, who can manage workplace communication in English and in Chinese. More specifically, they will:

Be able to communicate ideas and to connect and establish positive relationships with different people across a range of professional and personal contexts. (**Communication and interpersonal skills**)

Be able to comprehend and communicate effectively in English and Chinese (including Putonghua) in professional/work-related contexts, both orally and in writing. (**Biliteracy and trilingualism**) (*Note: This outcome is not applicable to overseas students*)

**3.6 Educated global citizens:** PolyU graduates at undergraduate level are expected to be responsible and cultivated citizens with an interest in local and international affairs and the ability to appreciate and respect different cultures. More specifically, they will:

Acknowledge their responsibilities to the society and their own nation and the need to behave ethically and morally, be willing to engage in services/activities beneficial to the society. (**Social and national responsibility**)

Be interested and purposely engaged in activities to foster an understanding of local and international affairs and issues. (**Interest in local and international affairs**)

Have an interest for appreciating artistic/cultural forms and/or participating in cultural activities. (**Cultural appreciation**)

Have a sensitivity and respect for cultural diversity. (**Global outlook**)

## Appendix II

### Alignment of RS programmes' generic competencies learning outcomes with University's\*

| <b>Programme Outcome for Physiotherapy</b>                          | <b>Programme Outcome for Occupational Therapy</b>  | <b>Institutional Outcome (referred to Appendix I)</b>   |
|---|--|---|
| Language proficiency – bilingualism and professional-based language | Effectively use English/Chinese (verbal and written) o communicate and interact effectively with clients, care-givers, peers, colleagues and other health care professionals with clarity and sensitivity in a professional manner | Be able to comprehend and communicate effectively in English and Chinese (including Putonghua) in professional/work-related contexts, both orally and in writing<br><b>(Biliteracy and tri-lingualism)</b><br>(Not applicable to overseas students) |
| Communication and interpersonal skills                              | Effectively use interpersonal skills to enhance treatment processes and reduce misunderstandings and conflicts among peers, patients, care-givers and team members.  | Be able to communicate ideas and to connect and establish positive relationships with different people across a range of professional and personal contexts<br><b>(Communication and interpersonal skills)</b>                                      |
| Problem-solving ability   |  | Be able to identify, define and resolve problems pertinent to their future professional practice or daily life<br><b>(Problem solving)</b>  |
|   |  | Be able to examine and critique the validity of information, arguments and different viewpoints and reach a sound judgment on the basis of credible evidence and logical reasoning<br><b>(Critical thinking)</b>                                    |
|   |  | Be able to generate and experiment with novel ideas, methods and approaches<br><b>(Creative thinking)</b>   |
| Personal and  | Translate ethical principles   | Acknowledge their   |

|                                 |  |   |
|---------------------------------|--|---|
| professional ethics             | into responsible and accountable behaviour and exhibit appropriate personal and professional conduct   | responsibilities to the society and their own nation and the need to behave ethically and morally; be willing to engage in services/activities beneficial to society<br><b>(Social and national responsibility)</b>   |
| Entrepreneurship                |  | Demonstrate an understanding of the elements of entrepreneurship, such as active discovery and exploitation of opportunities, prudent risk taking and experimentation of novel ideas of methods<br><b>(Entrepreneurship)</b>  |
| Leadership and Teamwork         | Demonstrate leadership skills in student organizations, social functions and outside visits.   | Be able to work collaboratively within a team and have an understanding of leadership and be prepared to lead a team <b>(Teamwork and leadership)</b>   |
| Life-long learning attitude     | Continue on-going and professional development through participation in professional conferences, workshops, postgraduate studies so as to keep abreast of local and international professional and technological developments, in particular in the field of rehabilitation | Recognise the need to better themselves through continual learning and be able to plan and reflect on their own learning, as well as being able to use lifelong learning skills such as information literacy for learning autonomously for professional or personal development<br><b>(Lifelong learning)</b> |
| Social and civic responsibility | Act as responsible citizens fulfilling social and civic duties to promote quality of life for people with disabilities in Hong Kong and China  | Acknowledge their responsibilities to the society and their own nation and the need to behave ethically and morally; be willing to engage in services/activities beneficial to society<br><b>(Social and national responsibility)</b>   |
|                                 |  | Be interested and purposely engaged in activities to foster   |



|                |  |   |
|----------------|--|---|
|                |  | an understanding of local and international affairs and issues<br><b>(Interest in local and international affairs)</b>                  |
| Global outlook |  | Have an interest for appreciating artistic/cultural forms and/or participating in cultural activities<br><b>(Cultural appreciation)</b> |
|                |  | Have a sensitivity and respect for cultural diversity<br><b>(Global outlook)</b>  |

\*Please read this table in conjunction with the alignment of Programme and University outcomes for professional skills (Appendix III), as there are also several University generic competencies embedded in the Programmes' professional skills outcomes (for example, global outlook, critical thinking, problem solving, teamwork and leadership, communication and interpersonal skills, entrepreneurship and lifelong learning).

## Appendix III

### Programme specific outcomes: Professional/academic knowledge and skills alignment with Institutional outcomes\*

| Programme Outcome for Physiotherapy  | Programme Outcome for Occupational Therapy  | Institutional Outcome (referred to Appendix I)   |
|--|---|--|
| Appraise the health and social care needs of clients, including screening, prevention and wellness programmes appropriate to physiotherapy   | Demonstrate the understanding and integration of the current biological, behavioural, social and clinical sciences for occupational therapy practice with due reference to the holistic approach in healthcare issues.  | Demonstrate fundamental knowledge and skills required or functioning effectively as an entry-level professional, and be able to integrate and apply them effectively in practice<br><b>(Professional competence)</b><br>Be able to examine and critique the validity of information, arguments and different viewpoints and reach a sound judgment on the basis of credible evidence and logical reasoning <b>(Critical thinking)</b>  |
| <p>Practise physiotherapy safely and effectively:</p> <ul style="list-style-type: none"> <li>Assess the physical, mental, environmental and cultural factors influencing the patient/client and formulate a diagnosis on the basis of physiotherapy assessments.</li> <li>Analyze, synthesize knowledge and prioritize assessment findings to establish functional goals with the patient/client that are achievable within a specified time period and within resource constraints.</li> <li>Monitor and adjust the plan of care in response to patient/client status.</li> <li>Evaluate the</li> </ul> | <p>Contribute to the planning, organizing, managing, leading and assuring the quality of services of an occupational therapy unit</p> <p>Identify patients'/clients' functional problems resulting from development dysfunction, physical dysfunction, psychosocial dysfunction and/or ageing process</p> | <p>Demonstrate fundamental knowledge and skills required or functioning effectively as an entry-level professional, and be able to integrate and apply them effectively in practice<br/><b>(Professional competence)</b></p> <p>Be able to communicate ideas and to connect and establish positive relationships with different people across a range of professional and personal contexts <b>(Communication and interpersonal skills)</b></p> <p>Be able to examine and critique the validity of information, arguments and different viewpoints and reach a sound judgment on the basis of credible evidence and logical reasoning <b>(Critical thinking)</b></p> |

|  |  |   |
|--|--|---|
| outcome(s) of all levels of physiotherapy service: individual treatment, plan of care and/or intervention programmes   |  |   |
| Collaborate with patients/clients, family members and other professionals to determine a plan of care and strategies for meeting the needs of clients that are realistic and acceptable to the patient/client, family and therapist                            |  | <p>Be able to work collaboratively within a team and have an understanding of leadership and be prepared to lead a team <b>(Teamwork and leadership)</b></p> <p>Have a sensitivity and respect for cultural diversity <b>(Global outlook)</b></p>   |
| Implement a physiotherapy plan of care which is safe, efficient and cost-effective   | Plan and provide quality and evidence-based OT programmes to help clients fulfil their own life roles and function independently in the community. | Demonstrate an understanding of the elements of entrepreneurship, such as active discovery and exploitation of opportunities, prudent risk taking and experimentation of novel ideas of methods <b>(Entrepreneurship)</b>   |
| Recognise the responsibility to deliver service and practice in accordance with current legislation applicable to physiotherapy, to maintain and promote the highest professional and ethical standards and to contribute to the development of the profession |  | <p>Be aware of the global trends and opportunities in their professions <b>(Global outlook)</b></p> <p>Recognise the need to better themselves through continual learning and be able to plan and reflect on their own learning, as well as being able to use lifelong learning skills such as information literacy for learning autonomously for professional or personal development <b>(Lifelong learning)</b></p> <p>Acknowledge their responsibilities to the society and their own nation and the need to behave ethically and morally; be willing to engage in</p> |

|   |   |  |
|---|---|--|
|   |   | services/activities beneficial to society ( <b>Social and national responsibility</b> )  |
| Critically evaluate published research evidence on techniques/technology and apply relevant findings to physiotherapy practice, research and education          | Understand the local and international health and labour policies and trends, identify market needs for OT services, and engage in service development and public education for Hong Kong and mainland China. | <p>Be aware of the global trends and opportunities in their professions (<b>Global outlook</b>)</p> <p>Recognise the need to better themselves through continual learning and be able to plan and reflect on their own learning, as well as being able to use lifelong learning skills such as information literacy for learning autonomously for professional or personal development (<b>Lifelong learning</b>)</p> <p>Be able to examine and critique the validity of information, arguments and different viewpoints and reach a sound judgment on the basis of credible evidence and logical reasoning (<b>Critical thinking</b>)</p> |
| Demonstrate clinical decision-making skills including clinical reasoning, clinical judgment and reflective practice to solve professional and clinical problems |   | Be able to identify, define and resolve problems pertinent to their future professional practice or daily life ( <b>Problem solving</b> )  |

\*Please note that there is also overlap here with Institutional Generic Outcomes

## Appendix IV

### Questionnaire design: Revisions made to 2008 version

#### Survey of Employers' Opinions of PolyU Graduates of the BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy Programmes

[Note: the learning outcomes listed below have been extracted from the 'BSc (Hons) in Physiotherapy, Credit-Based Curriculum – Code:51056, Programme Information and Syllabus (2010-2013)']

Notes for the amendments made in the new version:

1. The number of items was reduced from 14 to 13 for the *generic skills/competencies* section in the new version. For *professional skills/competencies* section, the number of items remained the same (i.e. 13 items).
2. Item #2 in the 08' version (*demonstrate the initiative to maximize own learning in professional and administrative areas*) was **removed and replaced** by *Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy* to address 'global outlook' as one of the programme learning outcomes.

The reason why item #2 was removed is that this item was very similar to item #13, with both of them addressing the demonstration of initiatives. As there was no item to address the ILO 'global outlook', this item was added to the new version.

3. Item #22 in the 08' version (*verbally report cases in an organized and clear manner*) has been replaced by moving item #14 (*apply knowledge learnt to meeting the needs and nature of the employing organization*) from the 'generic skills/competencies' section to the 'professional skills/competencies' section. Item #22 was removed since this should have been addressed in item #9 of the generic skills/competencies section.
4. Regarding the open-ended questions,
  - a. The first question was revised by inserting the headings '*generic skills/competencies*' and '*professional skills/competencies*' to make it more explicit to the respondents.
  - b. the second question was revised to provide four options for levels of overall performance (*high / average / low/ under-performing*). This revision was made to align with the corresponding interview question.
5. To establish the content validity of the new version, the project team mapped the questionnaire items to the programme learning outcomes (see the matrix below). However, items #4 and #12 referred to '*time management*' and '*creativity*' respectively, which are currently not mentioned in the document, '*BSc (Hons) in Physiotherapy, Credit-Based Curriculum – Code:51056, Programme Information and Syllabus (2010-2013)*'.

## Key to the matrix below:

### *Professional /academic knowledge and competencies*

1. Appraise the health and social care needs of clients, including screening, prevention, and wellness programmes appropriate to physiotherapy
2. Practice physiotherapy safely and effectively:
  - i. Assess the physical, mental, environmental and cultural factors influencing the patient/client, and formulate a diagnosis on the basis of physiotherapy assessment.
  - ii. Analyze, synthesize knowledge and prioritize assessment findings to establish functional goals with the patient/client that are achievable within a specified time period and within resource constraints.
  - iii. Collaborate with patients/clients, family members, and other professionals to determine a plan of care and strategies for meeting the needs of clients that are realistic and acceptable to the patient/client, family and therapist.
  - iv. Implement a physiotherapy plan of care which is safe, efficient and cost-effective.
  - v. Monitor and adjust the plan of care in response to patient/client status.
  - vi. Evaluate the outcome(s) of all levels of physiotherapy service: individual treatment, plan of care and/or intervention programme.
3. Recognize the responsibility to deliver service and practice in accordance with current legislation applicable to physiotherapy, to maintain and promote the highest professional and ethical standards and to contribute to the development of the profession
4. Critically evaluate published research evidence on techniques/technology and apply relevant findings to physiotherapy practice, research and education
5. Demonstrate clinical decision-making skills including clinical reasoning, clinical judgment, and reflective practice to solve professional and clinical problems

### *Generic attributes*

1. Language proficiency – bilingualism and professional-based language
2. Communication & interpersonal skills
3. Problem-solving ability
4. Personal and professional ethics
5.
  - a. Entrepreneurship
  - b. leadership
  - c. teamwork
6. life-long learning attitude
7. social and civic responsibility
8. global outlook

### Mapping of questionnaire items and RS programme outcomes

| Programme outcomes   | P1 | P2 | P3 | P4 | P5 | G1 | G2 | G3 | G4 | G5 | G6 | G7 | G8 |
|----------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Questionnaire items: |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Generic skills       |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 1                    |    |    |    |    |    |    |    | √  |    |    |    |    |    |
| 2                    |    |    |    |    |    |    |    |    |    |    |    |    | √  |
| 3                    |    |    |    |    |    |    |    |    | √  |    |    | √  |    |

|                               |   |              |   |   |   |   |   |   |  |        |   |  |  |
|-------------------------------|---|--------------|---|---|---|---|---|---|--|--------|---|--|--|
| 4<br>(time management)*       |   |              |   |   | √ |   |   | √ |  |        |   |  |  |
| 5                             |   |              |   |   |   |   |   | √ |  |        |   |  |  |
| 6                             |   |              |   |   |   |   |   |   |  | √ (b)  |   |  |  |
| 7                             |   |              |   |   |   |   |   |   |  | √ (c ) |   |  |  |
| 8                             |   |              |   |   |   |   |   | √ |  |        |   |  |  |
| 9                             |   |              |   |   |   | √ | √ |   |  |        |   |  |  |
| 10                            |   |              |   |   |   |   | √ |   |  |        |   |  |  |
| 11                            |   |              |   |   |   |   | √ |   |  |        |   |  |  |
| 12<br>(creativity)*           |   |              |   |   |   |   |   |   |  | √      | √ |  |  |
| 13                            |   |              |   |   |   |   |   |   |  |        | √ |  |  |
| <b>Professional knowledge</b> |   |              |   |   |   |   |   |   |  |        |   |  |  |
| 14                            |   |              | √ |   |   |   |   |   |  |        |   |  |  |
| 15                            |   | √ (ii)       |   | √ | √ |   |   |   |  |        |   |  |  |
| 16                            |   | √(ii)        |   |   |   |   |   |   |  |        |   |  |  |
| 17                            |   |              |   |   | √ |   |   |   |  |        |   |  |  |
| 18                            |   | √(i, ii)     |   |   |   |   |   |   |  |        |   |  |  |
| 19                            |   | √<br>(ii,iv) |   |   |   |   |   |   |  |        |   |  |  |
| 20                            |   | √ (vi)       |   |   |   |   |   |   |  |        |   |  |  |
| 21                            |   |              |   | √ |   |   |   | √ |  |        |   |  |  |
| 22                            |   | √ (iii)      |   |   |   |   |   |   |  |        |   |  |  |
| 23                            |   | √ (iii)      |   |   |   |   |   |   |  |        |   |  |  |
| 24                            | √ | √ (i)        |   |   |   |   |   |   |  |        |   |  |  |
| 25                            | √ |              |   |   |   |   |   |   |  |        |   |  |  |
| 26                            | √ |              |   |   |   |   |   |   |  |        |   |  |  |

\*Not mentioned specifically in RS Programme outcomes

## Appendix V: Questionnaire cover letter and consent form



THE UNIVERSITY OF HONG KONG

PUBLIC OPINION PROGRAMME

香港大學 民意研究計劃

Dear Sir/Madam,

### **Invitation to Participate in Survey of Employers' Opinions of PolyU Graduates**

### **of the BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy Programmes**

The Department of Rehabilitation Sciences (RS) of The Hong Kong Polytechnic University cordially invites you to participate in a telephone survey about the performance of recent graduates of the two RS programmes, BSc (Hons) Occupational Therapy and BSc (Hons) Physiotherapy. The Public Opinion Programme (POP) at The University of Hong Kong is commissioned to conduct this survey. The targets of the survey are employers of graduates who graduated in the years 2008- 2011.

The survey aims to collect the employers' feedback about the curricula as part of the commitment by RS to provide a high quality of professional education. Your feedback is crucial to this quality assurance and improvement mechanism.

Our interviewers will contact you during office hours in **October / November 2011**, and conduct a telephone interview with you for about 5 minutes. Your views will make a significant contribution to ongoing improvements to the quality of education for occupational therapists and physiotherapists. Please rest assured that all data will be collected and analysed independently by POP. The data will be kept strictly confidential and no matching of personal identity will be made under any circumstances.

For any enquiries regarding the telephone survey, please contact Mr. Frank Lee of POP at 3921 2724 or email via [frank.lee@hkupop.hku.hk](mailto:frank.lee@hkupop.hku.hk); or Ms. Anne Kwok of POP at 3921 2714 or email via [anne.kwok@hkupop.hku.hk](mailto:anne.kwok@hkupop.hku.hk). If you would prefer not to participate in this survey, please kindly provide your phone / email confirmation to Mr. Frank Lee within 5 working days after you have received this letter. Thank you in anticipation.

Yours sincerely,

Dr Robert Chung Ting-yiu  
Director of Public Opinion Programme  
The University of Hong Kong

Dr. Grace Szeto  
Associate Professor  
Department of Rehabilitation Sciences  
The Hong Kong Polytechnic University

Dr. Kenneth Fong  
Assistant Professor  
Department of Rehabilitation Sciences  
The Hong Kong Polytechnic University



## Consent form

Department of Rehabilitation Sciences  
The Hong Kong Polytechnic University

Public Opinion Programme  
The University of Hong Kong

### Study Project Informed Consent Form

- Project area:** Influence of outcome-based education on physiotherapy and occupational therapy students, and the stakeholders' perception of the learning outcomes obtained and their expectations of future graduate from the 334 education system.
- Project title:** Exploring the impact of outcome-based education on physiotherapy and occupational therapy students, and analysis of stakeholders' opinions on learning outcome achievement, and expectation from the 334 graduates
- Organization:** Department of Rehabilitation Sciences, the Hong Kong Polytechnic University commissions the Public Opinion Programme (POP) at The University of Hong Kong to conduct this survey
- Investigators:** Dr. Grace Szeto (Associate Professor, Department of Rehabilitation Sciences), Dr. Kenneth Fong (Assistant Professor, Department of Rehabilitation Sciences), Mr. Wynants Ho (Project Associate, Department of Rehabilitation Sciences)

### **Project information:**

The major objective of this project is to explore the influence of outcome-based education on PT and OT students, the stakeholders' perceptions of the learning outcomes obtained and their expectations of future graduates from the 334 education system. Specific study objectives include:

- a. Identify and map out the scopes of intended learning outcomes (ILOs) as understood
- b. Understand students' perspectives of future roles in PT and OT careers
- c. Review ILOs of PT and OT curriculum and teaching and learning strategies for 3-year and 4-year undergraduates courses

The research will include both quantitative and qualitative studies. You are now being invited to participate in a questionnaire survey conducted to the employers of PT and OT by the Public Opinion Programme (POP), The University of Hong Kong from September 2011 to November 2011. The project team will also conduct individual / focus group interviews for randomly selected participants from all the employers to solicit qualitative feedback from October 2011 to December 2011.

**Consent:**

I, \_\_\_\_\_, have been explained the details of this study. I voluntarily consent to participate in this study. I understand that I can withdraw from this study at any time without giving reasons, and my withdrawal will not lead to any punishment or prejudice against me. I am aware of any potential risk in joining this study. I also understand that my personal information will not be disclosed to people who are not related to this study and my name or photograph will not appear on any publications resulted from this study.

I can contact the investigator, Mr. Wynants Ho (project associate) at telephone 27666742 for any questions about this study. If I have complaints related to the investigator(s), I can contact Mr. Leung, secretary of Departmental Research Committee, Department of Rehabilitation Sciences, the Hong Kong Polytechnic University at 27665398. I know I will be given a signed copy of this consent form.

Signature (subject): \_\_\_\_\_ Date: \_\_\_\_\_

Signature (witness): \_\_\_\_\_ Date: \_\_\_\_\_

Signature (investigator): \_\_\_\_\_ Date: \_\_\_\_\_

Signature (investigator): \_\_\_\_\_ Date: \_\_\_\_\_

Signature (investigator): \_\_\_\_\_ Date: \_\_\_\_\_

=====

# Appendix VI: Questionnaires and interview guides for employers



The Hong Kong Polytechnic University Department of Rehabilitation Sciences

調查僱主對理工大學「職業治療學(榮譽)理學士」及「物理治療學 (榮譽)理學士」  
畢業生之表現

Survey of Employers' Opinions of PolyU Graduates of the  
BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy  
Programmes

## 第一部 個人及所屬機構背景資料

### Part I Background information about you and your organisation

#### 1. 機構類別 Type of organisation

- ① 醫院管理局 Hospital Authority      ⑨ 社區中心 Community Centre  
② 私立醫院 Private Hospital setting      ⑩ 保險業及相關機構 Insurance and workers' compensation

- ③ 非政府組織 (社福機構)      ⑪ 治療相關組織 Therapy-related setting  
Non-Government Organisation      ( 請 註 明 Please specify):

- ④ 社會福利署 Social Welfare Department      ⑫ 非治療相關組織 Non-therapy related organization  
⑤ 職業訓練局 Vocational Training Council      ( 請 註 明 Please specify):

- ⑥ 衛生署 Department of Health      ⑬ 其他: Others  
⑦ 辦學團體 (如: 特殊學校)      ( 請 註 明 Please specify):

Educational setting (e.g. special schools)

- ⑧ 私人執業 Private OT or PT practice

#### 2. 工作地點 Location

- ① 本地(香港境內) Local (within Hong Kong SAR)  
② 外地(香港境外) Overseas (outside Hong Kong SAR)

3. 閣下職位名稱為 Please state your current job title: \_\_\_\_\_

4. 職業治療師及物理治療師在職人數 (請於適當的空格內填上數字)

Number of occupational therapists (OT) or physiotherapists (PT) employed (please fill in the numbers in the appropriate boxes)

在貴機構工作之年數

未夠 1 年 1 年 2-4 年 5-10 年 >10 年

Number of years working in your organisation

>1 yr 1 yr 2-4 yrs 5-10 yrs >10 yrs

職業治療師在職人數

Total number of OT currently employed

(applicable for OT employers ONLY)

物理治療師在職人數

Total number of PT currently employed

(applicable for PT employers ONLY)

職業治療學畢業生(2009-2011 年間畢業)之在職人數

Total number of recent OT graduates (2009-2011) currently employed

物理治療學畢業生(2009-2011 年間畢業)之在職人數

Total number of recent PT graduates (2009-2011) currently employed

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## EMPLOYERS

第二部 理工大學「職業治療學(榮譽)理學士」及「物理治療學 (榮譽)理學士」畢業生之表現

Part II Performance of PolyU BSc (Hons) OT and BSc (Hons) PT Graduates

只問現有或曾聘用理工大學「職業治療學(榮譽)理學士」及「物理治療學 (榮譽)理學士」2008 至 2011 年間畢業生之僱主，否則直接跳至第三部作答。

Answer this part only if you are currently employing or have previously employed any PolyU BSc (Hons) OT and/or BSc (Hons) PT graduates of 2008, 2009, 2010 and/or 2011 in the past. If you have not employed any graduates in these categories, please skip this section and go directly to the questions in Part III on the next page.

畢業生在有關要求/標準之表現  
Performance of the graduates in  
meeting requirements/standards

## Q1. 共通技能/能力 Generic competencies

|   | 標準以上       | 大致合乎標準         | 僅僅未達標準         | 標準以下      | 不適用            |
|---|------------|----------------|----------------|-----------|----------------|
|   | Far exceed | Generally meet | Slightly below | Far below | Not applicable |
| 1. 能適應不斷轉變的工作環境<br>Be adaptable and flexible to cope with a changing work environment.  | 4          | 3              | 2              | 1         | NA             |
| 2. 具國際視野，樂於接受物理/職業治療的新觀點及勇敢面對挑戰<br>Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of Physiotherapy/ Occupational therapy. | 4          | 3              | 2              | 1         | NA             |
| 3. 表現專業，如：有責任感、守時、可靠及守信用等<br>Demonstrate professional behaviours (e.g., sense of responsibility, punctuality, reliability and confidentiality, etc.)                                      | 4          | 3              | 2              | 1         | NA             |
| 4. 有效率及有效地組織工作<br>Organise work in a cost effective and timely manner (i.e., efficiently).  | 4          | 3              | 2              | 1         | NA             |
| 5. 能獨立執行職務<br>Be able to work independently.  | 4          | 3              | 2              | 1         | NA             |
| 6. 表現恰當的領導能力<br>Demonstrate leadership appropriately.   | 4          | 3              | 2              | 1         | NA             |
| 7. 在專業團隊中有效地工作<br>Work effectively in multidisciplinary teams.  | 4          | 3              | 2              | 1         | NA             |
| 8. 能就困難草擬解決問題的方案及運用適當的策略去處理<br>Apply problem-solving skills and use suitable strategies to overcome difficulties.   | 4          | 3              | 2              | 1         | NA             |
| 9. 在各種專業範疇中表現出口述及書寫兼備的語言能力<br>Demonstrate language proficiency in oral and written communication in all aspects of professional practice.   | 4          | 3              | 2              | 1         | NA             |
| 10. 使用適當資訊科技，如：電腦技能以提升工作效率<br>Utilise appropriate information technology skills to improve productivity at work.  | 4          | 3              | 2              | 1         | NA             |
| 11. 在適當時候尋求意見及澄清疑問<br>Seek advice and clarify doubts when necessary.  | 4          | 3              | 2              | 1         | NA             |
| 12. 在服務/業務上發揮創意，如：提出新的服務意念<br>Be innovative in services/areas of practice (e.g. generating new service ideas).  | 4          | 3              | 2              | 1         | NA             |
| 13. 在個人/專業發展方面表現主動<br>Demonstrate initiatives for personal/professional development.  | 4          | 3              | 2              | 1         | NA             |

## 畢業生在有關要求/標準之表現

### Performance of the graduates in meeting requirements/standards

## Q2. 專業技能/能力 Professional competencies

|   | 標準以上       | 大致合乎標準         | 僅僅未達標準         | 標準以下      | 不適用            |
|---|------------|----------------|----------------|-----------|----------------|
|   | Far exceed | Generally meet | Slightly below | Far below | Not applicable |
| 1. 嚴守道德操守及法例準則<br>Adhere to ethical and/or legal practice standards.                                    | 4          | 3              | 2              | 1         | NA             |
| 2. 分析臨床評估結果以瞭解問題及提出治療方案<br>Analyse clinical findings to establish a problem list and outcomes of care.  | 4          | 3              | 2              | 1         | NA             |
| 3. 製訂完善的療程計劃，當中包括目標、治療、療效及執行計劃<br>Design a comprehensive plan of care that integrates goals, treatment, | 4          | 3              | 2              | 1         | NA             |

|  |     |     |     |     |    |
|--|-----|-----|-----|-----|----|
| outcomes, and discharge plan.  |     |     |     |     |    |
| 4. 應用專業理論及分析於臨床實踐上<br>Apply the principles of clinical thinking or clinical reasoning to practice.                             | (4) | (3) | (2) | (1) | NA |
| 5. 以有邏輯、組織及準確的方式進行臨床評估<br>Perform clinical examinations in a logical, organised, and accurate fashion.                         | (4) | (3) | (2) | (1) | NA |
| 6. 提供有效率、有成效及專業的治療方法<br>Perform interventions efficiently, effectively and professionally.                                     | (4) | (3) | (2) | (1) | NA |
| 7. 能就服務提供精簡、清晰及準確的書面報告<br>Produce legible, concise, and accurate written documentation to support the delivery of services.    | (4) | (3) | (2) | (1) | NA |
| 8. 能應用知識以切合受僱機構的要求及性質<br>Apply learnt knowledge to meet the needs and nature of the employing organization.                    | (4) | (3) | (2) | (1) | NA |
| 9. 跟病人、其家人及其他照顧者建立良好關係<br>Develop good rapport with clients, their families and/or other caregivers.                           | (4) | (3) | (2) | (1) | NA |
| 10. 用有效及適當方式教導病人、其家人及其他照顧者<br>Educate clients, families, or other caregivers using appropriate and effective teaching methods. | (4) | (3) | (2) | (1) | NA |
| 11. 安全至上，盡量減低對病人、自己及其他人的風險<br>Practise in a safe manner that minimises risk to clients, self, and others.                      | (4) | (3) | (2) | (1) | NA |
| 12. 尊重及留意個別及不同病人之需要<br>Respect for and be sensitive to individual needs or differences.  | (4) | (3) | (2) | (1) | NA |
| 13. 可勝任有效的健康推廣教育及基層醫療<br>Act as an effective educator in health promotion and primary care.                                    | (4) | (3) | (2) | (1) | NA |

### Q3. 整體滿意度 Overall Satisfaction

|   |                |     |               |
|---|----------------|-----|---------------|
|   | 非常滿意           |     | 不滿意           |
|   | Very satisfied |     | Not satisfied |
| 1. 整體而言，你對理工大學「職業治療學(榮譽)理學士」或「物理治療學(榮譽)理學士」的滿意程度有多大?<br>Overall, how satisfied are you with your experience of the undergraduate programme provided by the Department of Rehabilitation Sciences? | (4)            | (3) | (2) (1)       |

### 第三部 其他意見

#### Part III Other Comments

4. 你對理工大學畢業生哪方面的表現最感滿意?  
Which aspects of the PolyU graduates' performance are you most satisfied with?
- a. 共通技能/能力方面 Generic skills / competencies

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b. 專業技能/能力方面 Professional skills / competencies

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5. 就對「職業治療學 (榮譽)理學士」或「物理治療學 (榮譽)理學士」兩個課程的整體評價，請闡明給予此評價的原因。

Please explain your reasons for the overall satisfaction about the BSc (Hons) in Occupational Therapy or BSc (Hons) in

Physiotherapy programme provided by the Department of Rehabilitation Sciences.

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6. 請就如何改善「職業治療學 (榮譽)理學士」或「物理治療學 (榮譽)理學士」兩個課程從而令畢業生達到業界或貴機構的要求及標準方面提出意見。

Please suggest how the BSc (Hons) in OT and PT programmes might be improved to produce graduates that meet the requirements and standards of the profession/your organisation.

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7. 其他意見 Other comments:

## ***Interview questions:***

**Exploring the impact of outcome-based education on physiotherapy and occupational therapy students, and analysis of stakeholders' opinions on learning outcome achievement, and expectation from the 334 graduates**

### **Major objective:**

To explore the influence of outcome-based education on PT and OT students, the stakeholders' perceptions of the learning outcomes obtained and their expectations of future graduates from the 334 education system:

- d. Identify and map out the scopes of intended learning outcomes (ILOs) as understood
- e. Understand students' perspectives of future roles in PT and OT careers
- f. Review ILOs of PT and OT curriculum and teaching and learning strategies for 3-year and 4-year undergraduates courses

### **Interview questions (employers):**

1. How do you perceive the generic skills (such as critical thinking, problem solving, written & verbal communication, teamwork..etc) of the graduates who are under your supervision?
2. How do you perceive professional knowledge of the graduates who are under your supervision?
3. How do you perceive the overall performance (high / average / low /under-performed) of our graduates? Please explain your reasons for this view.
4. To what extent do you think our current programme can fulfill the needs of your organization? In relation to your answer, what do you see as the strengths and weaknesses of our programme?
5. Can you give some recommendations to improve our current programmes (OT/PT) in order to provide better training for our future graduates to meet workplace needs?



# Appendix VII: Questionnaires and interview guide for graduates

## GRADUATES



The Hong Kong Polytechnic University

Department of Rehabilitation Sciences

調查畢業生對理工大學「職業治療學(榮譽)理學士」及「物理治療學 (榮譽)理學士」兩個課程的評價

Survey of BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy Graduates 2009, 2010 and 2011

### 第一部 個人及受雇背景資料

#### Part I Personal and employment information

##### 1. 曾完成的課程 Programme of study graduated from

- ☐ ① 職業治療學(榮譽)理學士 BSc (Hons) in Occupational Therapy  
☐ ② 物理治療學 (榮譽)理學士 BSc (Hons) in Physiotherapy

##### 2. 畢業年份 Year of graduation

- ☐ ① 2009 ☐ ② 2010 ☐ ③ 2011 ☐ ④ Others (請註明 Please specify):

##### 3. 受聘現況 Current employment

- ☐ ① 受聘於有關康復治療的行業 Employed in rehabilitation/therapy-related fields  
☐ ② 受聘於有關康健的行業 Employed in health and wellness-related fields (請註明 Please specify)  
☐ ③ 受聘於其他行業 Employed in other areas (請註明 Please specify)  
☐ ④ 全時間進修 Pursuing full-time education (請註明課程及院校名稱 Please state the programme and institution)

☐ ⑤ 其他 Others (請註明 Please specify):

##### 4. 機構類別 Type of organisation or work setting (Please choose the most appropriate option)

- ☐ ① 醫院管理局 Hospital Authority ☐ ⑨ 社區中心 Community Centre  
☐ ② 私立醫院 Private Hospital setting ☐ ⑩ 保險業及相關機構 Insurance and workers' compensation\_\_  
☐ ③ 非政府組織 (社福機構) ☐ ⑪ 治療相關組織 Therapy-related setting  
Non-Government Organisation (請註明 Please specify):  
☐ ④ 社會福利署 Social Welfare Department ☐ ⑫ 非治療相關組織  
Non-therapy related organization  
☐ ⑤ 職業訓練局 Vocational Training Council (請註明 Please specify):  
☐ ⑥ 衛生署 Department of Health ☐ ⑬ 其他: Others  
☐ ⑦ 辦學團體 (如: 特殊學校) (請註明 Please specify):

Educational setting (e.g. special schools)

⑧ 私人執業 Private OT or PT practice

5. 工作地點 Location

① 本地(香港境內) Local (within Hong Kong SAR) ② 外地(香港境外) Overseas (outside Hong Kong SAR)

6. 閣下職位名稱為 state your current job title

7. 受聘形式 Nature of employment

① 全職 Full time (每星期 40 小時或以上 40 hours per week or more) ② 兼職 Part time (請註明每星期的時數)

Please specify: \_\_\_\_\_ hours a week)

8. 受聘條件 Conditions of employment/contract terms

① 6 個月內短期合約 Short-term contract of 6 months or less ③ 12 至 24 個月短期合約  
Short-term contract of

12 to 24 months

② 6 至 12 個月短期合約 Short-term contract of 6 to 12 months ④ 常規條款/可再續合約 Regular contract

terms/renewable

9. 進修計劃 Further study

在最近, 你有否持續進修的計劃? Currently, are you also pursuing continuing education?

① 有 Yes (請註明課程及院校名稱 Please specify the programme and institution):

② 沒有 No

**GRADUATES**

第二部 理工大學「職業治療學(榮譽)理學士」及「物理治療學(榮譽)理學士」對你專業發展的貢獻

**Part II Contribution of the programme to your professional competence**

For each statement below, please shade the appropriate oval completely to indicate the extent to which your PolyU Education Programme had contributed to your development of the indicated skill/competence

**對你發展有關技能/能力之貢獻**

**Contribution to your skills/competencies development**

**Q1. 共通技能/能力 Generic competencies**

標準以上 大致合乎標準 僅僅未達標準 標準以下 不適用

Far exceed Generally meet Slightly below Far below Not applicable

1. 能適應不斷轉變的工作環境

Be adaptable and flexible to cope with a changing work environment.

④ ③ ② ① NA

2. 具國際視野, 樂於接受物理/職業治療的新觀點及勇敢面對挑戰

Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy.

④ ③ ② ① NA

3. 表現專業, 如: 有責任感、守時、可靠及守信用等

Demonstrate professional behaviours (e.g., sense of responsibility,

④ ③ ② ① NA

|     |  |   |   |   |   |    |  |  |  |
|-----|--|---|---|---|---|----|--|--|--|
|     | punctuality, reliability and confidentiality, etc.)  |   |   |   |   |    |  |  |  |
| 4.  | 有效率及準時地組織工作<br>Organise work in a cost effective and timely manner (i.e., efficiently).  | 4 | 3 | 2 | 1 | NA |  |  |  |
| 5.  | 能獨立執行職務<br>Be able to work independently.  | 4 | 3 | 2 | 1 | NA |  |  |  |
| 6.  | 表現恰當的領導能力<br>Demonstrate leadership appropriately.   | 4 | 3 | 2 | 1 | NA |  |  |  |
| 7.  | 在專業團隊中有效地工作<br>Work effectively in multidisciplinary teams.  | 4 | 3 | 2 | 1 | NA |  |  |  |
| 8.  | 能就困難草擬解決問題的方案及運用適當的策略去處理<br>Apply problem-solving skills and use suitable strategies to overcome difficulties.                         | 4 | 3 | 2 | 1 | NA |  |  |  |
| 9.  | 在各種專業範疇中表現出口述及書寫兼備的語言能力<br>Demonstrate language proficiency in oral and written communication in all aspects of professional practice. | 4 | 3 | 2 | 1 | NA |  |  |  |
| 10. | 使用適當資訊科技，如：電腦技能以提升工作效率<br>Utilise appropriate information technology skills to improve productivity at work.                           | 4 | 3 | 2 | 1 | NA |  |  |  |
| 11. | 在適當時候尋求意見及澄清疑問<br>Seek advice and clarify doubts when necessary.   | 4 | 3 | 2 | 1 | NA |  |  |  |
| 12. | 在服務/業務上發揮創意，如：提出新的服務意念<br>Be innovative in services/areas of practice (e.g. generating new service ideas).                             | 4 | 3 | 2 | 1 | NA |  |  |  |
| 13. | 在個人/專業發展方面表現主動<br>Demonstrate initiatives for personal/professional development.   | 4 | 3 | 2 | 1 | NA |  |  |  |

## GRADUATES

### 對你發展有關技能/能力之貢獻 Contribution to your skills/competencies development

#### Q2. 專業技能/能力 Professional competencies

|     |  | 標準以上       | 大致合乎標準         | 僅僅未達標準         | 標準以下      | 不適用            |
|-----|--|------------|----------------|----------------|-----------|----------------|
|     |  | Far exceed | Generally meet | Slightly below | Far below | Not applicable |
| 1.  | 嚴守道德操守及法例準則<br>Adhere to ethical and/or legal practice standards.  | 4          | 3              | 2              | 1         | NA             |
| 2.  | 分析臨床評估結果以瞭解問題及提出治療方案<br>Analyse clinical findings to establish a problem list and outcomes of care.                                | 4          | 3              | 2              | 1         | NA             |
| 3.  | 製訂完善的療程計劃，當中包括目標、治療、療效及執行計劃<br>Design a comprehensive plan of care that integrates goals, treatment, outcomes, and discharge plan. | 4          | 3              | 2              | 1         | NA             |
| 4.  | 應用專業理論及分析於臨床實踐上<br>Apply the principles of clinical thinking or clinical reasoning to practice.                                    | 4          | 3              | 2              | 1         | NA             |
| 14. | 以有邏輯、組織及準確的方式進行臨床評估<br>Perform clinical examinations in a logical, organised, and accurate fashion.                                | 4          | 3              | 2              | 1         | NA             |
| 6.  | 提供有效率、有成效及專業的治療方法<br>Perform interventions efficiently, effectively and professionally.  | 4          | 3              | 2              | 1         | NA             |
| 7.  | 能就服務提供精簡、清晰及準確的書面報告  | 4          | 3              | 2              | 1         | NA             |

- |     |   |     |     |     |     |      |
|-----|---|-----|-----|-----|-----|------|
|     | Produce legible, concise, and accurate written documentation to support the delivery of services. | (4) | (3) | (2) | (1) | (NA) |
| 8.  | 能應用知識以切合受僱機構的要求及性質  |     |     |     |     |      |
|     | Apply learnt knowledge to meet the needs and nature of the employing organization.                |     |     |     |     |      |
| 9.  | 跟病人、其家人及其他照顧者建立良好關係   | (4) | (3) | (2) | (1) | (NA) |
|     | Develop good rapport with clients, their families and/or other caregivers.                        |     |     |     |     |      |
| 10. | 用有效及適當方式教導病人、其家人及其他照顧者  | (4) | (3) | (2) | (1) | (NA) |
|     | Educate clients, families, or other caregivers using appropriate and effective teaching methods.  |     |     |     |     |      |
| 11. | 安全至上，盡量減低對病人、自己及其他人的風險  | (4) | (3) | (2) | (1) | (NA) |
|     | Practise in a safe manner that minimises risk to clients, self, and others.                       |     |     |     |     |      |
| 12. | 尊重及留意個別及不同病人之需要   | (4) | (3) | (2) | (1) | (NA) |
|     | Respect for and be sensitive to individual needs or differences.                                  |     |     |     |     |      |
| 13. | 可勝任有效的健康推廣教育及基層醫療   | (4) | (3) | (2) | (1) | (NA) |
|     | Act as an effective educator in health promotion and primary care.                                |     |     |     |     |      |

### Q3. 整體滿意度 Overall Satisfaction

- |    |  |                                   |     |                     |
|----|--|-----------------------------------|-----|---------------------|
|    |  | 非<br>不滿意<br>Very Not<br>satisfied | 常   | 滿<br>意<br>satisfied |
|    |  | (4)                               | (3) | (2)                 |
| 2. | 整體而言，你對理工大學「職業治療學(榮譽)理學士」或「物理治療學(榮譽)理學士」的滿意程度有多大?  | (4)                               | (3) | (2)                 |
|    | Overall, how satisfied are you with your experience of your undergraduate programme provided by the Department of Rehabilitation Sciences? |                                   |     |                     |

## GRADUATES

### 第三部 其他意見

#### Part III Other Comments

- 請列出你對理工大學「職業治療學(榮譽)理學士」或「物理治療學 (榮譽)理學士」最感滿意的三個方面。  
Please list **three aspects** of your undergraduate education in the BSc (Hons) in Occupational Therapy or BSc (Hons) in Physiotherapy programme provided by the Department of Rehabilitation Sciences that you are most satisfied with.  
(i) \_\_\_\_\_  
(ii) \_\_\_\_\_  
(iii) \_\_\_\_\_
- 請列出你對理工大學「職業治療學(榮譽)理學士」或「物理治療學 (榮譽)理學士」最不感滿意的三個方面。  
Please list **three aspects** of your undergraduate education in the BSc (Hons) in Occupational Therapy or BSc (Hons) in Physiotherapy programme provided by the Department of Rehabilitation Sciences that you are least satisfied with.

Physiotherapy programme provided by the Department of Rehabilitation Sciences that you are least satisfied with.

- (i) \_\_\_\_\_
- (ii) \_\_\_\_\_
- (iii) \_\_\_\_\_

3. 請就如何改善理工大學「職業治療學 (榮譽)理學士」或「物理治療學 (榮譽)理學士」兩個課程提出三個意見。

Please list **three things** that could be improved with your education in the BSc (Hons) in Occupational Therapy or BSc (Hons) in Physiotherapy programme provided by the Department of Rehabilitation Sciences.

- (i) \_\_\_\_\_
- (ii) \_\_\_\_\_
- (iii) \_\_\_\_\_

- Q4. 其他意見 Other comments:

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## Appendix VIII: Questionnaires and interview guide for undergraduates

### UNDERGRADUATES



The Hong Kong Polytechnic University Department of Rehabilitation Sciences

調查現校學生對理工大學「職業治療學(榮譽)理學士」及「物理治療學 (榮譽)理學士」兩個課程的評價

Survey of BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy Undergraduates 2011 / 12

#### 第二部 個人背景資料

##### Part I Personal information

##### 1. 現正修讀之課程 Current programme of study

① 職業治療學 (榮譽)理學士 BSc (Hons) in Occupational Therapy

② 物理治療學 (榮譽)理學士 BSc (Hons) in Physiotherapy

##### 2. 現正修讀之年級 Current year of study

① 一年級 year1

② 二年級 year2

③ 三年級 year3

##### 3. 畢業後希望從事的機構類別 Type of organisation or work setting you would prefer after graduation (Please choose the most appropriate option)

① 醫院管理局 Hospital Authority

⑨ 社區中心 Community Centre

② 私立醫院 Private Hospital setting  
compensation\_\_

⑩ 保險業及相關機構 Insurance and workers'

③ 非政府組織 (社福機構)  
組織 Therapy-related setting

⑪ 治療相關

Non-Government Organisation

(請註明 Please specify):

④ 社會福利署 Social Welfare Department  
Non-therapy related organization

⑫ 非治療相關組織

⑤ 職業訓練局 Vocational Training Council

(請註明 Please specify):

⑥ 衛生署 Department of Health

⑬ 其他: Others

⑦ 辦學團體 (如: 特殊學校)

(請註明 Please

specify):

Educational setting (e.g. special schools)

⑧ 私人執業 Private OT or PT practice

##### 4. 進修計劃 Further study

當你完成現正修讀之「職業治療學(榮譽)理學士」或「物理治療學 (榮譽)理學士」課程，會否考慮持續進修? Are you also pursuing continuing education after having completed the current PT / OT programme?

① 有 Yes (請註明課程及院校名稱 Please specify the programme and institution):

② 沒有 No

## UNDERGRADUATES

### 第二部 理工大學「職業治療學(榮譽)理學士」及「物理治療學 (榮譽)理學士」對你專業發展的貢獻

#### Part II Contribution of the programme to your professional competence

For each statement below, please shade the appropriate oval completely to indicate the extent to which your PolyU Education Programme contributes to your development of the indicated skill/competence

#### 對你發展有關技能/能力之貢獻 Contribution to your skills/competencies development

##### Q1. 共通技能/能力 Generic competencies

標準以上 大致合乎標準 僅僅未達標準 標準以下 不適用

|   | Far exceed | Generally meet | Slightly below | Far below | Not applicable |
|---|------------|----------------|----------------|-----------|----------------|
| 1. 能適應不斷轉變的工作環境<br>Be adaptable and flexible to cope with a changing work environment.  | 4          | 3              | 2              | 1         | NA             |
| 2. 具國際視野，樂於接受物理/職業治療的新觀點及勇敢面對挑戰<br>Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy. | 4          | 3              | 2              | 1         | NA             |
| 3. 表現專業，如：有責任感、守時、可靠及守信用等<br>Demonstrate professional behaviours (e.g., sense of responsibility, punctuality, reliability and confidentiality, etc.)                | 4          | 3              | 2              | 1         | NA             |
| 4. 有效率及準時地組織工作<br>Organise work in a cost effective and timely manner (i.e., efficiently).  | 4          | 3              | 2              | 1         | NA             |
| 5. 能獨立執行職務<br>Be able to work independently.  | 4          | 3              | 2              | 1         | NA             |
| 6. 表現恰當的領導能力<br>Demonstrate leadership appropriately.   | 4          | 3              | 2              | 1         | NA             |
| 7. 在專業團隊中有效地工作<br>Work effectively in multidisciplinary teams.  | 4          | 3              | 2              | 1         | NA             |
| 8. 能就困難草擬解決問題的方案及運用適當的策略去處理<br>Apply problem-solving skills and use suitable strategies to overcome difficulties.   | 4          | 3              | 2              | 1         | NA             |
| 9. 在各種專業範疇中表現出口述及書寫兼備的語言能力<br>Demonstrate language proficiency in oral and written communication in all aspects of professional practice.                           | 4          | 3              | 2              | 1         | NA             |
| 10. 使用適當資訊科技，如：電腦技能以提升工作效率<br>Utilise appropriate information technology skills to improve productivity at work.  | 4          | 3              | 2              | 1         | NA             |
| 11. 在適當時候尋求意見及澄清疑問<br>Seek advice and clarify doubts when necessary.  | 4          | 3              | 2              | 1         | NA             |
| 12. 在服務/業務上發揮創意，如：提出新的服務意念<br>Be innovative in services/areas of practice (e.g. generating new service ideas).  | 4          | 3              | 2              | 1         | NA             |
| 13. 在個人/專業發展方面表現主動<br>Demonstrate initiatives for personal/professional development.  | 4          | 3              | 2              | 1         | NA             |

## UNDERGRADUATES

### 對你發展有關技能/能力之貢獻 Contribution to your skills/competencies development

#### Q2. 專業技能/能力 Professional competencies

|   | 標準以上       | 大致合乎標準         | 僅僅未達標準         | 標準以下      | 不適用            |
|---|------------|----------------|----------------|-----------|----------------|
|   | Far exceed | Generally meet | Slightly below | Far below | Not applicable |
| 1. 嚴守道德操守及法例準則<br>Adhere to ethical and/or legal practice standards.  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 2. 分析臨床評估結果以瞭解問題及提出治療方案<br>Analyse clinical findings to establish a problem list and outcomes of care.                                | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 3. 製訂完善的療程計劃，當中包括目標、治療、療效及執行計劃<br>Design a comprehensive plan of care that integrates goals, treatment, outcomes, and discharge plan. | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 4. 應用專業理論及分析於臨床實踐上<br>Apply the principles of clinical thinking or clinical reasoning to practice.                                    | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 15. 以有邏輯、組織及準確的方式進行臨床評估<br>Perform clinical examinations in a logical, organised, and accurate fashion.                               | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 6. 提供有效率、有成效及專業的治療方法<br>Perform interventions efficiently, effectively and professionally.  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 7. 能就服務提供精簡、清晰及準確的書面報告<br>Produce legible, concise, and accurate written documentation to support the delivery of services.           | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 8. 能應用知識以切合受僱機構的要求及性質<br>Apply learnt knowledge to meet the needs and nature of the employing organization.                           | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 9. 跟病人、其家人及其他照顧者建立良好關係<br>Develop good rapport with clients, their families and/or other caregivers.                                  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 10. 用有效及適當方式教導病人、其家人及其他照顧者<br>Educate clients, families, or other caregivers using appropriate and effective teaching methods.        | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 11. 安全至上，盡量減低對病人、自己及其他人的風險<br>Practise in a safe manner that minimises risk to clients, self, and others.                             | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 12. 尊重及留意個別及不同病人之需要<br>Respect for and be sensitive to individual needs or differences.   | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 13. 可勝任有效的健康推廣教育及基層醫療<br>Act as an effective educator in health promotion and primary care.   | (4)        | (3)            | (2)            | (1)       | (NA)           |

#### Q3. 整體滿意度 Overall Satisfaction

|  | 非<br>不滿意<br>VeryNot<br>satisfied | 常   | 滿<br>意<br>satisfied |     |
|--|----------------------------------|-----|---------------------|-----|
| 3. 整體而言，你對理工大學「職業治療學(榮譽)理學士」或「物理治療學(榮譽)理學士」的滿意程度有多大？<br>Overall, how satisfied are you with your experience of your undergraduate programme provided by the Department of Rehabilitation Sciences? | (4)                              | (3) | (2)                 | (1) |



## **UNDERGRADUATES**

### **第三部 其他意見**

#### **Part III Other Comments**

1. 請列出你對理工大學「職業治療學(榮譽)理學士」或「物理治療學 (榮譽)理學士」最感滿意的三個方面。

Please list **three aspects** of your undergraduate education the BSc (Hons) in Occupational Therapy or BSc (Hons) in

Physiotherapy programme provided by the Department of Rehabilitation Sciences that you are most satisfied with.

(iv) \_\_\_\_\_

(v) \_\_\_\_\_

(vi) \_\_\_\_\_

2. 請列出你對理工大學「職業治療學(榮譽)理學士」或「物理治療學 (榮譽)理學士」最不感滿意的三個方面。

Please list **three aspects** of your undergraduate education the BSc (Hons) in Occupational Therapy or BSc (Hons) in

Physiotherapy programme provided by the Department of Rehabilitation Sciences that you are least satisfied with.

(iv) \_\_\_\_\_

(v) \_\_\_\_\_

(vi) \_\_\_\_\_

3. 請就如何改善理工大學「職業治療學 (榮譽)理學士」或「物理治療學 (榮譽)理學士」兩個課程提出三個意見。

Please list **three things** that could be improved with your education the BSc (Hons) in Occupational Therapy or BSc (Hons) in Physiotherapy programme provided by the Department of Rehabilitation Sciences.

(iv) \_\_\_\_\_

(v) \_\_\_\_\_

(vi) \_\_\_\_\_

- Q4. 其他意見 Other comments:

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## **Appendix IX: Consent forms** **(For Employers, graduates and undergraduates)**

**Department of Rehabilitation Sciences  
The Hong Kong Polytechnic University**

**Public Opinion Programme  
The University of Hong Kong**

### **Research Project Informed Consent Form**

**Project area:** Influence of outcome-based education on physiotherapy and occupational therapy students, and the stakeholders' perception of the learning outcomes obtained and their expectations of future graduate from the 334 education system.

**Project title:** Exploring the impact of outcome-based education on physiotherapy and occupational therapy students, and analysis of stakeholders' opinions on learning outcome achievement, and expectation from the 334 graduates

**Organization:** Department of Rehabilitation Sciences, the Hong Kong Polytechnic University commissions Public Opinion Programme (POP) at The University of Hong Kong to conduct this survey

**Investigators:** Dr. Grace Szeto (Associate Professor, Department of Rehabilitation Sciences), and Dr. Kenneth Fong (Assistant Professor, Department of Rehabilitation Sciences)

**Project information:** The major objective of this project is to explore the influence of outcome-based education on PT and OT students, the stakeholders' perceptions of the learning outcomes obtained and their expectations of future graduates from the 334 education system. Specific study objectives include:

- a. Identify and map out the scopes of intended learning outcomes (ILOs) as understood
- b. Understand students' perspectives of future roles in PT and OT careers
- c. Review ILOs of PT and OT curriculum and teaching and learning strategies for 3-year and 4-year undergraduates courses

#### **Consent:**

I, \_\_\_\_\_, have been explained the details of this study. I voluntarily consent to participate in this study. I understand that I can withdraw from this study at any time without giving reasons, and my withdrawal will not lead to any punishment or prejudice against me. I am aware of any potential risk in joining this study. I also understand that my personal information will not be disclosed to people who are not related to this study and my name or photograph will not appear on any publications resulted from this study.

I can contact the Co-Principal Investigators, Dr Kenneth Fong at telephone 27666716 for any questions about this study. If I have complaints related to the investigator(s), I can contact Mr. Leung, secretary of Departmental Research Committee, Department of Rehabilitation Sciences, the Hong Kong Polytechnic University at 27665398. I know I will be given a signed copy of this consent form.

Signature (subject): \_\_\_\_\_

Date: \_\_\_\_\_

Signature (witness): \_\_\_\_\_

Date: \_\_\_\_\_

Signature (investigator): \_\_\_\_\_

Date: \_\_\_\_\_

**Department of Rehabilitation Sciences  
The Hong Kong Polytechnic University**

**Study Project Informed Consent Form**

**Project area:** Influence of outcome-based education on physiotherapy and occupational therapy students, and the stakeholders' perception of the learning outcomes obtained and their expectations of future graduate from the 334 education system.

**Project title:** Exploring the impact of outcome-based education on physiotherapy and occupational therapy students, and analysis of stakeholders' opinions on learning outcome achievement, and expectation from the 334 graduates

**Organization:** Department of Rehabilitation Sciences, the Hong Kong Polytechnic University

**Investigators:** Dr. Grace Szeto (Associate Professor, Department of Rehabilitation Sciences), and Dr. Kenneth Fong (Assistant Professor, Department of Rehabilitation Sciences), Mr. Wynants Ho (Project Associate, Department of Rehabilitation Sciences)

**Project information:** The major objective of this project is to explore the influence of outcome-based education on PT and OT students, the stakeholders' perceptions of the learning outcomes obtained and their expectations of future graduates from the 334 education system. Specific study objectives include:

- a. Identify and map out the scopes of intended learning outcomes (ILOs) as understood
- b. Understand students' perspectives of future roles in PT and OT careers
- c. Review ILOs of PT and OT curriculum and teaching and learning strategies for 3-year and 4-year undergraduates courses

The research will include both quantitative and qualitative studies. You are now being invited to participate in a questionnaire survey conducted to the PT and OT graduates who are working in the field.

You will be contacted by the project team from October 2011 to December 2011 for the survey. The project team will also conduct individual / focus group interviews for randomly selected participants from all the graduates to solicit qualitative feedback from October 2011 to December 2011.

**Consent:**

I, \_\_\_\_\_, have been explained the details of this study. I voluntarily consent to participate in this study. I understand that I can withdraw from this study at any time without giving reasons, and my withdrawal will not lead to any punishment or prejudice against me. I am aware of any potential risk in joining this study. I also understand that my personal information will not be disclosed to people who are not related to this study and my name or photograph will not appear on any publications resulted from this study.

I can contact the investigator, Mr. Wynants Ho (project associate) at telephone 27666742 for any questions about this study. If I have complaints related to the investigator(s), I can

contact Mr. Leung, secretary of Departmental Research Committee, Department of Rehabilitation Sciences, the Hong Kong Polytechnic University at 27665398. I know I will be given a signed copy of this consent form.

Signature (subject): \_\_\_\_\_

Date: \_\_\_\_\_

Signature (witness): \_\_\_\_\_

Date: \_\_\_\_\_

Signature (investigatorS): \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix X: E-mail invitation to employers and graduates

To: [list of employers (First contact persons)], *Attach with the invitation letter in pdf format*

From: POP of HKU

Subject: Employers' Survey of PolyU graduates of the BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy Programmes

Dear Sir/Madam,

### **Invitation to Participate in Survey of Employers' Opinions of PolyU Graduates of the BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy Programmes**

The Department of Rehabilitation Sciences (RS) of The Hong Kong Polytechnic University cordially invites you to participate in a telephone survey about the performance of recent graduates of the two RS programmes, BSc (Hons) Occupational Therapy and BSc (Hons) Physiotherapy. The Public Opinion Programme (POP) at The University of Hong Kong is commissioned to conduct this survey. The targets of the survey are employers of graduates who graduated in the years 2009, 2010, 2011.

The survey aims at collecting the employers' feedback about the curricula as part of the commitment of RS to provide professional education of high quality. Your feedback is crucial to this quality assurance and improvement mechanism.

Our interviewers will contact you during office hours in **October / November 2011**, and conduct a telephone interview with you for about 5 minutes. Your views are essential to assure and further improve the quality education of occupational therapists and physiotherapists. Please rest assured that all data will be collected and analysed independently by POP. The data will be kept strictly confidential and no matching of personal identity will be made under any circumstances.

For any enquiries regarding the telephone survey, please contact Mr. Frank Lee of POP at 3921 2724 or email via [frank.lee@hkupop.hku.hk](mailto:frank.lee@hkupop.hku.hk). If you would prefer not to participate in this survey, please kindly provide your phone / email confirmation to Mr. Frank Lee within 5 working days after you have received this email. Thank you in anticipation.

Yours sincerely,

Dr Robert Chung Ting-yiu  
Director of Public Opinion  
Programme  
The University of Hong Kong

Dr. Grace Szeto  
Associate Professor  
Department of Rehabilitation Sciences  
The Hong Kong Polytechnic University

Dr. Kenneth Fong  
Assistant Professor  
Department of Rehabilitation  
Sciences  
The Hong Kong Polytechnic  
University

To: [list of graduates in 2009, 2010, 2011]

From: RS of HKU

Subject: Survey of PolyU graduates of the BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy Programmes

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Dear Graduates,

**Invitation to Participate in Survey of Graduates' Opinions of the BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy Programmes**

The Department of Rehabilitation Sciences (RS) of The Hong Kong Polytechnic University cordially invites you to participate in a phone Survey of the performance of recent graduates of the two RS programmes, BSc (Hons) Occupational Therapy and BSc (Hons) Physiotherapy. The targets of the survey are the PolyU graduates of RS who graduated in the years 2008, 2009, 2010, 2011.

The survey aims to collect the graduates' feedback about the curricula as part of the commitment by RS to provide a high quality of professional education. Your feedback will be crucial to this quality assurance and the improvement mechanisms. Also, your comments and suggestions about the OT/PT programme will form the basis for further development of the programmes in the new 3-3-4 education system.

Attached please kindly find the questionnaire in WORD format for your feedback. Simply put your marks there on the soft copy and then send it to this email. In case you prefer a telephone interview, our Project Associate, Mr. Wynants Ho, will contact you during office hours in **October / November 2011**. Your views will contribute significantly to improving the quality of education for future occupational therapists and physiotherapists. Please rest assured that all data will be collected and analysed independently by RS. The data will be kept strictly confidential and no matching of personal identity will be made under any circumstances.

For any enquiries regarding the telephone survey, please contact Mr Wynants Ho of RS at 2766-6742 or email via [etwynts@inet.polyu.edu.hk](mailto:etwynts@inet.polyu.edu.hk). Thank you in anticipation.

Yours sincerely,

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Dr. Grace Szeto

Associate Professor

Department of Rehabilitation Sciences

The Hong Kong Polytechnic University

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Dr. Kenneth Fong

Assistant Professor

Department of Rehabilitation Sciences

The Hong Kong Polytechnic University

## **Appendix XI:**

# **The University of Hong Kong Public Opinion Programme**

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## **2011 Survey of Employers' Opinions of PolyU Graduates of the BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy Programmes**

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## **Survey Report**

**Compiled by**

**Chung Ting-yiu Robert, Pang Ka-lai Karie,  
Kwok Zee-miu Anne and Cheung Sai-hei**

**14 February 2012**

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### ***Appendices***

- i. Calculation of Response Rate and Detailed Breakdown of Contact Information
- ii. Frequency Tables (combined results of PolyU graduates)
- iii. Respondents' Demographic Profile
- iv. Cover Letter [English] and Questionnaire [Bilingual]
- v. Frequency Tables (individual results of OT and PT graduates)

## **I. Research Background**

- 1.1 In July 2011, the Department of Rehabilitation Sciences (RS) of The Hong Kong Polytechnic University (PolyU) commissioned Public Opinion Programme at the University of Hong Kong (POP), for the second time in the row, to conduct an opinion survey entitled “Survey of Employers’ Opinions of PolyU Graduates of the BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy Programmes”. The main objective of this survey was to collect employers’ assessment on the job performance of recent PolyU graduates of Occupational Therapy (OT) and Physiotherapy (PT) programmes, as well as their opinions towards the study programmes. Results of this survey will be used as future reference to improve the quality of education tailor-made for occupational therapists and physiotherapists.
- 1.2 For this survey, RS was responsible for designing the questionnaire, and providing the contact list of the graduates’ employers while POP was responsible for translating the questionnaire into Chinese, mailing out invitation letters (via local and electronic mails) and collecting the data by telephone interviews. As POP’s role in the questionnaire design was only advisory, the responsibility of the design rests entirely on RS. This is the normal practice adopted by POP in collaborating with academic researchers. The questionnaire used is attached in Appendix IV.

## II. Research Design

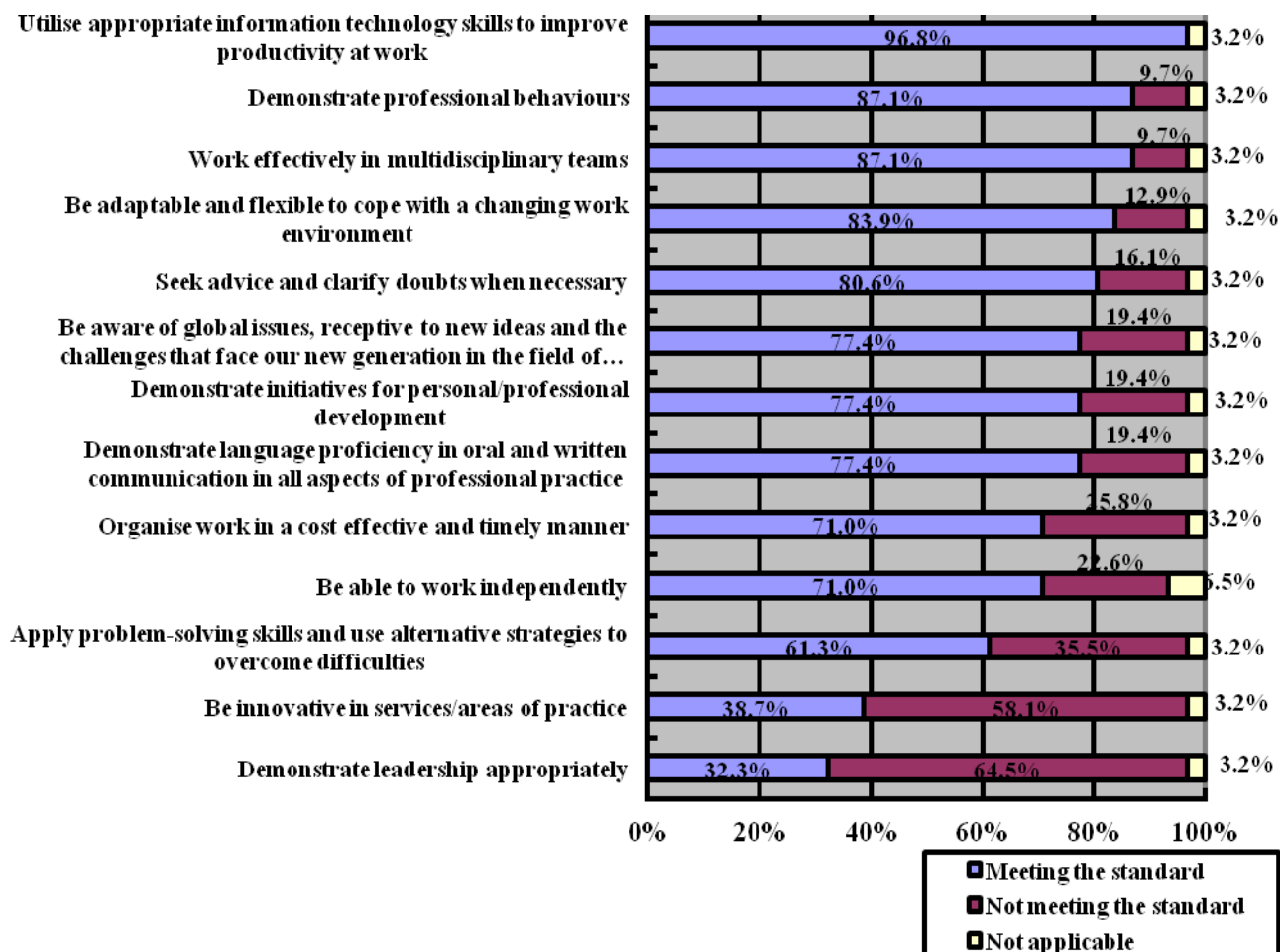
- 2.1. Target respondents of the study were current occupational therapists (OT), physiotherapists (PT) and/or department heads of various types of clinics or medical organizations, who were in a position to employ and/or supervise OT and PT graduates, in particular those graduated in the years 2008-2011. Telephone interviews were conducted by interviewers under close supervision. A total of 273 telephone numbers were provided by RS, with 267 cases being full contacts, and 6 being partial contacts, i.e. no specific contact person available. For those partial contacts, a representative who belonged to the personnel department or was familiar with the graduate performance was invited to participate in the survey. In other words, all respondents were verified as valid targets in the beginning of survey.
- 2.2. After filtering the duplicated and invalid numbers, 204 valid numbers remained and formed the final sample frame. All contacts were randomized before fieldwork commencement so that it would not be biased towards any year of graduate. To boost the participation rate, a cover letter under a joint letterhead of PolyU and HKUPOP was sent to all target respondents prior to the fieldwork commencement.
- 2.3. Actual fieldwork was conducted in between 9:30 am and 6:30 pm during the period of **6 October to 14 November 2011**. The fieldwork was completed after exhausting the entire contact lists. A total of **119 eligible respondents were successfully interviewed**, 10 of which had answered the questionnaire twice due to their double identities as OT and PT, hence giving rise to a sample size of 129 for certain questions. Besides, only 70 out of these 119 respondents are currently employing or have previously employed any PolyU BSc (Hons) OT and/or BSc (Hons) PT graduates in the years 2008-2011. As shown from the calculation in Appendix I (Tables 1 & 2), the overall effective response rate of this survey was 79.3% with a standard sampling error of less than 4.6 percentage points. In other words, the sampling error for all statistics based on the overall sample reported in percentages was less than plus/minus 9.2 percentage points at 95% confidence level.
- 2.4. All data were collected by our interviewers using a Computer Assisted Telephone Interview (CATI) system which allowed real-time data capture and consolidation. To ensure data quality, on top of on-site supervision, voice recording, screen capturing and camera surveillance were used to monitor the interviewers' performance.

### III. Research Findings

3.1. This survey questionnaire began with some background questions, followed by a total of seven opinion questions with many sub-items, of which 4 of them are in open-ended format. Key findings are summarized below and cross-references can be made with the frequency tables in Appendix V.

#### Result of the PT Graduates

3.2. The main part of this survey started by asking the respondents who were current or previous employers of the PT graduates of 2008 - 2011 (valid base: 62), to rate their performance in numerous areas concerning their **general skills / competencies** in terms of “far exceeding standard”, “generally meeting standard”, “slightly below standard”, “far below standard” and “not applicable”. Results showed that all performance aspects of the graduates except two were perceived as “generally meeting the standard” or even “far exceeding standard” by at least 60% of the valid sample. “Utilising appropriate information technology skills to improve productivity at work” topped the list, with an overwhelming 97% of the sample choosing the top 2 positive responses. It was followed by the performance of “demonstrating professional behaviours” (87%), “working effectively in multidisciplinary teams” (87%), “being adaptable and flexible to cope with a changing work environment” (84%) and “seeking advice and clarifying doubts when necessary” (81%). Other areas rated as meeting or exceeding standard by over 70% included “being aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy” (77%), “demonstrating initiatives for personal/professional development” (77%), “demonstrating language proficiency in oral and written communication in all aspects of professional practice” (77%), “organising work in a cost effective and timely manner” (71%) and “being able to work independently” (71%). In addition, 61% of respondents regarded the performance of graduates in “applying problem-solving skills and using alternative strategies to overcome difficulties” as meeting or exceeding standard. However, “demonstrating leadership appropriately” and “being innovative in services/areas of practice” were perceived as not meeting the standard (i.e. choosing “slightly below standard” or “far below standard”) by 65% and 58% of the valid sample respectively. See Summary Chart 1 below for details.

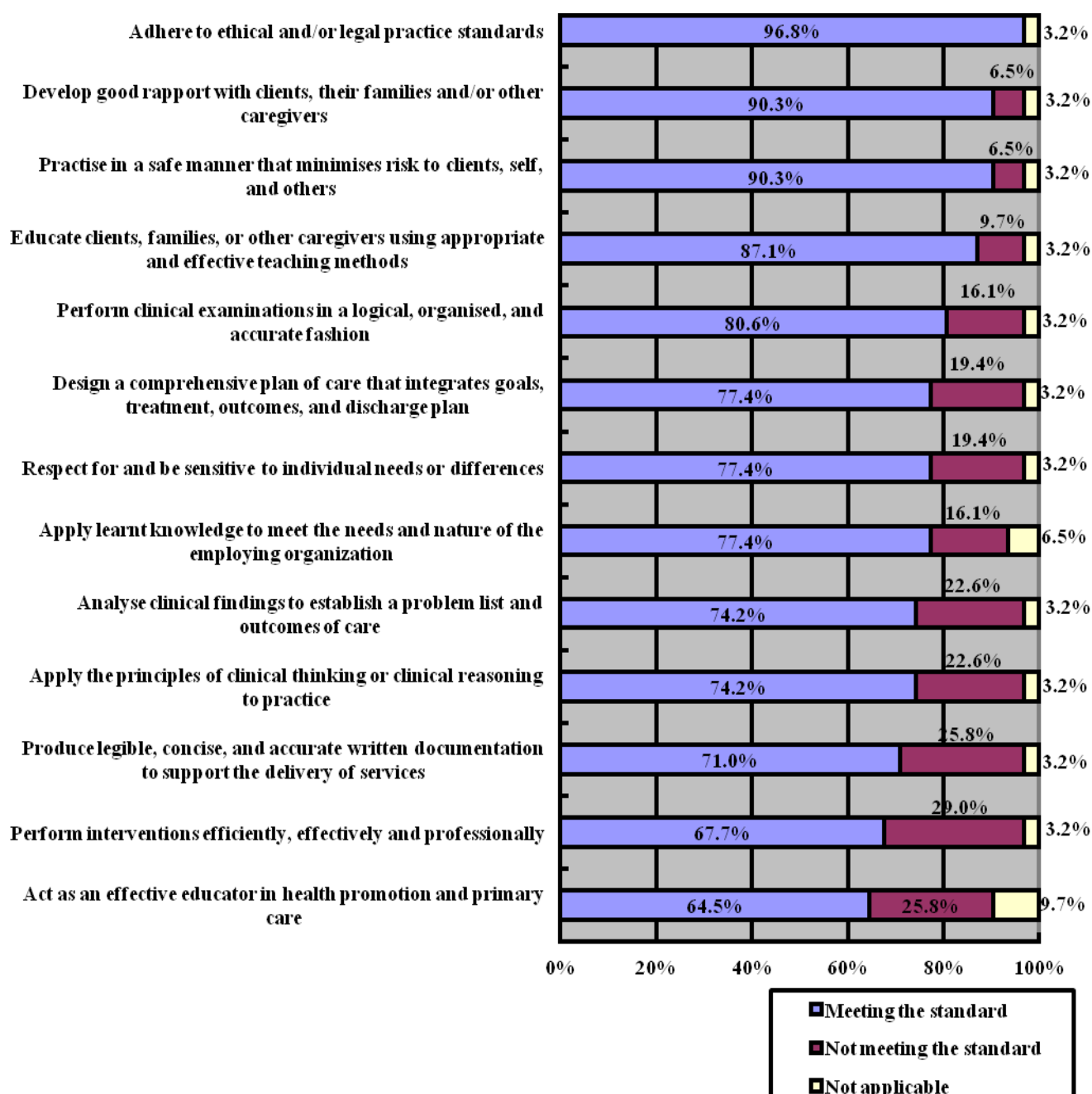
**Summary Chart 1: Performance of PT Graduates on General Skills/Competencies**

3.3. In order to obtain a comparable mean score for each of the performance item described above, scores from 1 to 4 were artificially assign to each answer of the 4-point scale above, with 1 representing “far below standard”, 2 “slightly below standard”, 3 “generally meeting standard” and 4 being “far exceeding standard”. In other words, the higher the mean score, the more skillful/competent the graduates were in that aspect. Results revealed that, by this mean analysis, “utilising appropriate information technology skills to improve productivity at work” was found to be the best performing area with the highest mean score of 3.5 (subject to a sampling error of  $\pm 0.2$ ). “Being adaptable and flexible to cope with a changing work environment”, “demonstrating professional behaviours”, “seeking advice and clarifying doubts when necessary” and “working effectively in multidisciplinary teams” formed the next tier, each attaining a mean score of 3.1 (subject to a sampling error of  $\pm 0.2$ ). See Summary Table 1 below for other results.

**Summary Table 1: Performance of PT Graduates on General Skills/Competencies – Mean Analysis**

|   | Number of<br>raters | Mean score<br>(1-4) | Sampling<br>error |
|---|---------------------|---------------------|-------------------|
| Utilise appropriate information technology skills to improve productivity at work   | 30                  | 3.5                 | +/- 0.2           |
| Be adaptable and flexible to cope with a changing work environment  | 30                  | 3.1                 | +/- 0.2           |
| Demonstrate professional behaviours   | 30                  | 3.1                 | +/- 0.2           |
| Seek advice and clarify doubts when necessary   | 30                  | 3.1                 | +/- 0.2           |
| Work effectively in multidisciplinary teams   | 30                  | 3.1                 | +/- 0.2           |
| Be able to work independently   | 29                  | 2.9                 | +/- 0.2           |
| Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy | 30                  | 2.9                 | +/- 0.3           |
| Demonstrate initiatives for personal/professional development   | 30                  | 2.9                 | +/- 0.3           |
| Demonstrate language proficiency in oral and written communication in all aspects of professional practice                      | 30                  | 2.9                 | +/- 0.3           |
| Organise work in a cost effective and timely manner   | 30                  | 2.8                 | +/- 0.3           |
| Apply problem-solving skills and use alternative strategies to overcome difficulties  | 30                  | 2.6                 | +/- 0.3           |
| Be innovative in services/areas of practice   | 30                  | 2.4                 | +/- 0.3           |
| Demonstrate leadership appropriately  | 30                  | 2.1                 | +/- 0.3           |

3.4. The second part of questionnaire also aimed at current or previous employers of the PT graduates of PolyU (valid base: 62). When being asked to assess the graduates' performance with respect to their **professional skills / competencies**, once again in terms of "far exceeding standard", "generally meeting standard", "slightly below standard", "far below standard" and "not applicable", an overwhelming 97% regarded the graduates' performance in "adherence to ethical and/or legal practice standards" having met or even far beyond the standard. Meanwhile, 90% each recognized their performance in "developing good rapport with clients, their families and/or other caregivers" and "practising a safe manner that minimises risk to clients, self, and others". Other qualities perceived as meeting the standards by over 80% of the sample included "educating clients, families, or other caregivers using appropriate and effective teaching methods" (87%) and "performing clinical examinations in a logical, organised and accurate fashion" (81%). In general, all professional skills / competencies put to test in this study were perceived as meeting the standard by nearly 65% or above of the employers interviewed. See Summary Chart 2 below for details.

**Summary Chart 2: Performance of PT Graduates on Professional Skills/Competencies**

3.5. Similar to the first section, by conducting a mean score analysis with assigned scores from 1 to 4, in which 1 representing “far below standard”, 2 “slightly below standard”, 3 “generally meeting standard” and 4 being “far exceeding standard”, it was found that no significant change was observed with respect to the relative rankings of individual items. Among which, “adherence to ethical and/or legal practice standards” still topped the list with a mean score of 3.4 and a sampling error of +/-0.2. “Developing good rapport with clients, their families and/or other caregivers” ranked second with a score of 3.2 (subject to a sampling error of +/-0.2), while “practising in a safe manner that minimises risk to clients, self, and others” ranked third with a score of 3.1 (subject to a sampling error of +/-0.2). See Summary Table 2 below for more details.

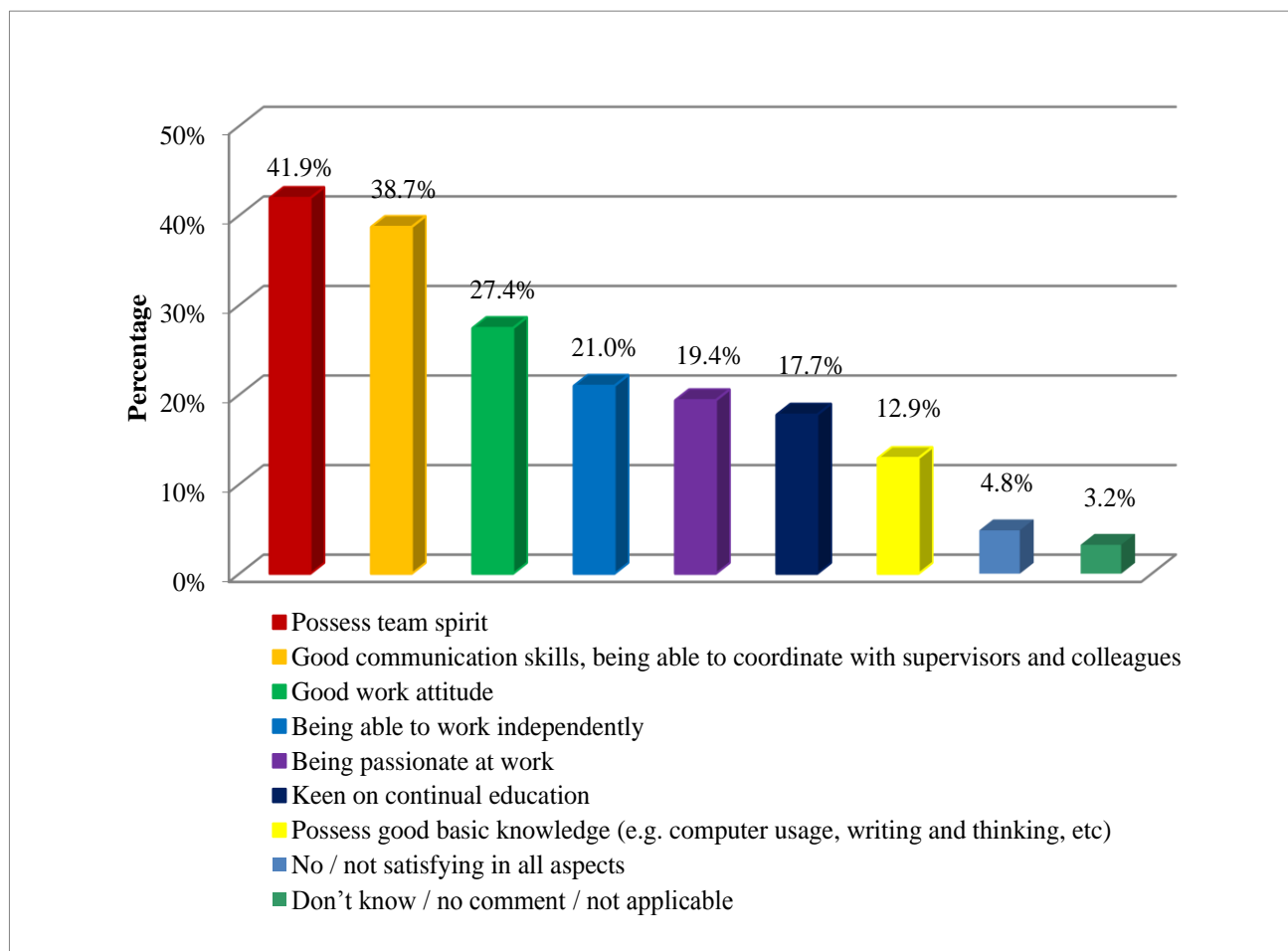
**Summary Table 2: Performance of PT Graduates on Professional Skills/Competencies – Mean Analysis**

|   | Number of<br>raters | Mean score<br>(1-4) | Sampling<br>error |
|---|---------------------|---------------------|-------------------|
| Adhere to ethical and/or legal practice standards   | 30                  | 3.4                 | +/- 0.2           |
| Develop good rapport with clients, their families<br>and/or other caregivers                          | 30                  | 3.2                 | +/- 0.2           |
| Practise in a safe manner that minimises risk to<br>clients, self, and others                         | 30                  | 3.1                 | +/- 0.2           |
| Respect for and be sensitive to individual needs or<br>differences                                    | 30                  | 3.0                 | +/- 0.2           |
| Educate clients, families, or other caregivers using<br>appropriate and effective teaching methods    | 29                  | 2.9                 | +/- 0.1           |
| Apply learnt knowledge to meet the needs and<br>nature of the employing organization                  | 30                  | 2.9                 | +/- 0.2           |
| Design a comprehensive plan of care that integrates<br>goals, treatment, outcomes, and discharge plan | 30                  | 2.9                 | +/- 0.2           |
| Perform clinical examinations in a logical,<br>organised, and accurate fashion                        | 28                  | 2.9                 | +/- 0.2           |
| Act as an effective educator in health promotion and<br>primary care                                  | 30                  | 2.9                 | +/- 0.3           |
| Analyse clinical findings to establish a problem list<br>and outcomes of care                         | 30                  | 2.8                 | +/- 0.2           |
| Apply the principles of clinical thinking or clinical<br>reasoning to practice                        | 30                  | 2.8                 | +/- 0.2           |
| Perform interventions efficiently, effectively and<br>professionally                                  | 30                  | 2.8                 | +/- 0.3           |
| Produce legible, concise, and accurate written<br>documentation to support the delivery of services   | 30                  | 2.8                 | +/- 0.3           |



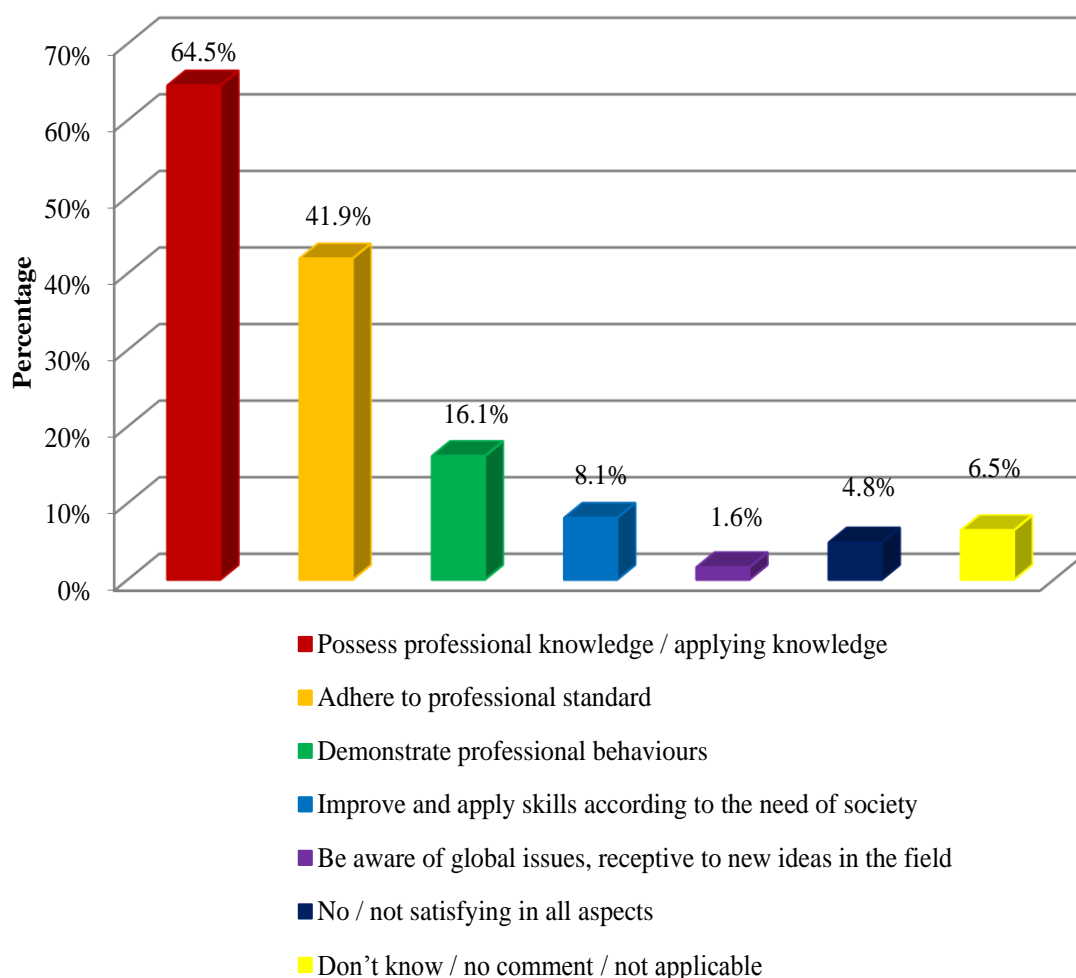
- 3.6. The overall performance of the PolyU graduates in PT was then asked. Results showed that the majority of employers interviewed (82%) expressed satisfaction towards the performance of PT graduates, only 5% of them were dissatisfied. Likewise, by conducting a mean score analysis with assigned scores from 1 to 5, where 1 representing the lowest level of satisfaction and 5 being the highest, the sample mean obtained this year was 4.0, which literally meant “quite satisfied”.
- 3.7. The next question was in open-end format asking all the employers, no matter they have recruited the PT graduates before, to name the most satisfied aspects on general skills / competencies exhibited by them. Results revealed that the attribute “possession of team spirit” topped the list and was cited by 42% of the respondents. “Good communication skills, being able to coordinate with supervisors and colleagues” came second and was named by 39%. Another 27% cited “good work attitude”, 21% cited “being able to work independently”, 19% cited “being passionate at work”, 18% cited “keen on continual education” and 13% cited “possession of good basic knowledge (e.g. knowledge of computer applications, writing and analytical skills)”. Meanwhile, 5% said they could not name any aspect and 3% had no comment. See Summary Chart 3 below.

**Summary Chart 3: Most satisfied aspects of PT graduates on general skills/competencies**



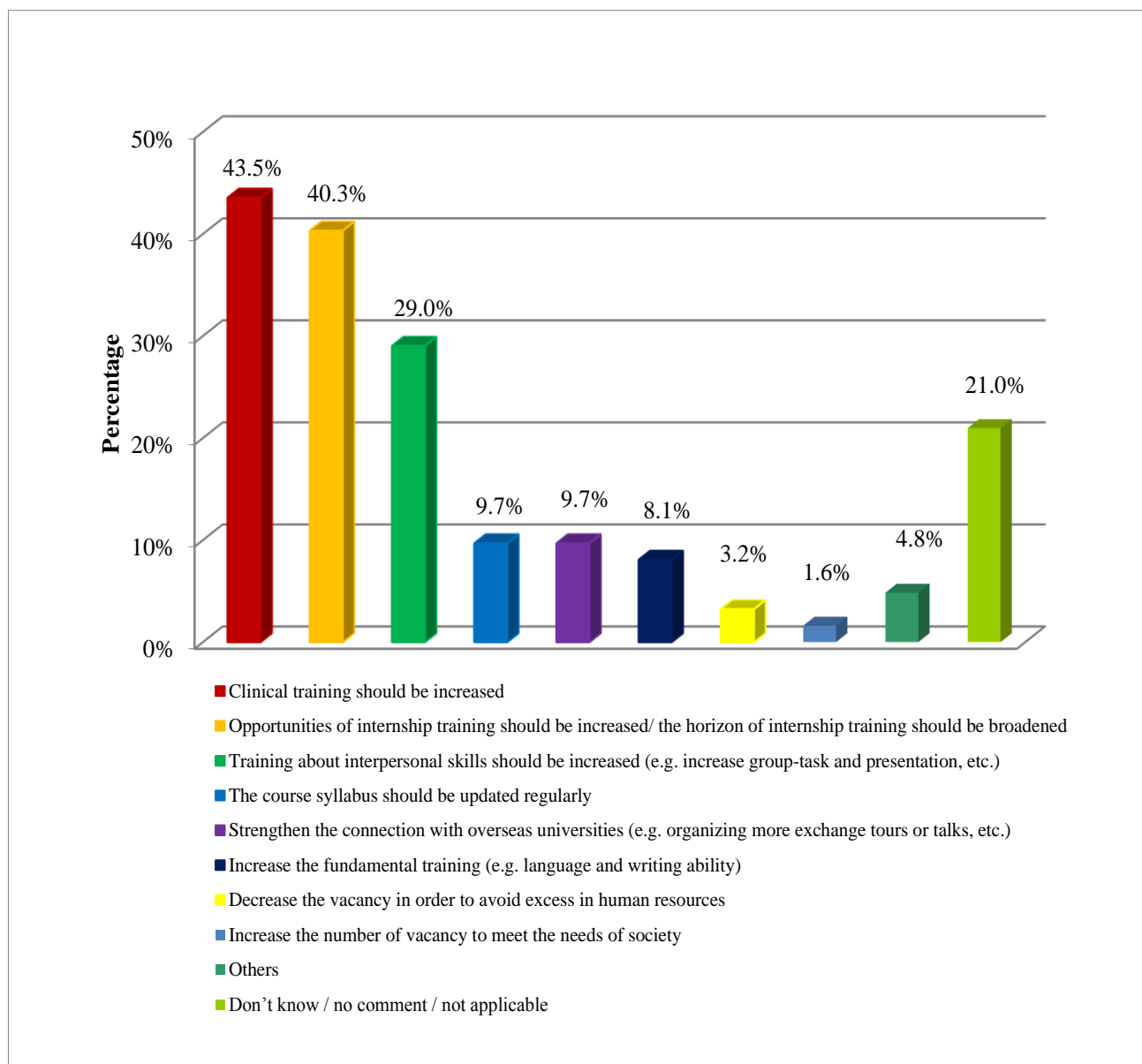
3.8. All respondents were also asked to mention their most satisfied aspects on professional skills / competencies borne by the PT graduates. “Possession of professional knowledge / applying knowledge” ranked first, mentioned by 65% of the respondents. 42% also suggested that “adherence to professional standard” was another aspect that they excelled. Besides, 16% cited “demonstrating professional behaviours” and 8% cited “improving and applying skills according to the need of society”. Meanwhile, 5% could not name any aspect and 7% had no comment. See Summary Chart 4 below.

**Summary Chart 4: Most satisfied aspects of PT graduates on professional skills/competencies**



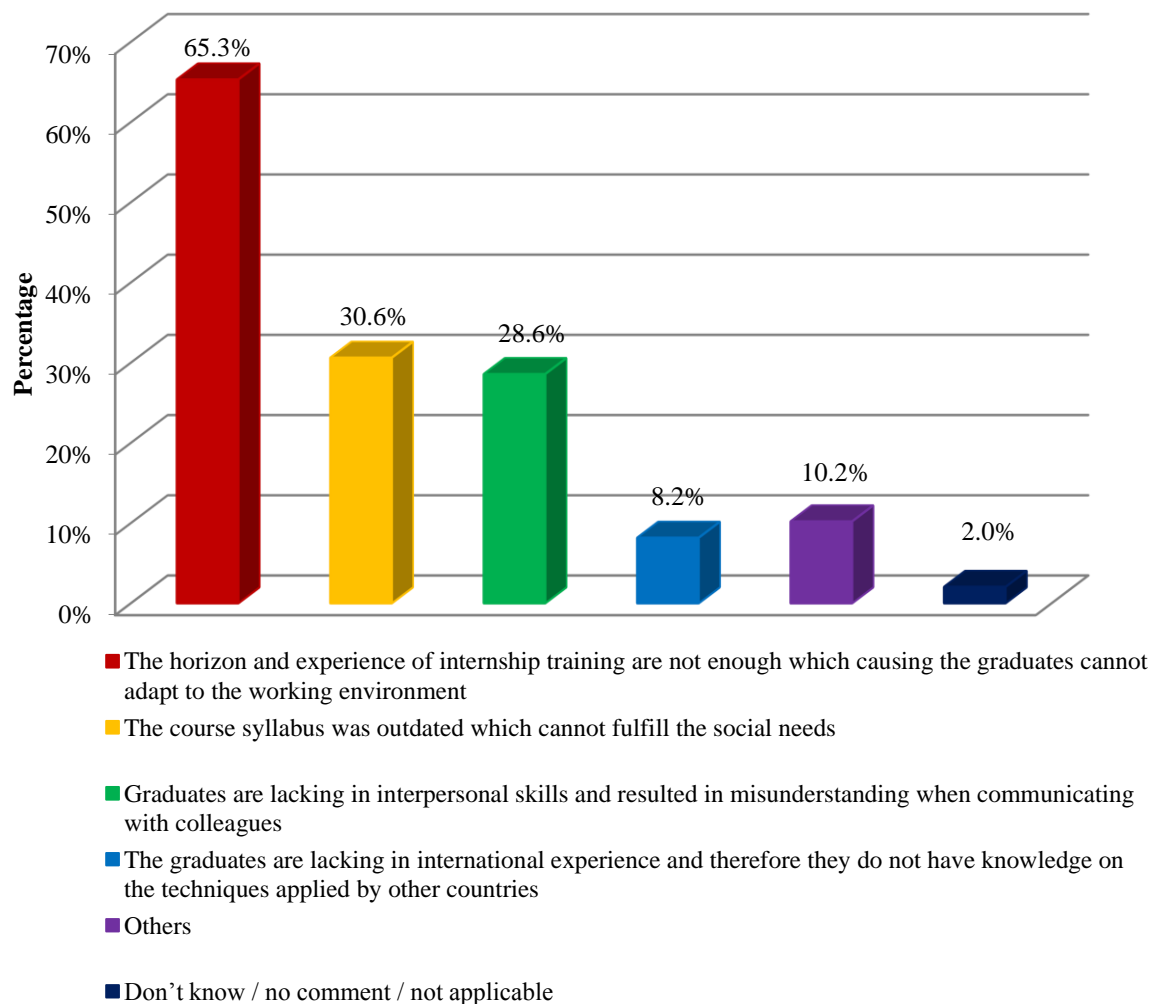
3.9. With respect to the overall comments on the current PT programmes, 44% of the employers suggested to “increase the clinical training”. At the same time, 40% expressed that the “opportunities of internship should be increased or the horizon of internship should be broadened”. 29% said “more training on interpersonal skills” should be provided (e.g. increase group task and presentation, etc.), while 10% each said “the course syllabus should be updated regularly” and the programmes should “strengthen the connection with overseas universities”, such as organizing more exchange tours or talks. However, about 21% of respondents had no comments on the current PT programmes. See Summary Chart 5 below.

**Summary Chart 5: Overall Comments on PT programmes**



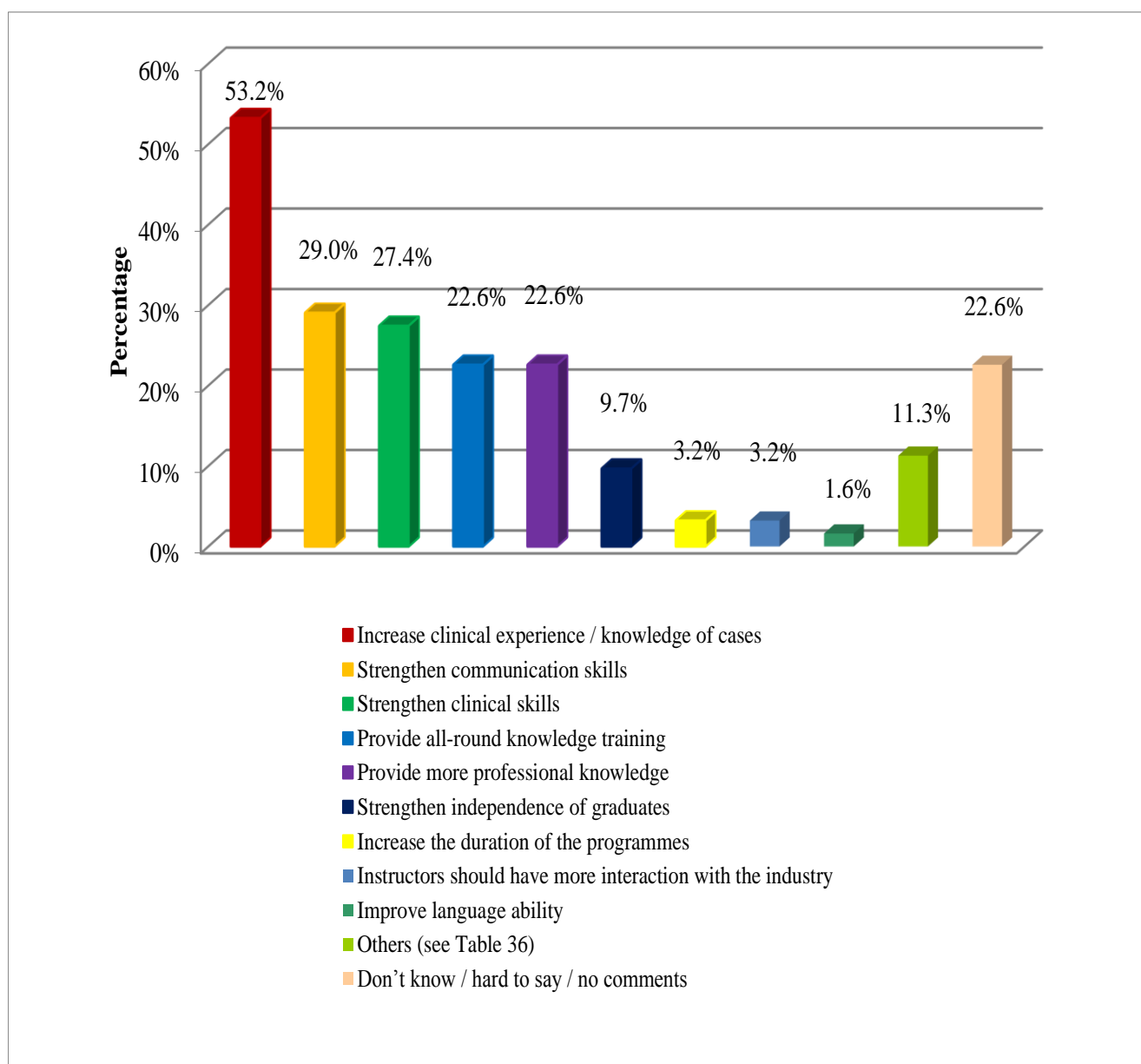
3.10. When asked to provide the reasons behind their comments on the programmes, nearly two-thirds of these respondents said “the horizon and experience of internship training were not enough hence the graduates had difficulties adapting to the working environment” (65%). Followed at a distance, “the course syllabus was outdated which failed to fulfill the social needs” (31%) took the second place. The third most commonly cited problem was “graduates in lack of interpersonal skills and resulted in misunderstanding when communicating with colleagues” (29%). For other responses, please see Summary Chart 6 below.

**Summary Chart 6: Reasons for Specific Comments on the PT Programmes**



3.11. With respect to the suggestions on how to improve the existing PT programmes, 53% of the respondents advised RS to “increase clinical experience / knowledge of cases”. Another 29% suggested RS to “strengthen communication skills”, 27% proposed to “strengthen clinical skills” and 23% each suggested to “provide all-round knowledge training”, and “provide more professional knowledge” respectively. Meanwhile, 23% had no comment. See Summary Chart 7 for more answers.

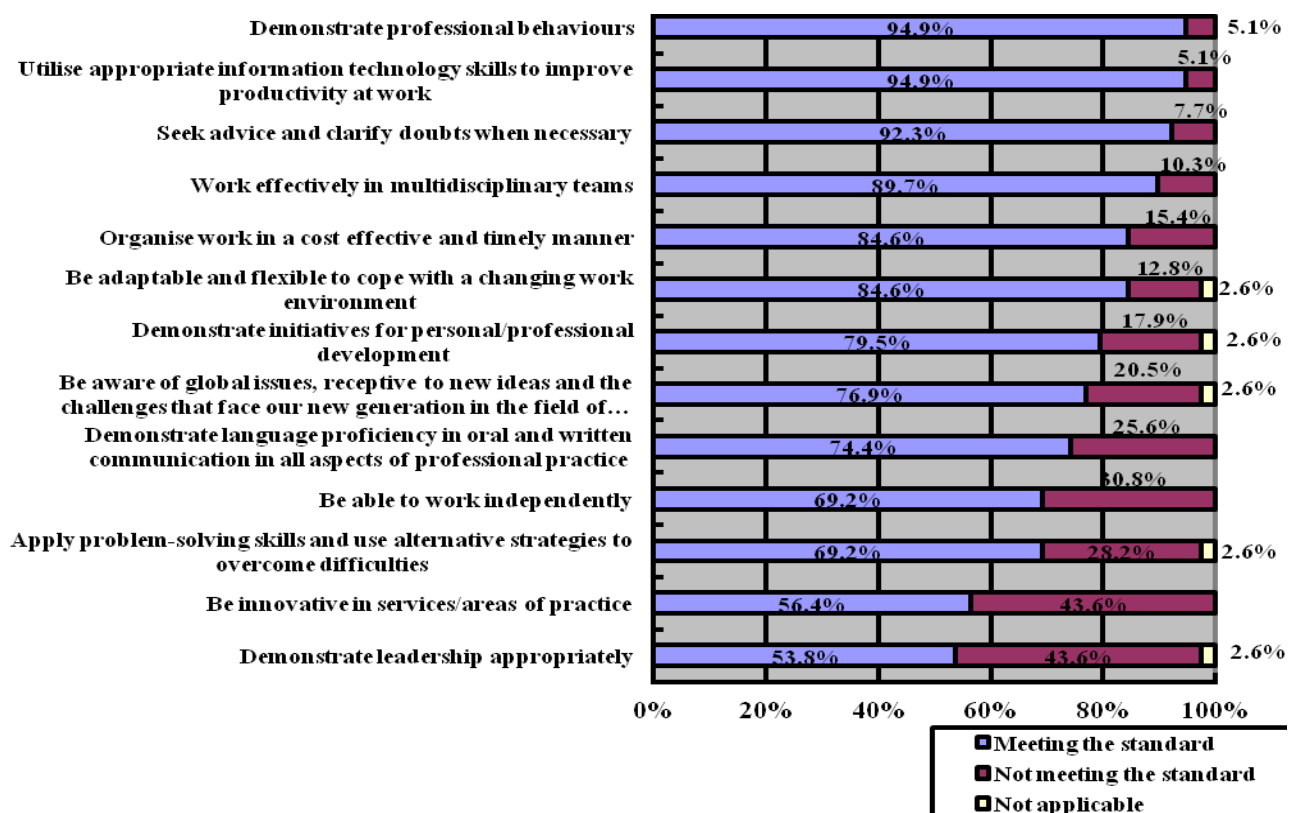
**Summary Chart 7: Suggestions on how to improve the PT programmes**



## Result of the OT Graduates

3.12. As for the OT graduates of 2008 - 2011 (valid base of employers: 67), again in terms of “far exceeding standard”, “generally meeting standard”, “slightly below standard”, “far below standard” and “not applicable”, results showed that all performance aspects of **general skills / competencies** of the graduates except two were perceived as “generally meeting the standard” or even “far exceeding standard” by at least two-thirds of the valid sample. Both “demonstrating professional behaviours” and “utilising appropriate information technology skills to improve productivity at work” topped the list, with an overwhelming 95% of the sample choosing the top 2 positive responses. They were closely followed by the performance of “seeking advice and clarifying doubts when necessary” (92%), and then “working effectively in multidisciplinary teams” (90%), “organising work in a cost effective and timely manner” (85%) and “being adaptable and flexible to cope with a changing work environment” (85%). Other areas rated as meeting or exceeding standard by over 70% included “demonstrating initiatives for personal/professional development” (80%), “being aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy” (77%) and “demonstrating language proficiency in oral and written communication in all aspects of professional practice” (74%). See Summary Chart 8 below for details.

**Summary Chart 8: Performance of OT Graduates on General Skills/Competencies**



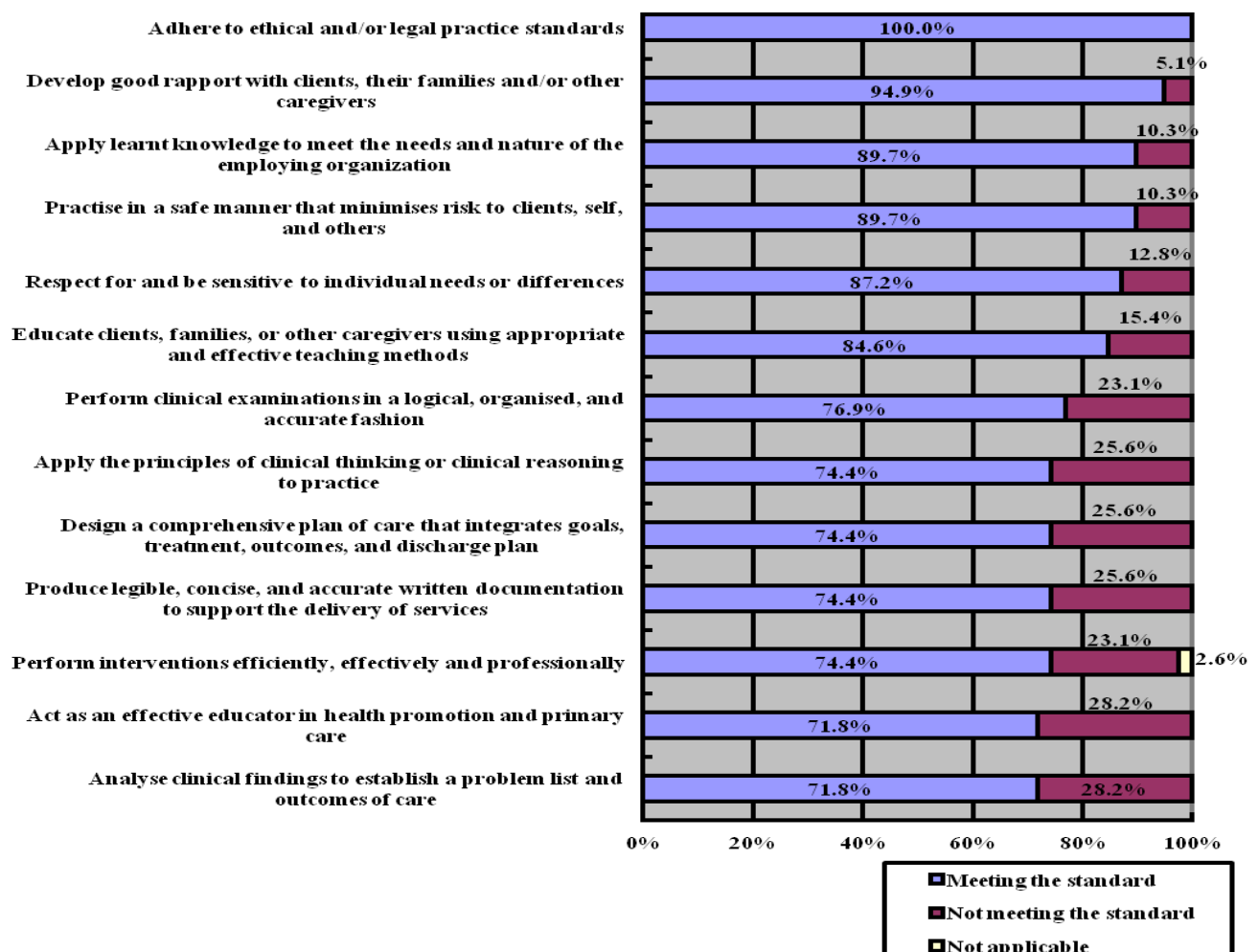
3.13. In order to obtain a comparable mean score for each of the performance item described above, scores from 1 to 4 were artificially assign to each answer of the 4-point scale above, with 1 representing “far below standard”, 2 “slightly below standard”, 3 “generally meeting standard” and 4 being “far exceeding standard”. In other words, the higher the mean score, the more skillful/competent the graduates were in that aspect. Results revealed that, by this mean analysis, “demonstrating professional behaviours” was found to be the best performing area with the highest mean score of 3.4 (subject to a sampling error of +/-0.2). “Utilising appropriate information technology skills to improve productivity at work” and “working effectively in multidisciplinary teams” closely followed behind with a respective mean score of 3.3 and 3.2 (subject to a sampling error of +/-0.2)., “Being adaptable and flexible to cope with a changing work environment”, “organising work in a cost effective and timely manner” and “seeking advice and clarifying doubts when necessary” formed the next tier, each attaining a mean score of 3.1 (subject to a sampling error of +/-0.2). See Summary Table 3 below for other results.

**Summary Table 3: Performance of OT Graduates on General Skills/Competencies – Mean Analysis**

|   | Number of<br>raters | Mean score<br>(1-4) | Sampling<br>error |
|---|---------------------|---------------------|-------------------|
| Demonstrate professional behaviours   | 39                  | 3.4                 | +/- 0.2           |
| Utilise appropriate information technology skills<br>to improve productivity at work  | 39                  | 3.3                 | +/- 0.2           |
| Work effectively in multidisciplinary teams   | 39                  | 3.2                 | +/- 0.2           |
| Be adaptable and flexible to cope with a changing<br>work environment   | 38                  | 3.1                 | +/- 0.2           |
| Organise work in a cost effective and timely<br>manner  | 39                  | 3.1                 | +/- 0.2           |
| Seek advice and clarify doubts when necessary   | 39                  | 3.1                 | +/- 0.2           |
| Be aware of global issues, receptive to new ideas<br>and the challenges that face our new generation<br>in the field of physiotherapy | 38                  | 3.0                 | +/- 0.2           |
| Demonstrate initiatives for personal/professional<br>development  | 38                  | 3.0                 | +/- 0.2           |
| Demonstrate language proficiency in oral and<br>written communication in all aspects of<br>professional practice                      | 39                  | 2.9                 | +/- 0.2           |
| Apply problem-solving skills and use alternative<br>strategies to overcome difficulties   | 38                  | 2.8                 | +/- 0.2           |
| Be able to work independently   | 39                  | 2.8                 | +/- 0.2           |
| Be innovative in services/areas of practice   | 39                  | 2.6                 | +/- 0.2           |
| Demonstrate leadership appropriately  | 38                  | 2.5                 | +/- 0.2           |

3.14. When being asked to assess the OT graduates' performance with respect to their **professional skills / competencies**, once again in terms of “far exceeding standard”, “generally meeting standard”, “slightly below standard”, “far below standard” and “not applicable”, all respondents (100%) regarded the graduates' performance in “adherence to ethical and/or legal practice standards” having met or even far beyond the standard. Meanwhile, 95% recognized their performance in “developing good rapport with clients, their families and/or other caregivers” while 90% each thought the same for “applying learnt knowledge to meet the needs and nature of the employing organization” and “practising a safe manner that minimises risk to clients, self, and others”. Other qualities perceived as meeting the standards by over 80% of the sample included “showing respect for and being sensitive to individual needs or differences” (87%) and “educating clients, families, or other caregivers using appropriate and effective teaching methods” (85%). In general, all professional skills / competencies put to test in this study were perceived as meeting the standard by nearly 70% up to 100% of the employers interviewed. See Summary Chart 9 below for details.

**Summary Chart 9: Performance of OT Graduates on Professional Skills/Competencies**





3.15. Similar to the first section, by conducting a mean score analysis with assigned scores from 1 to 4, in which 1 representing “far below standard”, 2 “slightly below standard”, 3 “generally meeting standard” and 4 being “far exceeding standard”, it was found that no significant change was observed with respect to the relative rankings of individual items. Among which, “adherence to ethical and/or legal practice standards” still topped the list with a mean score of 3.6 and a sampling error of  $\pm 0.2$ . “Developing good rapport with clients, their families and/or other caregivers” and “practising in a safe manner that minimises risk to clients, self, and others” both ranked second with a score of 3.2 (subject to a sampling error of  $\pm 0.2$ ). See Summary Table 4 below for more details.

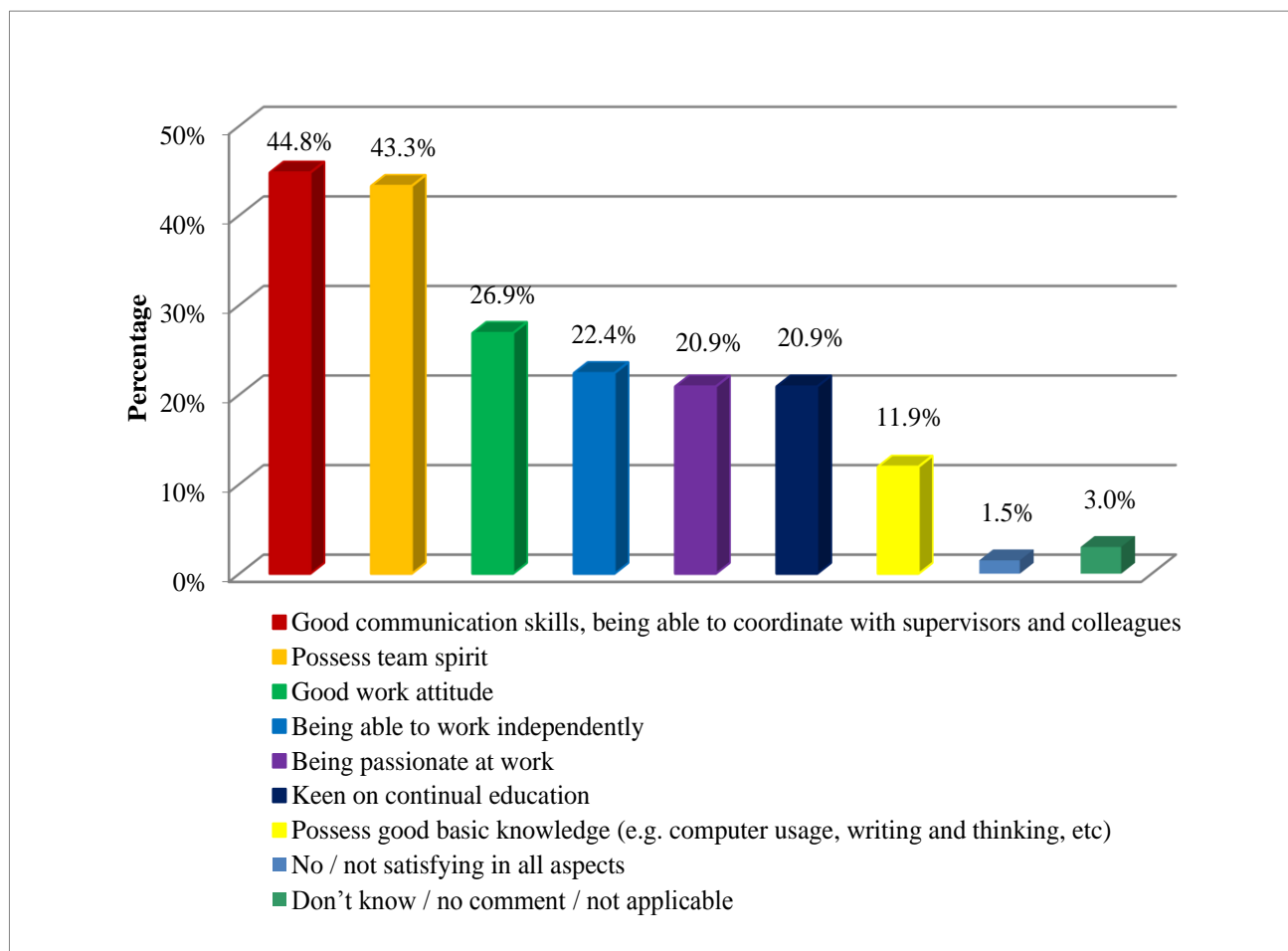
**Summary Table 4: Performance of OT Graduates on Professional Skills/Competencies – Mean Analysis**

|   | Number of<br>raters | Mean score<br>(1-4) | Sampling<br>error |
|---|---------------------|---------------------|-------------------|
| Adhere to ethical and/or legal practice standards   | 39                  | 3.6                 | $\pm 0.2$         |
| Develop good rapport with clients, their families<br>and/or other caregivers                          | 39                  | 3.2                 | $\pm 0.2$         |
| Practise in a safe manner that minimises risk to<br>clients, self, and others                         | 39                  | 3.2                 | $\pm 0.2$         |
| Respect for and be sensitive to individual needs or<br>differences                                    | 39                  | 3.1                 | $\pm 0.2$         |
| Apply learnt knowledge to meet the needs and<br>nature of the employing organization                  | 39                  | 3.0                 | $\pm 0.2$         |
| Educate clients, families, or other caregivers using<br>appropriate and effective teaching methods    | 39                  | 3.0                 | $\pm 0.2$         |
| Apply the principles of clinical thinking or clinical<br>reasoning to practice                        | 39                  | 2.9                 | $\pm 0.2$         |
| Perform clinical examinations in a logical,<br>organised, and accurate fashion                        | 39                  | 2.9                 | $\pm 0.2$         |
| Perform interventions efficiently, effectively and<br>professionally                                  | 38                  | 2.9                 | $\pm 0.2$         |
| Produce legible, concise, and accurate written<br>documentation to support the delivery of services   | 39                  | 2.9                 | $\pm 0.2$         |
| Act as an effective educator in health promotion and<br>primary care                                  | 39                  | 2.8                 | $\pm 0.2$         |
| Analyse clinical findings to establish a problem list<br>and outcomes of care                         | 39                  | 2.8                 | $\pm 0.2$         |
| Design a comprehensive plan of care that integrates<br>goals, treatment, outcomes, and discharge plan | 39                  | 2.8                 | $\pm 0.2$         |

3.16. The overall performance of the PolyU graduates in OT was then asked. Results showed that the majority of employers interviewed (78%) expressed satisfaction towards the performance of OT graduates, only 5% of them were dissatisfied. Likewise, by conducting a mean score analysis with assigned scores from 1 to 5, where 1 representing the lowest level of satisfaction and 5 being the highest, the sample mean obtained this year was 3.9, which literally meant “quite satisfied”.

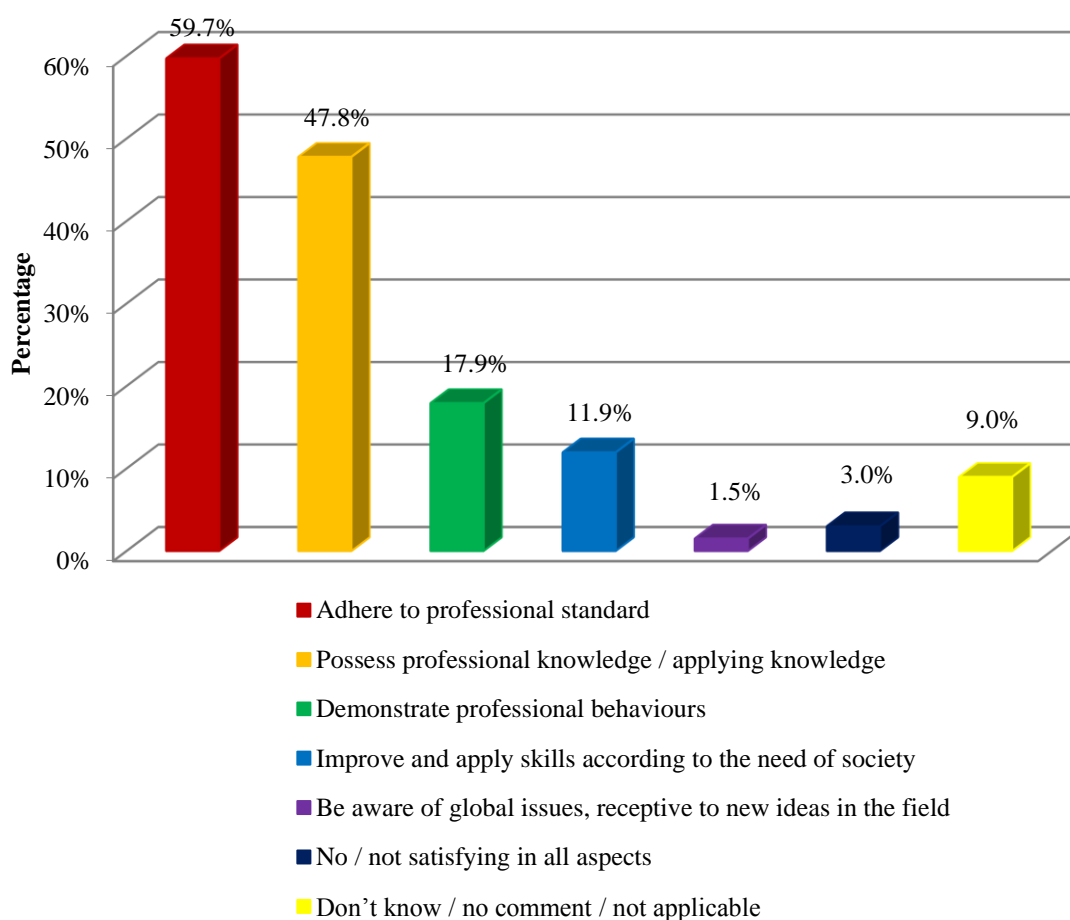
3.17. The next question was in open-end format asking all the employers, no matter they have recruited the OT graduates before, to name the most satisfied aspects on general skills / competencies exhibited by the graduates. Results revealed that the attribute “good communication skills, being able to coordinate with supervisors and colleagues” topped the list and was cited by 45% of the respondents. “Possession of team spirit” came second and was named by 43%. Another 27% cited “good work attitude”, 22% cited “being able to work independently”, 21% each cited “being passionate at work” and “keen on continual education”, and 12% cited “possession of good basic knowledge (e.g. knowledge of computer applications, writing and analytical skills)”. Meanwhile, 3% had no comment. See Summary Chart 10 below.

**Summary Chart 10: Most satisfied aspects of OT graduates on general skills/competencies**



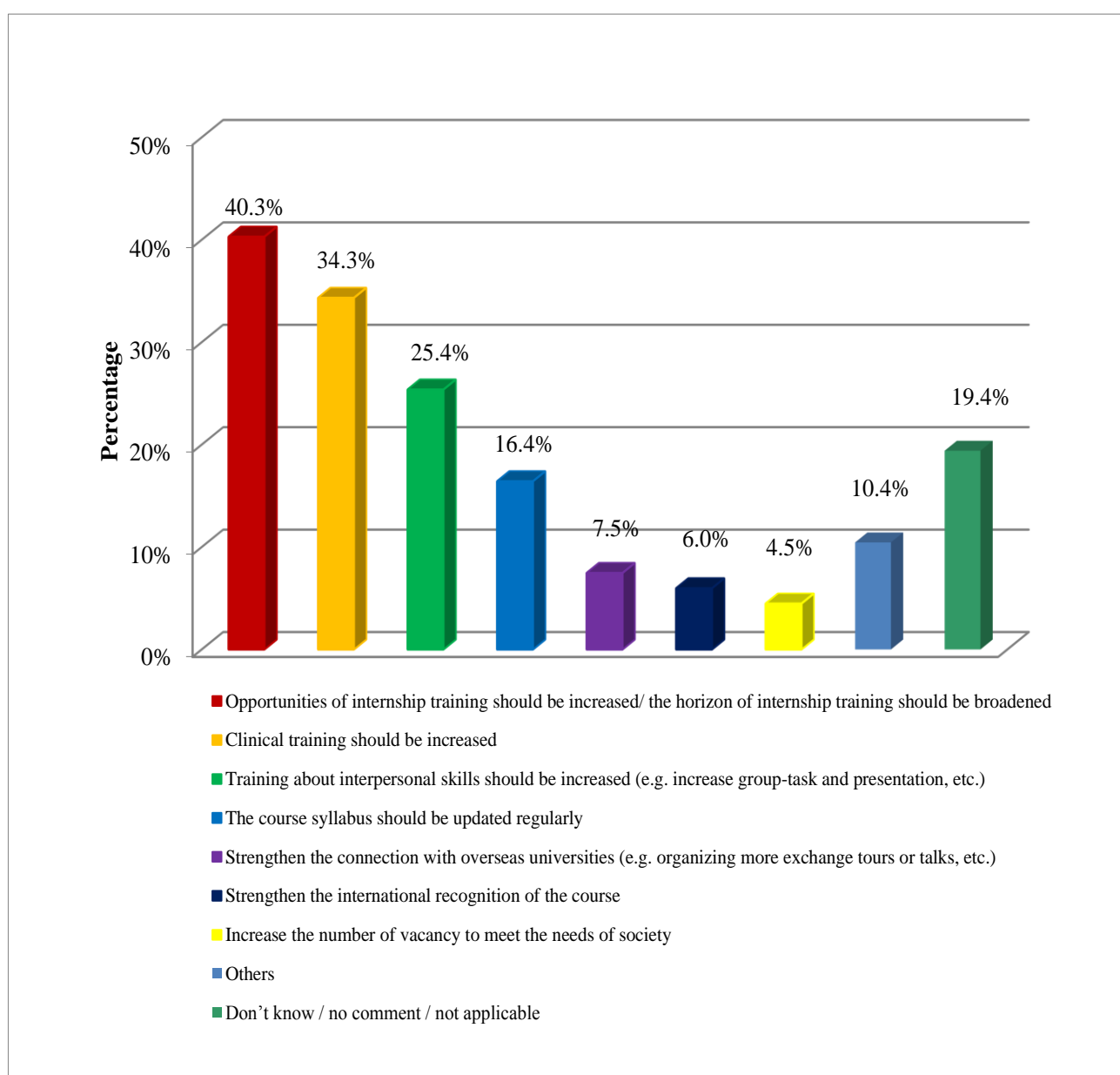
3.18. All respondents were also asked to mention their most satisfied aspects on professional skills / competencies borne by the OT graduates. “Adherence to professional standard” ranked first, mentioned by 60% of the respondents. Nearly half of the respondents (48%) also suggested that “possession of professional knowledge / applying knowledge” was another aspect that they excelled. Besides, 18% cited “demonstrating professional behaviours” and 12% cited “improving and applying skills according to the need of society”. Meanwhile, 3% could not name any aspect and 9% had no comment. See Summary Chart 11 below.

**Summary Chart 11: Most satisfied aspects of OT graduates on professional skills/competencies**



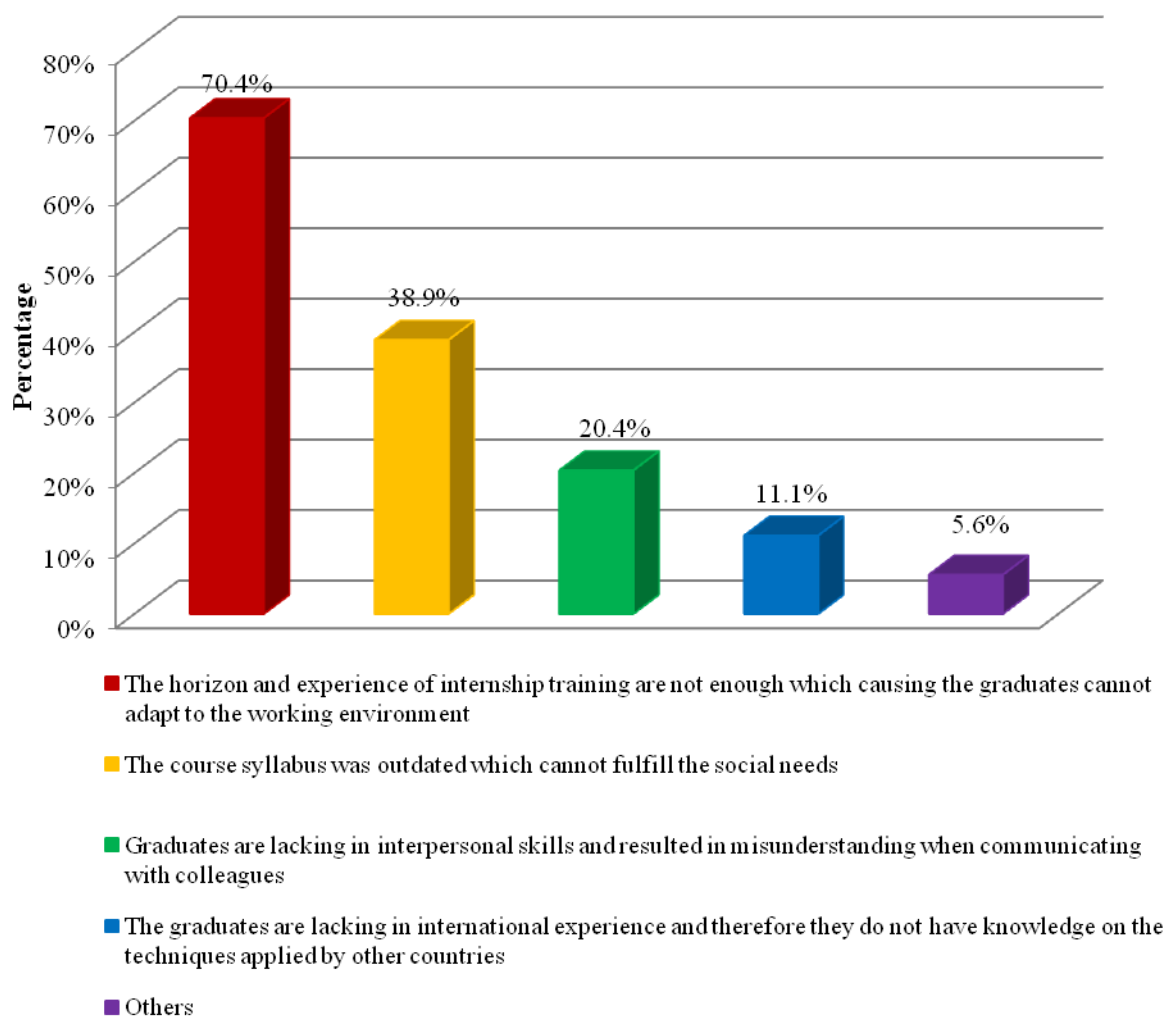
3.19. With respect to the overall comments on the current OT programmes, 40% of the employers expressed that the “opportunities of internship should be increased or the horizon of internship should be broadened”. At the same time, 34% suggested to “increase the clinical training”, 25% said “more training on interpersonal skills” should be provided (e.g. increase group task and presentation, etc.), and 16% said “the course syllabus should be updated regularly”. Moreover, 8% said that the programmes should “strengthen the connection with overseas universities”, such as organizing more exchange tours or talks. However, about 19% of respondents had no comments on the current OT programmes. See Summary Chart 12 below.

**Summary Chart 12: Overall Comments on OT programmes**



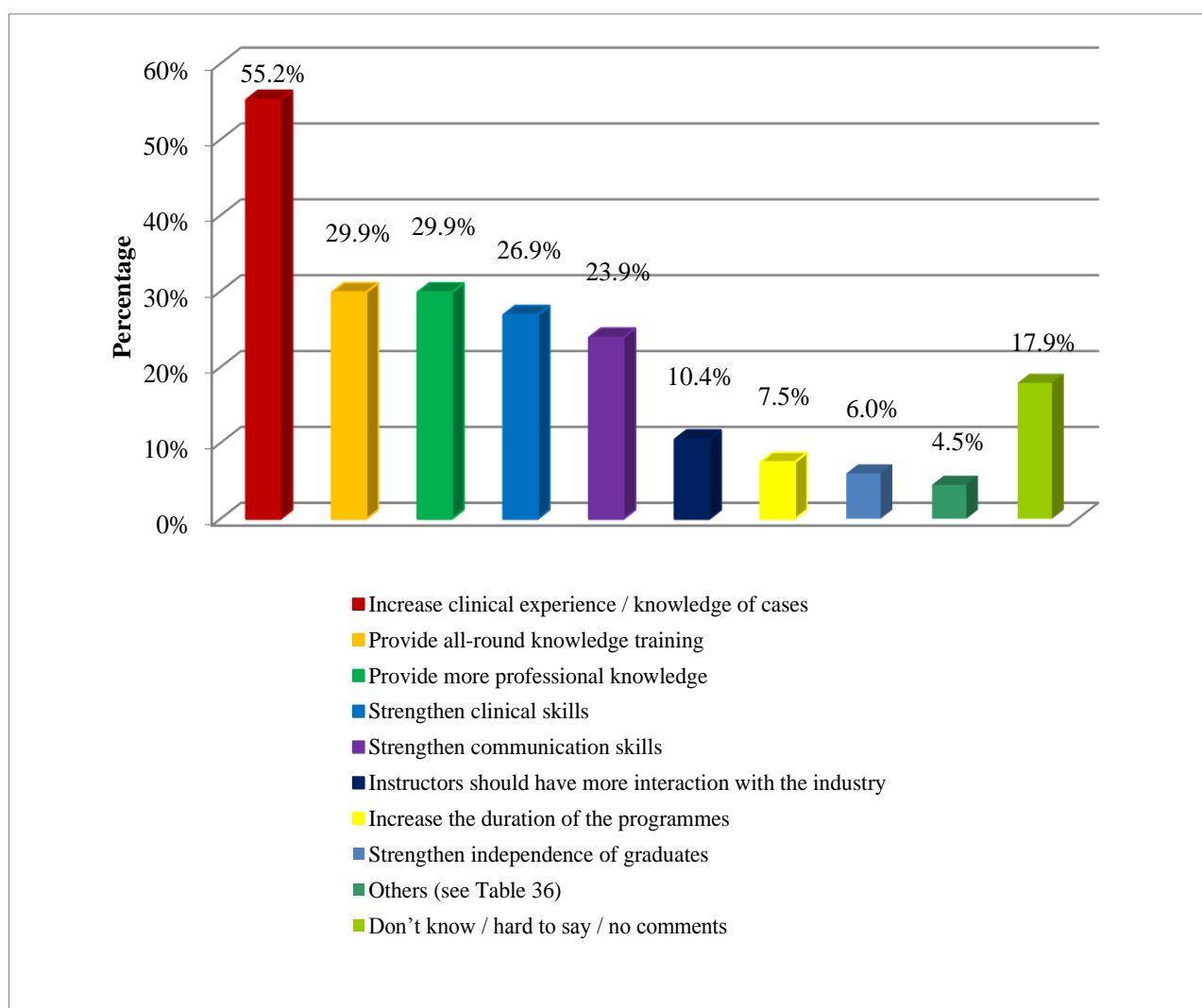
3.20. When asked to provide the reasons behind their comments on the programmes, 70% of these respondents said “the horizon and experience of internship training were not enough hence the graduates had difficulties adapting to the working environment”. Followed at a distance, “the course syllabus was outdated which failed to fulfill the social needs” (39%) took the second place. The third most commonly cited problem was “graduates in lack of interpersonal skills and resulted in misunderstanding when communicating with colleagues” (20%) For other responses, please see Summary Chart 13 below.

**Summary Chart 13: Reasons for Specific Comments on the OT Programmes**



3.21. With respect to the suggestions on how to improve the existing OT programmes, 55% of the respondents advised RS to “increase clinical experience / knowledge of cases”. 30% each suggested RS to “provide all-round knowledge training” and “provide more professional knowledge”. Another 27% proposed to “strengthen clinical skills” while 24% “strengthen communication skills”. Other recommendations with more than 5% of the total sample included “instructors should have more interaction with the industry” (10%), “increase the duration of the programmes” (8%) and “strengthen independence of graduates” (6%). Meanwhile, 18% had no comment. See Summary Chart 14 for more answers.

**Summary Chart 14: Suggestions on how to improve the OT programmes**



3.22. The last question in the questionnaire, also in open-ended format, was set out to collect some in-depth comments from the respondents regarding this survey topic. A total of 21 submissions were received and they are all tabulated in Table 38 of Appendix II, in un-edited format.

## IV. Concluding Remarks

- 4.1. Regarding the performance of OT and/or PT graduates both in terms of general and professional skills/competencies, most aspects received positive satisfaction ratings among the employers interviewed, in particular to the aspects of “utilising appropriate information technology skills to improve productivity at work” and “adhering to ethical and/or legal practice standards”. As many as 96% and 99% of respondents regarded the graduates having met or exceeded the standards respectively. On the contrary, the weakest performance areas of the graduates should be “demonstrating leadership appropriately” and “being innovative in services/areas of practice (e.g. generating new service ideas)” as more than half of their employers regarded them not able to meet the standards for these two areas (53% and 50% respectively). All in all, leadership skills and innovation appeared to be the weakest links, thus RS may consider to put more efforts in training up the students in these aspects.
- 4.2. Nevertheless, although the “meeting the standard” figures in all aspects under the general and professional skills / competencies have attained rather favorable assessment in this survey, when compared to the survey results in 2008, the aggregate positive figure for most aspects have dropped in general. For example, a substantial decrease of 17 and 19 percentage points was observed for the areas of “being innovative in services/areas of practice (e.g. generating new service ideas)” and “performing interventions efficiently, effectively and professionally” which are the two most severe deteriorations when compared to the 2008 survey. However, it is worth mentioning that since the sample size for both surveys are relatively small (less than 100 cases), and the composition of the sampling frame should have changed over the past 3 years, the results may not be directly comparable in a sense. Of course, this may also due to the ever increasing expectations of the employers on the graduates.
- 4.3. Looking ahead, when asked on how to improve the programmes, many respondents placed high emphasis on the internship training and clinical experience before graduation. Therefore, more internships and training opportunities should be offered and the scope of clinical training should be widened. Moreover, some other respondents mentioned the lack of knowledge of some specialized treatments, which they hoped could be introduced in the course in future. Generally speaking, since the OT and PT programmes are closely related to the society, therefore the course syllabus should be reviewed and updated regularly. Finally, tutors and lecturers of the department should heed the latest developments of the industry, and not only limited to Hong Kong, but also open to the whole world.

# **Appendix I**

## **Contact Information**



Table 1 *Calculation of effective response rate*

|   |
|---|
| Effective response rate   |
| $= \frac{\text{Successful cases}}{\text{Successful cases} + \text{Partial interview} + \text{Refusal cases by eligible respondents} + \text{Refusal cases by prorated-eligible respondents}}$ |
| $= \frac{119}{119 + 4 + 27 [(119 + 4 + 27) / (119 + 4 + 27 + 1)]^*}$  |
| = 79.3%   |

\* Figure obtained by prorata

Table 2 *Contact information*

|   | Frequency  | Percentage   |
|---|------------|--------------|
| <b>Respondents' ineligibility confirmed</b>                                     | <b>8</b>   | <b>3.9</b>   |
| <i>Fax/ data line</i>   | 4          | 2.0          |
| <i>Invalid number</i>   | 3          | 1.5          |
| <i>Call-forwarding/ mobile/ pager number</i>                                    | 0          | 0.0          |
| <i>Non-residential number</i>   | 0          | 0.0          |
| <i>Special technological difficulties</i>                                       | 0          | 0.0          |
| <i>No eligible respondents</i>  | 1          | 0.5          |
| <b>Respondents' eligibility not confirmed</b>                                   | <b>46</b>  | <b>22.5</b>  |
| <i>Line busy</i>  | 0          | 0.0          |
| <i>No answer</i>  | 14         | 6.9          |
| <i>Answering device</i>   | 3          | 1.5          |
| <i>Call-blocking</i>  | 0          | 0.0          |
| <i>Language problem</i>   | 1          | 0.5          |
| <i>Interview terminated before the screening question</i>                       | 27         | 13.2         |
| <i>Others</i>   | 1          | 0.5          |
| <b>Respondents' eligibility confirmed, but failed to complete the interview</b> | <b>31</b>  | <b>15.2</b>  |
| <i>Known respondent refusal</i>   | 0          | 0.0          |
| <i>Appointment date beyond the end of the fieldwork period</i>                  | 23         | 11.3         |
| <i>Partial interview</i>  | 4          | 2.0          |
| <i>No specific respondents</i>  | 4          | 2.0          |
| <i>Miscellaneous</i>  | 0          | 0.0          |
| <b>Successful cases</b>   | <b>119</b> | <b>58.3</b>  |
| <b>Total</b>  | <b>204</b> | <b>100.0</b> |

# **Appendix II**

## **Frequency Tables**

**(combined results of PolyU graduates)**

\*Note: Since Q1 and Q2 are only eligible for respondents who have employed the 2008-2011 OT and/or PT graduates, therefore the subsample size is 70.

Table 3 [Q1\_1] Performance of the graduates in meeting requirements/standards - **Be adaptable and flexible to cope with a changing work environment**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 20          | 24.1%                   | 18          | 25.7%                   |
| Generally meeting standard | 56 ) 76     | <b>67.5%</b> ) 91.6%    | 41 ) 59     | <b>58.6%</b> ) 84.3%    |
| Slightly below standard    | 5           | 6.0%                    | 8           | 11.4%                   |
| Far below standard         | 1 ) 6       | 1.2% ) 7.2%             | 1 ) 9       | 1.4% ) 12.9%            |
| Not applicable             | 1           | 1.2%                    | 2           | 2.9%                    |
| Total                      | 83          | 100.0%                  | 70          | 100%                    |

Table 4 [Q1\_2] Performance of the graduates in meeting requirements/standards - **Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of physiotherapy/ occupational therapy**

|                            | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 15          | 21.4%                   |
| Generally meeting standard | 39 ) 54     | <b>55.7%</b> ) 77.1%    |
| Slightly below standard    | 11          | 15.7%                   |
| Far below standard         | 3 ) 14      | 4.3% ) 20.0%            |
| Not applicable             | 2           | 2.9%                    |
| Total                      | 70          | 100.0%                  |

Table 5 [Q1\_3] Performance of the graduates in meeting requirements/standards - **Demonstrate professional behaviours (e.g., sense of responsibility, punctuality, reliability and confidentiality, etc.)**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 38          | 45.8%                   | 26          | 37.1%                   |
| Generally meeting standard | 40 ) 78     | <b>48.2%</b> ) 94.0%    | 38 ) 64     | <b>54.3%</b> ) 91.4%    |
| Slightly below standard    | 4           | 4.8%                    | 4           | 5.7%                    |
| Far below standard         | 1 ) 5       | 1.2% ) 6.0%             | 1 ) 5       | 1.4% ) 7.1%             |
| Not applicable             | 0           | 0.0%                    | 1           | 1.4%                    |
| Total                      | 83          | 100.0%                  | 70          | 100.0%                  |

Table 6 [Q1\_4] Performance of the graduates in meeting requirements/standards - **Organise work in a cost effective and timely manner (i.e., efficiently)**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 23 ) 73     | 27.7% ) 88.0%           | 12 ) 55     | 17.1% ) 78.6%           |
| Generally meeting standard | 50          | <b>60.2%</b>            | 43          | <b>61.4%</b>            |
| Slightly below standard    | 8 ) 10      | 9.6% ) 12.0%            | 13 ) 14     | 18.6% ) 20.0%           |
| Far below standard         | 2           | 2.4%                    | 1           | 1.4%                    |
| Not applicable             | 0           | 0.0%                    | 1           | 1.4%                    |
| Total                      | 83          | 100.0%                  | 70          | 100%                    |

Table 7 [Q1\_5] Performance of the graduates in meeting requirements/standards - **Be able to work independently**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 24 ) 68     | 28.9% ) 81.9%           | 12 ) 49     | 17.1% ) 70.0%           |
| Generally meeting standard | 44          | <b>53.0%</b>            | 37          | <b>52.9%</b>            |
| Slightly below standard    | 14 ) 15     | 16.9% ) 18.1%           | 18 ) 19     | 25.7% ) 27.1%           |
| Far below standard         | 1           | 1.2%                    | 1           | 1.4%                    |
| Not applicable             | 0           | 0.0%                    | 2           | 2.9%                    |
| Total                      | 83          | 100.0%                  | 70          | 100%                    |

Table 8 [Q1\_6] Performance of the graduates in meeting requirements/standards - **Demonstrate leadership appropriately**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 7 ) 49      | 8.4% ) 59.0%            | 2 ) 31      | 2.9% ) 44.3%            |
| Generally meeting standard | 42          | <b>50.6%</b>            | 29          | <b>41.4%</b>            |
| Slightly below standard    | 26 ) 30     | 31.3% ) 36.1%           | 28 ) 37     | 40.0% ) 52.9%           |
| Far below standard         | 4           | 4.8%                    | 9           | 12.9%                   |
| Not applicable             | 4           | 4.8%                    | 2           | 2.9%                    |
| Total                      | 83          | 100.0%                  | 70          | 100.0%                  |

Table 9 [Q1\_7] Performance of the graduates in meeting requirements/standards - **Work effectively in multidisciplinary teams**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 29 ) 79     | 34.9% ) 95.2%           | 17 ) 62     | 24.3% ) 88.6%           |
| Generally meeting standard | 50          | <b>60.2%</b>            | 45          | <b>64.3%</b>            |
| Slightly below standard    | 2 ) 3       | 2.4% ) 3.6%             | 6 ) 7       | 8.6% ) 10.0%            |
| Far below standard         | 1           | 1.2%                    | 1           | 1.4%                    |
| Not applicable             | 1           | 1.2%                    | 1           | 1.4%                    |
| Total                      | 83          | 100.0%                  | 70          | 100.0%                  |

Table 10 [Q1\_8] Performance of the graduates in meeting requirements/standards - **Apply problem-solving skills and use alternative strategies to overcome difficulties**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 12 ) 62     | 14.5% ) 74.7%           | 7 ) 46      | 10.0% ) 65.7%           |
| Generally meeting standard | 50          | <b>60.2%</b>            | 39          | <b>55.7%</b>            |
| Slightly below standard    | 16 ) 19     | 19.3% ) 22.9%           | 17 ) 22     | 24.3% ) 31.4%           |
| Far below standard         | 3           | 3.6%                    | 5           | 7.1%                    |
| Not applicable             | 2           | 2.4%                    | 2           | 2.9%                    |
| Total                      | 83          | 100.0%                  | 70          | 100.0%                  |

Table 11 [Q1\_9] Performance of the graduates in meeting requirements/standards - **Demonstrate language proficiency in oral and written communication in all aspects of professional practice**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 18 ) 68     | 21.7% ) 81.9%           | 10 ) 53     | 14.3% ) 75.7%           |
| Generally meeting standard | 50          | <b>60.2%</b>            | 43          | <b>61.4%</b>            |
| Slightly below standard    | 13 ) 15     | 15.7% ) 18.1%           | 14 ) 16     | 20.0% ) 22.9%           |
| Far below standard         | 2           | 2.4%                    | 2           | 2.9%                    |
| Not applicable             | 0           | 0.0                     | 1           | 1.4%                    |
| Total                      | 83          | 100.0%                  | 70          | 100.0%                  |

Table 12 [Q1\_10] Performance of the graduates in meeting requirements/standards - **Utilise appropriate information technology skills to improve productivity at work**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 31 ) 74     | 37.3% ) 89.2%           | 31 ) 67     | 44.3% ) 95.7%           |
| Generally meeting standard | 43          | <b>51.8%</b>            | 36          | <b>51.4%</b>            |
| Slightly below standard    | 3 ) 4       | 3.6% ) 4.8%             | 1 ) 2       | 1.4% ) 2.9%             |
| Far below standard         | 1           | 1.2%                    | 1           | 1.4%                    |
| Not applicable             | 5           | 6.0%                    | 1           | 1.4%                    |
| Total                      | 83          | 100.0%                  | 70          | 100.0%                  |

Table 13 [Q1\_11] Performance of the graduates in meeting requirements/standards - **Seek advice and clarify doubts when necessary**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 24 ) 72     | 28.9% ) 86.7%           | 16 ) 61     | 22.9% ) 87.1%           |
| Generally meeting standard | 48          | <b>57.8%</b>            | 45          | <b>64.3%</b>            |
| Slightly below standard    | 9 ) 9       | 10.8% ) 10.8%           | 7 ) 8       | 10.0% ) 11.4%           |
| Far below standard         | 0           | 0.0%                    | 1           | 1.4%                    |
| Not applicable             | 2           | 2.4%                    | 1           | 1.4%                    |
| Total                      | 83          | 100.0%                  | 70          | 100.0%                  |

Table 14 [Q1\_12] Performance of the graduates in meeting requirements/standards - **Be innovative in services/areas of practice (e.g. generating new service ideas)**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 12          | 14.5%                   | 4           | 5.7%                    |
| Generally meeting standard | 42 ) 54     | <b>50.6%</b> ) 65.1%    | 30 ) 34     | 42.9% ) 48.6%           |
| Slightly below standard    | 23          | 27.7%                   | 31          | <b>44.3%</b>            |
| Far below standard         | 5 ) 28      | 6.0% ) 33.7%            | 4 ) 35      | 5.7% ) 50.0%            |
| Not applicable             | 1           | 1.2%                    | 1           | 1.4%                    |
| Total                      | 83          | 100.0%                  | 70          | 100.0%                  |

Table 15 [Q1\_13] Performance of the graduates in meeting requirements/standards - **Demonstrate initiatives for personal/professional development**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 24          | 28.9%                   | 13          | 18.6%                   |
| Generally meeting standard | 45 ) 69     | <b>54.2%</b> ) 83.1%    | 42 ) 55     | <b>60.0%</b> ) 78.6%    |
| Slightly below standard    | 13          | 15.7%                   | 12          | 17.1%                   |
| Far below standard         | 1 ) 14      | 1.2% ) 16.9%            | 1 ) 13      | 1.4% ) 18.6%            |
| Not applicable             | 0           | 0.0%                    | 2           | 2.9%                    |
| Total                      | 83          | 100.0%                  | 70          | 100.0%                  |

Table 16 [Q2\_1] Performance of the graduates in meeting requirements/standards - **Adhere to ethical and/or legal practice standards**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 39          | 47.0%                   | 33          | 47.1%                   |
| Generally meeting standard | 43 ) 82     | <b>51.8%</b> ) 98.8%    | 36 ) 82     | <b>51.4%</b> ) 98.6%    |
| Slightly below standard    | 1           | 1.2%                    | 0           | 0.0%                    |
| Far below standard         | 0 ) 1       | 0.0% ) 1.2%             | 0 ) 0       | 0.0% ) 0.0%             |
| Not applicable             | 0           | 0.0%                    | 1           | 1.4%                    |
| Total                      | 83          | 100.0%                  | 70          | 100.0%                  |

Table 17 [Q2\_2] Performance of the graduates in meeting requirements/standards - **Analyse clinical findings to establish a problem list and outcomes of care**

|                            | <b>2008</b> |                         | <b>2011</b> |                         |
|----------------------------|-------------|-------------------------|-------------|-------------------------|
|                            | Frequency   | Percentage<br>(Base=83) | Frequency   | Percentage<br>(Base=70) |
| Far exceeding standard     | 17          | 20.5%                   | 7           | 10.0%                   |
| Generally meeting standard | 55 ) 72     | <b>66.3%</b> ) 86.7%    | 44 ) 51     | <b>62.9%</b> ) 72.9%    |
| Slightly below standard    | 10          | 12.0%                   | 18          | 25.7%                   |
| Far below standard         | 0 ) 10      | 0.0% ) 12.0%            | 0 ) 18      | 0.0% ) 25.7%            |
| Not applicable             | 1           | 1.2%                    | 1           | 1.4%                    |
| Total                      | 83          | 100.0%                  | 70          | 100.0%                  |

Table 18 [Q2\_3] Performance of the graduates in meeting requirements/standards - **Design a comprehensive plan of care that integrates goals, treatment, outcomes, and discharge plan**

|                            | 2008      |                         | 2011      |                         |
|----------------------------|-----------|-------------------------|-----------|-------------------------|
|                            | Frequency | Percentage<br>(Base=83) | Frequency | Percentage<br>(Base=70) |
| Far exceeding standard     | 20        | 24.1%                   | 7         | 10.0%                   |
| Generally meeting standard | 55        | <b>66.3%</b>            | 46        | <b>65.7%</b>            |
| Slightly below standard    | 7         | 8.4%                    | 14        | 20.0%                   |
| Far below standard         | 0         | 0.0%                    | 2         | 2.9%                    |
| Not applicable             | 1         | 1.2%                    | 1         | 1.4%                    |
| Total                      | 83        | 100.0%                  | 70        | 100.0%                  |

Table 19 [Q2\_4] Performance of the graduates in meeting requirements/standards - **Apply the principles of clinical thinking or clinical reasoning to practice**

|                            | 2008      |                         | 2011      |                         |
|----------------------------|-----------|-------------------------|-----------|-------------------------|
|                            | Frequency | Percentage<br>(Base=83) | Frequency | Percentage<br>(Base=70) |
| Far exceeding standard     | 18        | 21.7%                   | 8         | 11.4%                   |
| Generally meeting standard | 55        | <b>66.3%</b>            | 44        | <b>62.9%</b>            |
| Slightly below standard    | 5         | 6.0%                    | 17        | 24.3%                   |
| Far below standard         | 3         | 3.6%                    | 0         | 0.0%                    |
| Not applicable             | 2         | 2.4%                    | 1         | 1.4%                    |
| Total                      | 83        | 100.0%                  | 70        | 100.0%                  |

Table 20 [Q2\_5] Performance of the graduates in meeting requirements/standards - **Perform clinical examinations in a logical, organised, and accurate fashion**

|                            | 2008      |                         | 2011      |                         |
|----------------------------|-----------|-------------------------|-----------|-------------------------|
|                            | Frequency | Percentage<br>(Base=83) | Frequency | Percentage<br>(Base=70) |
| Far exceeding standard     | 16        | 19.3%                   | 8         | 11.4%                   |
| Generally meeting standard | 55        | <b>66.3%</b>            | 47        | <b>67.1%</b>            |
| Slightly below standard    | 9         | 10.8%                   | 14        | 20.0%                   |
| Far below standard         | 2         | 2.4%                    | 0         | 0.0%                    |
| Not applicable             | 1         | 1.2%                    | 1         | 1.4%                    |
| Total                      | 83        | 100.0%                  | 70        | 100.0%                  |

Table 21 [Q2\_6] Performance of the graduates in meeting requirements/standards - **Perform interventions efficiently, effectively and professionally**

|                            | 2008      |                         | 2011      |                         |
|----------------------------|-----------|-------------------------|-----------|-------------------------|
|                            | Frequency | Percentage<br>(Base=83) | Frequency | Percentage<br>(Base=70) |
| Far exceeding standard     | 18        | 21.7%                   | 8         | 11.4%                   |
| Generally meeting standard | 57        | <b>68.7%</b>            | 42        | <b>60.0%</b>            |
| Slightly below standard    | 6         | 7.2%                    | 17        | 24.3%                   |
| Far below standard         | 0         | 0.0%                    | 1         | 1.4%                    |
| Not applicable             | 2         | 2.4%                    | 2         | 2.9%                    |
| Total                      | 83        | 100.0%                  | 70        | 100.0%                  |

Table 22 [Q2\_7] Performance of the graduates in meeting requirements/standards - **Produce legible, concise, and accurate written documentation to support the delivery of services**

|                            | 2008      |                         | 2011      |                         |
|----------------------------|-----------|-------------------------|-----------|-------------------------|
|                            | Frequency | Percentage<br>(Base=83) | Frequency | Percentage<br>(Base=70) |
| Far exceeding standard     | 15        | 18.1%                   | 10        | 14.3%                   |
| Generally meeting standard | 55 ) 70   | <b>66.3%</b> ) 84.3%    | 41 ) 70   | <b>58.6%</b> ) 72.9%    |
| Slightly below standard    | 9         | 10.8%                   | 16        | 22.9%                   |
| Far below standard         | 1 ) 10    | 1.2% ) 12.0%            | 2 ) 10    | 2.9% ) 25.7%            |
| Not applicable             | 3         | 3.6%                    | 1         | 1.4%                    |
| Total                      | 83        | 100.0%                  | 70        | 100.0%                  |

Table 23 [Q2\_8] Performance of the graduates in meeting requirements/standards - **Apply learnt knowledge to meet the needs and nature of the employing organization**

|                            | 2011      |                         |
|----------------------------|-----------|-------------------------|
|                            | Frequency | Percentage<br>(Base=70) |
| Far exceeding standard     | 9         | 12.9%                   |
| Generally meeting standard | 50 ) 59   | <b>71.4%</b> ) 84.3%    |
| Slightly below standard    | 7         | 10.0%                   |
| Far below standard         | 2 ) 9     | 2.9% ) 12.9%            |
| Not applicable             | 2         | 2.9%                    |
| Total                      | 70        | 100.0%                  |

Table 24 [Q2\_9] Performance of the graduates in meeting requirements/standards - **Develop good rapport with clients, their families and/or other caregivers**

|                            | 2008      |                         | 2011      |                         |
|----------------------------|-----------|-------------------------|-----------|-------------------------|
|                            | Frequency | Percentage<br>(Base=83) | Frequency | Percentage<br>(Base=70) |
| Far exceeding standard     | 36        | 43.4%                   | 18        | 25.7%                   |
| Generally meeting standard | 43 ) 79   | <b>51.8%</b> ) 95.2%    | 47 ) 65   | <b>67.1%</b> ) 92.9%    |
| Slightly below standard    | 3         | 3.6%                    | 4         | 5.7%                    |
| Far below standard         | 0 ) 3     | 0.0% ) 3.6%             | 0 ) 4     | 0.0% ) 5.7%             |
| Not applicable             | 1         | 1.2%                    | 1         | 1.4%                    |
| Total                      | 83        | 100.0%                  | 70        | 100.0%                  |

Table 25 [Q2\_10] Performance of the graduates in meeting requirements/standards - **Educate clients, families, or other caregivers using appropriate and effective teaching methods**

|                            | 2008      |                         | 2011      |                         |
|----------------------------|-----------|-------------------------|-----------|-------------------------|
|                            | Frequency | Percentage<br>(Base=83) | Frequency | Percentage<br>(Base=70) |
| Far exceeding standard     | 25        | 30.1%                   | 8         | 11.4%                   |
| Generally meeting standard | 50 ) 75   | <b>60.2%</b> ) 90.4%    | 52 ) 60   | <b>74.3%</b> ) 85.7%    |
| Slightly below standard    | 7         | 8.4%                    | 9         | 12.9%                   |
| Far below standard         | 0 ) 7     | 0.0% ) 8.4%             | 0 ) 9     | 0.0% ) 12.9%            |
| Not applicable             | 1         | 1.2%                    | 1         | 1.4%                    |
| Total                      | 83        | 100.0%                  | 70        | 100.0%                  |



Table 26 [Q2\_11] Performance of the graduates in meeting requirements/standards - **Practise in a safe manner that minimises risk to clients, self, and others**

|                            | 2008      |                         | 2011      |                         |
|----------------------------|-----------|-------------------------|-----------|-------------------------|
|                            | Frequency | Percentage<br>(Base=83) | Frequency | Percentage<br>(Base=70) |
| Far exceeding standard     | 34 ) 78   | 41.0% ) 94.0%           | 19 ) 63   | 27.1% ) 90.0%           |
| Generally meeting standard | 44        | <b>53.0%</b>            | 44        | <b>62.9%</b>            |
| Slightly below standard    | 3 ) 3     | 3.6% ) 3.6%             | 5 ) 6     | 7.1% ) 8.6%             |
| Far below standard         | 0         | 0.0%                    | 1         | 1.4%                    |
| Not applicable             | 2         | 2.4%                    | 1         | 1.4%                    |
| Total                      | 83        | 100.0%                  | 70        | 100.0%                  |

Table 27 [Q2\_12] Performance of the graduates in meeting requirements/standards - **Respect for and be sensitive to individual needs or differences**

|                            | 2008      |                         | 2011      |                         |
|----------------------------|-----------|-------------------------|-----------|-------------------------|
|                            | Frequency | Percentage<br>(Base=83) | Frequency | Percentage<br>(Base=70) |
| Far exceeding standard     | 27 ) 81   | 32.5% ) 97.6%           | 15 ) 58   | 21.4% ) 82.9%           |
| Generally meeting standard | 54        | <b>65.1%</b>            | 43        | <b>61.4%</b>            |
| Slightly below standard    | 0 ) 0     | 0.0% ) 0.0%             | 11 ) 11   | 15.7% ) 15.7%           |
| Far below standard         | 0         | 0.0%                    | 0         | 0.0%                    |
| Not applicable             | 2         | 2.4%                    | 1         | 1.4%                    |
| Total                      | 83        | 100.0%                  | 70        | 100.0%                  |

Table 28 [Q2\_13] Performance of the graduates in meeting requirements/standards - **\*Act as an effective educator in health promotion and primary care**

|                            | 2008      |                         | 2011      |                         |
|----------------------------|-----------|-------------------------|-----------|-------------------------|
|                            | Frequency | Percentage<br>(Base=83) | Frequency | Percentage<br>(Base=70) |
| Far exceeding standard     | 18 ) 66   | 21.7% ) 79.5%           | 8 ) 48    | 11.4% ) 68.6%           |
| Generally meeting standard | 48        | <b>57.8%</b>            | 40        | <b>57.1%</b>            |
| Slightly below standard    | 11 ) 12   | 13.3% ) 14.5%           | 18 ) 19   | 25.7% ) 27.1%           |
| Far below standard         | 1         | 1.2%                    | 1         | 1.4%                    |
| Not applicable             | 5         | 6.0%                    | 3         | 4.3%                    |
| Total                      | 83        | 100.0%                  | 70        | 100.0%                  |

\*The wordings in 2008 survey were "be able to act as effective educator in health promotion".

\*Note: Since 10 of the respondents are representatives of both OT and PT, and they have to answer the questionnaire twice with different identities, therefore Q3 – Q7 will have a sample size of 129.

Table 29 [Q3] Overall, how satisfied are you with your experience of the undergraduate programme provided by the Department of Rehabilitation Sciences?

|                                       | <b>2011</b> |                          |
|---------------------------------------|-------------|--------------------------|
|                                       | Frequency   | Percentage<br>(Base=129) |
| Very satisfied                        | 20          | 15.5%                    |
| Quite satisfied ) Satisfied           | 83 ) 103    | <b>64.3%</b> ) 79.8%     |
| Half-half                             | 12          | 9.3%                     |
| Not quite satisfied                   | 5           | 3.9%                     |
| Not satisfied ) Dissatisfied          | 1 ) 6       | 0.8% ) 4.7%              |
| Don't know/hard to say/not applicable | 8           | 6.2%                     |
| Total                                 | 129         | 100.0%                   |

Table 30 [Q4\_a] Which aspects of the PolyU graduates' performance are you most satisfied with (general skills / competencies)?

|  | Frequency | Percentage of<br>responses<br>(Base =247) | Percentage of<br>cases<br>(Base=129) |
|--|-----------|---|--------------------------------------|
| Possess team spirit  | 55        | 22.3%                                     | <b>42.6%</b>                         |
| Good communication skills, being able to<br>coordinate with supervisors and colleagues | 54        | 21.9%                                     | 41.9%                                |
| Good work attitude   | 35        | 14.2%                                     | 27.1%                                |
| Being able to work independently   | 28        | 11.3%                                     | 21.7%                                |
| Being passionate at work   | 26        | 10.5%                                     | 20.2%                                |
| Keen on continual education  | 25        | 10.1%                                     | 19.4%                                |
| Possess good basic knowledge (e.g. computer<br>usage, writing and thinking, etc)       | 16        | 6.5%                                      | 12.4%                                |
| No / not satisfying in all aspects   | 4         | 1.6%                                      | 3.1%                                 |
| Don't know / no comment / not applicable   | 4         | 1.6%                                      | 3.1%                                 |
| Total  | 247       | 100.0%                                    |                                      |

Table 31 [Q4\_b] Which aspects of the PolyU graduates' performance are you most satisfied with (professional skills / competencies)?

|   | Frequency | Percentage of<br>responses<br>(Base =190) | Percentage of<br>cases<br>(Base=129) |
|---|-----------|---|--------------------------------------|
| Possess professional knowledge/ applying knowledge                | 72        | 37.9%                                     | <b>55.8%</b>                         |
| Adhere to professional standard                                   | 66        | 34.7%                                     | 51.2%                                |
| Demonstrate professional behaviours                               | 22        | 11.6%                                     | 17.1%                                |
| Improve and apply skills according to the need of<br>society      | 13        | 6.8%                                      | 10.1%                                |
| Be aware of global issues, receptive to new ideas in<br>the field | 2         | 1.1%                                      | 1.6%                                 |
| No / not satisfying in all aspects                                | 5         | 2.6%                                      | 3.9%                                 |
| Don't know / no comment / not applicable                          | 10        | 5.3%                                      | 7.8%                                 |
| Total   | 190       | 100.0%                                    |                                      |

Table 32 [Q5] Please provide your overall comments about the BSc (Hons) in Occupational Therapy or BSc (Hons) in Physiotherapy programme provided by the Department of Rehabilitation Sciences.

|  | Frequency | Percentage of responses (Base= 216) | Percentage of cases (Base=129) |
|--|-----------|-------------------------------------|--------------------------------|
| Opportunities of internship training should be increased/ the horizon of internship training should be broadened | 52        | 24.1%                               | <b>40.3%</b>                   |
| Clinical training should be increased  | 50        | 23.1%                               | 38.8%                          |
| Training about interpersonal skills should be increased (e.g. increase group-task and presentation, etc.)        | 35        | 16.2%                               | 27.1%                          |
| The course syllabus should be updated regularly  | 17        | 7.9%                                | 13.2%                          |
| Strengthen the connection between overseas universities (e.g. organizing more exchange tours or talks, etc.)     | 11        | 5.1%                                | 8.5%                           |
| Increase the fundamental training, e.g. language and writing ability)  | 5         | 2.3%                                | 3.9%                           |
| Strengthen the international recognition of the course   | 4         | 1.9%                                | 3.1%                           |
| Increase the number of vacancy to meet the needs of society  | 4         | 1.9%                                | 3.1%                           |
| Decrease the vacancy in order to avoid excess in human resources   | 2         | 0.9%                                | 1.6%                           |
| Don't know / hard to say / no comments   | 26        | 12.0%                               | 20.2%                          |
| Others (see Table 33)  | 10        | 4.6%                                | 7.8%                           |
| Total  | 216       | 100.0%                              |                                |

Table 33 [Q5\_others] Please provide your overall comments about the BSc (Hons) in Occupational Therapy or BSc (Hons) in Physiotherapy programme provided by the Department of Rehabilitation Sciences.

|                         | Frequency | OT / PT |
|-------------------------|-----------|---------|
| 兒科方面知識較少                | 1         | PT      |
| 書寫及語文能力                 | 1         | OT      |
| 增加新設備，加強痛症理論            | 1         | PT      |
| 增加實習，例如骨折及關節強化          | 1         | PT      |
| 增加對非政府機構工作上需要的訓練        | 1         | OT      |
| 課程內容要宏觀以配合畢業後工作發展       | 1         | OT      |
| 課程內容較偏向醫管理局的服務，應包括非政府機構 | 1         | OT      |
| 課程內容需要多元化               | 1         | OT      |
| 課程內容應增加專業操守教育           | 1         | OT      |
| 擴闊課程內容，例如增加視障及聽障課程      | 1         | OT      |

Table 34 [Q5a] (Only for respondents who gave comment(s) in Q5) Why do you have these comments?

|   | Frequency | Percentage of responses<br>(Base= 150) | Percentage of cases<br>(Base=103) |
|---|-----------|--|-----------------------------------|
| The horizon and experience of internship training are not enough which causing the graduates cannot adapt to the working environment        | 70        | 46.7%                                  | <b>68.0%</b>                      |
| The course syllabus was outdated which cannot fulfill the social needs  | 36        | 24.0%                                  | 35.0%                             |
| Graduates are lacking in interpersonal skills and resulted in misunderstanding when communicating with colleagues                           | 25        | 16.7%                                  | 24.3%                             |
| The graduates are lacking in international experience and therefore they do not have knowledge on the techniques applied by other countries | 10        | 6.7%                                   | 9.7%                              |
| Others (see Table 35)   | 8         | 5.3%                                   | 7.8%                              |
| Don't know / hard to say / no comments  | 1         | 0.7%                                   | 1.0%                              |
| Total   | 150       | 100.0%                                 |                                   |

Table 35 [Q5a\_others] (Only for respondents who gave comment(s) in Q5) How do you come to this comment?

|                         | Frequency | OT / PT |
|-------------------------|-----------|---------|
| 人手短缺，人口老化需要更多治療服務       | 1         | OT      |
| 三年課程太短                  | 1         | OT      |
| 太多學位影響市場就業              | 1         | PT      |
| 在針灸方面未夠深入，畢業生未能適應工作環境   | 1         | PT      |
| 書寫能力                    | 1         | PT      |
| 課程只針對醫院運作，缺乏私立/社福機構運作知識 | 1         | PT      |
| 學額太少不能配合社會需要            | 1         | OT      |
| 學額太多會影響質素               | 1         | PT      |

Table 36 [Q6] Please suggest how the BSc (Hons) in OT and PT programmes might be improved to produce graduates that meet the requirements and standards of the profession/your organisation.

|  | Frequency | Percentage<br>of responses<br>(Base= 270) | Percentage of<br>cases<br>(Base=129) |
|--|-----------|---|--------------------------------------|
| Increase clinical experience / knowledge of cases          | 70        | 25.9%                                     | <b>54.3%</b>                         |
| Strengthen clinical skills                                 | 35        | 13.0%                                     | 27.1%                                |
| Provide all-round knowledge training                       | 34        | 12.6%                                     | 26.4%                                |
| Strengthen communication skills                            | 34        | 12.6%                                     | 26.4%                                |
| Provide more professional knowledge                        | 34        | 12.6%                                     | 26.4%                                |
| Strengthen independence of graduates                       | 10        | 3.7%                                      | 7.8%                                 |
| Instructors should have more interaction with the industry | 9         | 3.3%                                      | 7.0%                                 |
| Increase the duration of the programmes                    | 7         | 2.6%                                      | 5.4%                                 |
| Improve language ability                                   | 1         | 0.4%                                      | 0.8%                                 |
| Others (see Table 37)                                      | 10        | 3.7%                                      | 7.8%                                 |
| Don't know / hard to say / no comments                     | 26        | 9.6%                                      | 20.2%                                |
| Total  | 270       | 100.0%                                    |                                      |

Table 37 [Q6\_others] Please suggest how the BSc (Hons) in OT and PT programmes might be improved to produce graduates that meet the requirements and standards of the profession/your organisation.

|                  | Frequency | OT / PT |
|------------------|-----------|---------|
| 加強身體機能訓練以提高康復較果  | 1         | PT      |
| 留意病人家屬情緒，對社會資源調配 | 1         | PT      |
| 增加教導病人出院後家居護理知識  | 1         | PT      |
| 增加智障及精神科臨床培訓     | 1         | PT      |
| 增加義工服務活動         | 1         | OT      |
| 課程足夠全面，需要增加學額    | 1         | OT      |
| 課程要結合社區需要        | 1         | PT      |
| 導師具國際視野          | 1         | PT      |
| 導師要有臨床經驗教學生      | 1         | OT      |
| 整體上可以，不需改善       | 1         | PT      |

Table 38 [Q7] Other comments:

|  | Frequency | OT / PT |
|--|-----------|---------|
| 畢業生要提高專業操守，不能只看薪酬來肯定自己的專業知識                                    | 2         | OT & PT |
| 畢業生應更主動學習  | 2         | OT      |
| 增加有關兒童的復康課程  | 2         | OT & PT |
| 不停要工作轉變，要持續進修  | 1         | PT      |
| 加強痴呆治療訓練   | 1         | OT      |
| 在實習方面顧及社區健康，處理及照顧病人情緒及心理健康，由於現在欠缺研究元素，欠指導實習，建議聘請多些行內治療師，多講臨床經驗 | 1         | PT      |
| 多學習外國大學的考試   | 1         | PT      |
| 專業操守   | 1         | PT      |
| 畢業生國際經驗不足，以致對外國技術欠缺認識  | 1         | PT      |
| 提供全面的知識訓練，例如中風年輕化，增加臨床經驗及個案的知識                                 | 1         | OT      |
| 實習前先觀察學生對課程有沒有興趣，完成後可以工作                                       | 1         | PT      |
| 增加兒科知識   | 1         | OT      |
| 增加特殊個案訓練，例如增加自閉症課程、讀寫障礙課程等                                     | 1         | OT      |
| 增加學額應付機構人手短缺   | 1         | OT      |
| 增加應用書寫語文能力   | 1         | PT      |
| 學生承受不了工作壓力，語言能力需要改善  | 1         | OT      |
| 導師應定期與業界交流，了解現實工作  | 1         | OT      |
| 邀請業界臨床導師訓練學生，了解臨床技巧，另外讓學生參觀業界了解工作環境                            | 1         | OT      |

# **Appendix III**

## **Respondents' Demographic Profile**

## Background Information of Respondents

Table 39 Type of organisation

|  | Frequency | Percentage |
|--|-----------|------------|
| Hospital Authority                         | 53        | 44.5%      |
| Non-Government Organisation                | 31        | 26.1%      |
| Private OT or PT practice                  | 17        | 14.3%      |
| Private Hospital setting                   | 11        | 9.2%       |
| Educational setting (e.g. special schools) | 3         | 2.5%       |
| Social Welfare Department                  | 2         | 1.7%       |
| Vocational Training Council                | 1         | 0.8%       |
| Department of Health                       | 1         | 0.8%       |
| Total                                      | 119       | 100.0%     |

Table 40 Location

|                                  | Frequency | Percentage |
|----------------------------------|-----------|------------|
| Local (within Hong Kong SAR)     | 119       | 100.0%     |
| Overseas (outside Hong Kong SAR) | 0         | 0.0%       |
| Total                            | 119       | 100.0%     |

Table 41 Please state your current job title (exact wordings given):

|                            | Frequency | Percentage |
|----------------------------|-----------|------------|
| Occupational therapists    | 52        | 43.7%      |
| Physiotherapists           | 47        | 39.5%      |
| CEOs / heads of center     | 15        | 12.6%      |
| Heads of department        | 3         | 2.5%       |
| Administrative officer     | 1         | 0.8%       |
| Project executive/ manager | 1         | 0.8%       |
| Total                      | 119       | 100.0%     |



Table 42 **Number of occupational therapists (OT) and physiotherapists (PT) employed – Summary Table**

|   | Total number | Average year(s) working<br>in the organization per<br>employee | Standard error |
|---|--------------|--|----------------|
| Number of OT currently employed                                       | 768          | 7.1  | 3.25           |
| Number of PT currently employed                                       | 698          | 7.1  | 3.51           |
| Total number of recent OT graduates<br>(2004-2007) currently employed | 159          | 1.5  | 0.92           |
| Total number of recent PT graduates<br>(2004-2007) currently employed | 154          | 1.4  | 0.97           |

Table 43 **Total number of OT currently employed - Less than 1 year**

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 46        | 70.8%      |
| 1              | 7         | 10.8%      |
| 2              | 5         | 7.7%       |
| 3              | 2         | 3.1%       |
| 5              | 4         | 6.2%       |
| 9              | 1         | 1.5%       |
| Total          | 65        | 100.0%     |
| <i>Missing</i> | 2         |            |
| Mean           | 2.74      |            |
| Median         | 2.00      |            |
| Standard error | +/-0.99   |            |
| Base           | 19        |            |

Table 44 **Total number of OT currently employed - 1 year**

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 50        | 76.9%      |
| 1              | 6         | 9.2%       |
| 2              | 1         | 1.5%       |
| 3              | 5         | 7.7%       |
| 5              | 1         | 1.5%       |
| 7              | 2         | 3.1%       |
| Total          | 65        | 100.0%     |
| <i>Missing</i> | 2         |            |
| Mean           | 2.80      |            |
| Median         | 3.00      |            |
| Standard error | +/-1.07   |            |
| Base           | 15        |            |

Table 45 Total number of OT currently employed- 2-4 years

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 24        | 36.9%      |
| 1              | 16        | 24.6%      |
| 2              | 9         | 13.8%      |
| 3              | 4         | 6.2%       |
| 4              | 4         | 6.2%       |
| 5              | 1         | 1.5%       |
| 6              | 1         | 1.5%       |
| 7              | 1         | 1.5%       |
| 8              | 2         | 3.1%       |
| 9              | 1         | 1.5%       |
| 12             | 1         | 1.5%       |
| 14             | 1         | 1.5%       |
| Total          | 65        | 100.0%     |
| <i>Missing</i> | 2         |            |
| Mean           | 3.20      |            |
| Median         | 2.00      |            |
| Standard error | +/-0.98   |            |
| Base           | 41        |            |

Table 46 Total number of OT currently employed- **5-10 years**

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 18        | 27.7%      |
| 1              | 15        | 23.1%      |
| 2              | 9         | 13.8%      |
| 3              | 8         | 12.3%      |
| 4              | 2         | 3.1%       |
| 5              | 6         | 9.2%       |
| 6              | 1         | 1.5%       |
| 7              | 1         | 1.5%       |
| 8              | 1         | 1.5%       |
| 9              | 1         | 1.5%       |
| 10             | 1         | 1.5%       |
| 15             | 2         | 3.1%       |
| Total          | 65        | 100.0%     |
| Missing        | 2         |            |
| Mean           | 3.51      |            |
| Median         | 2.00      |            |
| Standard error | +/-0.97   |            |
| Base           | 47        |            |

Table 47 Total number of OT currently employed- &gt;10 years

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 12        | 18.5%      |
| 1              | 13        | 20.0%      |
| 2              | 8         | 12.3%      |
| 3              | 2         | 3.1%       |
| 4              | 3         | 4.6%       |
| 5              | 4         | 6.2%       |
| 6              | 6         | 9.2%       |
| 7              | 2         | 3.1%       |
| 8              | 2         | 3.1%       |
| 9              | 1         | 1.5%       |
| 10             | 2         | 3.1%       |
| 13             | 1         | 1.5%       |
| 15             | 1         | 1.5%       |
| 17             | 3         | 4.6%       |
| 18             | 2         | 3.1%       |
| 22             | 1         | 1.5%       |
| 30             | 1         | 1.5%       |
| 49             | 1         | 1.5%       |
| Total          | 65        | 100.0%     |
| Missing        | 2         |            |
| Mean           | 7.13      |            |
| Median         | 5.00      |            |
| Standard error | +/-2.39   |            |
| Base           | 53        |            |

Table 48 Total number of PT currently employed - **Less than 1 year**

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 43        | 70.5%      |
| 1              | 4         | 6.6%       |
| 2              | 7         | 11.5%      |
| 3              | 2         | 3.3%       |
| 5              | 2         | 3.3%       |
| 6              | 1         | 1.6%       |
| 8              | 1         | 1.6%       |
| 20             | 1         | 1.6%       |
| Total          | 61        | 100.0%     |
| <i>Missing</i> | <i>1</i>  |            |
| Mean           | 3.78      |            |
| Median         | 2.00      |            |
| Standard error | 2.12      |            |
| Base           | 18        |            |

Table 49 Total number of PT currently employed - **1 year**

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 40        | 65.6%      |
| 1              | 13        | 21.3%      |
| 2              | 5         | 8.2%       |
| 3              | 2         | 3.3%       |
| 7              | 1         | 1.6%       |
| Total          | 61        | 100.0%     |
| <i>Missing</i> | <i>1</i>  |            |
| Mean           | 1.71      |            |
| Median         | 1.00      |            |
| Standard error | 0.60      |            |
| Base           | 21        |            |

Table 50 Total number of PT currently employed- 2-4 years

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 29        | 47.5%      |
| 1              | 10        | 16.4%      |
| 2              | 7         | 11.5%      |
| 3              | 8         | 13.1%      |
| 4              | 2         | 3.3%       |
| 5              | 1         | 1.6%       |
| 6              | 2         | 3.3%       |
| 7              | 1         | 1.6%       |
| 9              | 1         | 1.6%       |
| Total          | 61        | 100.0%     |
| Missing        | 1         |            |
| Mean           | 2.78      |            |
| Median         | 2.00      |            |
| Standard error | 0.70      |            |
| Base           | 32        |            |

Table 51 Total number of PT currently employed- 5-10 years

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 16        | 26.2%      |
| 1              | 10        | 16.4%      |
| 2              | 8         | 13.1%      |
| 3              | 8         | 13.1%      |
| 4              | 6         | 9.8%       |
| 5              | 4         | 6.6%       |
| 6              | 2         | 3.3%       |
| 7              | 1         | 1.6%       |
| 8              | 2         | 3.3%       |
| 10             | 2         | 3.3%       |
| 12             | 1         | 1.6%       |
| 16             | 1         | 1.6%       |
| Total          | 61        | 100.0%     |
| Missing        | 1         |            |
| Mean           | 3.93      |            |
| Median         | 3.00      |            |
| Standard error | 0.97      |            |
| Base           | 45        |            |

Table 52 Total number of PT currently employed- &gt;10 years

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 12        | 19.7%      |
| 1              | 14        | 23.0%      |
| 2              | 8         | 13.1%      |
| 3              | 3         | 4.9%       |
| 4              | 3         | 4.9%       |
| 5              | 6         | 9.8%       |
| 6              | 1         | 1.6%       |
| 7              | 1         | 1.6%       |
| 10             | 3         | 4.9%       |
| 11             | 1         | 1.6%       |
| 14             | 1         | 1.6%       |
| 15             | 2         | 3.3%       |
| 18             | 2         | 3.3%       |
| 21             | 1         | 1.6%       |
| 25             | 1         | 1.6%       |
| 29             | 1         | 1.6%       |
| 38             | 1         | 1.6%       |
| Total          | 61        | 100.0%     |
| <i>Missing</i> | 1         |            |
| Mean           | 6.69      |            |
| Median         | 3.00      |            |
| Standard error | 2.34      |            |
| Base           | 49        |            |

Table 53 Total number of recent OT graduates (2008-2011) currently employed - Less than 1 year

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 21        | 53.8%      |
| 1              | 7         | 17.9%      |
| 2              | 5         | 12.8%      |
| 3              | 1         | 2.6%       |
| 5              | 4         | 10.3%      |
| 9              | 1         | 2.6%       |
| Total          | 39        | 100.0%     |
| Mean           | 2.72      |            |
| Median         | 2.00      |            |
| Standard error | 1.05      |            |
| Base           | 18        |            |

Table 54 Total number of recent OT graduates (2008-2011) currently employed - **1 year**

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 24        | 61.5%      |
| 1              | 7         | 17.9%      |
| 2              | 1         | 2.6%       |
| 3              | 4         | 10.3%      |
| 5              | 1         | 2.6%       |
| 7              | 2         | 5.1%       |
| Total          | 39        | 100.0%     |
| Mean           | 2.67      |            |
| Median         | 2.00      |            |
| Standard error | 1.10      |            |
| Base           | 15        |            |

Table 55 Total number of recent OT graduates (2008-2011) currently employed – **2 years**

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 20        | 51.3%      |
| 1              | 10        | 25.6%      |
| 2              | 1         | 2.6%       |
| 3              | 5         | 12.8%      |
| 4              | 2         | 5.1%       |
| 6              | 1         | 2.6%       |
| Total          | 39        | 100.0%     |
| Mean           | 2.16      |            |
| Median         | 1.00      |            |
| Standard error | 0.67      |            |
| Base           | 19        |            |

Table 56 Total number of recent OT graduates (2008-2011) currently employed – **3 years**

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 26        | 66.7%      |
| 1              | 6         | 15.4%      |
| 2              | 5         | 12.8%      |
| 3              | 1         | 2.6%       |
| 10             | 1         | 2.6%       |
| Total          | 39        | 100.0%     |
| Mean           | 2.23      |            |
| Median         | 2.00      |            |
| Standard error | 1.34      |            |
| Base           | 13        |            |



Table 57      Total number of recent PT graduates (2008-2011) currently employed - **Less than 1 year**

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 15        | 48.4%      |
| 1              | 5         | 16.1%      |
| 2              | 5         | 16.1%      |
| 3              | 2         | 6.5%       |
| 5              | 2         | 6.5%       |
| 8              | 1         | 3.2%       |
| 20             | 1         | 3.2%       |
| Total          | 31        | 100.0%     |
| Mean           | 3.69      |            |
| Median         | 2.00      |            |
| Standard error | 2.38      |            |
| Base           | 16        |            |

Table 58      Total number of recent PT graduates (2008-2011) currently employed - **1 year**

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 13        | 41.9%      |
| 1              | 10        | 32.3%      |
| 2              | 5         | 16.1%      |
| 3              | 2         | 6.5%       |
| 7              | 1         | 3.2%       |
| Total          | 31        | 100.0%     |
| Mean           | 1.83      |            |
| Median         | 1.00      |            |
| Standard error | 0.69      |            |
| Base           | 18        |            |

Table 59 Total number of recent PT graduates (2008-2011) currently employed – **2 years**

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 17        | 54.8%      |
| 1              | 3         | 9.7%       |
| 2              | 7         | 22.6%      |
| 3              | 3         | 9.7%       |
| 5              | 1         | 3.2%       |
| Total          | 31        | 100.0%     |
| Mean           | 2.21      |            |
| Median         | 2.00      |            |
| Standard error | 0.56      |            |
| Base           | 14        |            |

Table 60 Total number of recent PT graduates (2008-2011) currently employed – **3 years**

|                | Frequency | Percentage |
|----------------|-----------|------------|
| 0              | 15        | 48.4%      |
| 1              | 8         | 25.8%      |
| 2              | 4         | 12.9%      |
| 3              | 3         | 9.7%       |
| 6              | 1         | 3.2%       |
| Total          | 31        | 100.0%     |
| Mean           | 1.94      |            |
| Median         | 1.50      |            |
| Standard error | 0.67      |            |
| Base           | 16        |            |

# **Appendix IV**

## **Cover Letter (English) & Questionnaire (bilingual)**



THE UNIVERSITY OF HONG KONG  
PUBLIC OPINION PROGRAMME  
香港大學 民意研究計劃

26 September 2011

Dear Sir/Madam,

**Invitation to Participate in Survey of Employers' Opinions of PolyU Graduates  
of the BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy Programmes**

The Department of Rehabilitation Sciences (RS) of The Hong Kong Polytechnic University cordially invites you to participate in a telephone survey about the performance of recent graduates of the two RS programmes, BSc (Hons) Occupational Therapy and BSc (Hons) Physiotherapy. The Public Opinion Programme (POP) at The University of Hong Kong is commissioned to conduct this survey. The targets of the survey are employers of graduates who graduated in the years 2008- 2011.

The survey aims to collect the employers' feedback about the curricula as part of the commitment by RS to provide a high quality of professional education. Your feedback is crucial to this quality assurance and improvement mechanism.

Our interviewers will contact you during office hours in **October / November 2011**, and conduct a telephone interview with you for about 5 minutes. Your views will make a significant contribution to ongoing improvements to the quality of education for occupational therapists and physiotherapists. Please rest assured that all data will be collected and analysed independently by POP. The data will be kept strictly confidential and no matching of personal identity will be made under any circumstances.

For any enquiries regarding the telephone survey, please contact Mr. Frank Lee of POP at 3921 2724 or email via [frank.lee@hkupop.hku.hk](mailto:frank.lee@hkupop.hku.hk); or Ms. Anne Kwok of POP at 3921 2714 or email via [anne.kwok@hkupop.hku.hk](mailto:anne.kwok@hkupop.hku.hk). If you would prefer not to participate in this survey, please kindly provide your phone / email confirmation to Mr. Frank Lee within 5 working days after you have received this letter. Thank you in anticipation.

Yours sincerely,

Dr Robert Chung Ting-yiu  
Director of Public Opinion  
Programme  
The University of Hong Kong

Dr. Grace Szeto  
Associate Professor  
Department of Rehabilitation  
Sciences  
The Hong Kong Polytechnic  
University

Dr. Kenneth Fong  
Assistant Professor  
Department of Rehabilitation  
Sciences  
The Hong Kong Polytechnic  
University

## EMPLOYERS



The Hong Kong Polytechnic University

Department of Rehabilitation Sciences

調查僱主對理工大學「職業治療學(榮譽)理學士」及「物理治療學 (榮譽)理學士」  
畢業生之表現Survey of Employers' Opinions of PolyU Graduates of the  
BSc (Hons) in Occupational Therapy and BSc (Hons) in Physiotherapy Programmes

## 第一部 個人及所屬機構背景資料

## Part I Background information about you and your organisation

## 1. 機構類別 Type of organisation

- |  |   |
|--|---|
| ① 醫院管理局 Hospital Authority                                     | ⑨ 社區中心 Community Centre   |
| ② 私立醫院 Private Hospital setting                                | ⑩ 保險業及相關機構 Insurance and workers' compensation                            |
| ③ 非政府組織 (社福機構)<br>Non-Government Organisation                  | ⑪ 治療相關組織 Therapy-related setting<br>(請註明 Please specify): _____           |
| ④ 社會福利署 Social Welfare Department                              | ⑫ 非治療相關組織 Non-therapy related organization<br>(請註明 Please specify): _____ |
| ⑤ 職業訓練局 Vocational Training Council                            | ⑬ 其他: Others<br>(請註明 Please specify): _____                               |
| ⑥ 衛生署 Department of Health                                     |   |
| ⑦ 辦學團體 (如: 特殊學校)<br>Educational setting (e.g. special schools) |   |
| ⑧ 私人執業 Private OT or PT practice                               |   |

## 2. 工作地點 Location

- ① 本地(香港境內) Local (within Hong Kong SAR)
- ② 外地(香港境外) Overseas (outside Hong Kong SAR)

## 3. 閣下職位名稱為 Please state your current job title: \_\_\_\_\_

## 4. 職業治療師及物理治療師在職人數 (請於適當的空格內填上數字)

**Number of occupational therapists (OT) or physiotherapists (PT) employed** (please fill in the numbers in the appropriate boxes)

在貴 機構工作之年數

Number of years working in your organisation

| 未夠 1 年 | 1 年  | 2-4 年   | 5-10 年   | >10 年   |
|--------|------|---------|----------|---------|
| >1 yr  | 1 yr | 2-4 yrs | 5-10 yrs | >10 yrs |

職業治療師在職人數

Total number of OT currently employed  
(applicable for OT employers ONLY)

物理治療師在職人數

Total number of PT currently employed  
(applicable for PT employers ONLY)

職業治療學畢業生(2009-2011 年間畢業)之在職人數

Total number of recent OT graduates (2009-2011) currently employed

物理治療學畢業生(2009-2011 年間畢業)之在職人數

Total number of recent PT graduates (2009-2011) currently employed

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## EMPLOYERS

**第二部 理工大學「職業治療學(榮譽)理學士」及「物理治療學 (榮譽)理學士」畢業生之表現**  
**Part II Performance of PolyU BSc (Hons) OT and BSc (Hons) PT Graduates**

只問現有或曾聘用理工大學「職業治療學(榮譽)理學士」及「物理治療學 (榮譽)理學士」2008 至 2011 年間畢業生之僱主，否則直接跳至第三部作答。

Answer this part only if you are currently employing or have previously employed any PolyU BSc (Hons) OT and/or BSc (Hons) PT graduates of 2008, 2009, 2010 and/or 2011 in the past. If you have not employed any graduates in these categories, please skip this section and go directly to the questions in Part III on the next page.

**畢業生在有關要求/標準之表現**  
**Performance of the graduates in meeting requirements/standards**

**Q1. 共通技能/能力 Generic skills/competencies**

標準以上 大致合乎標準 僅僅未達標準 標準以下 不適用

|   | Far exceed | Generally meet | Slightly below | Far below | Not applicable |
|---|------------|----------------|----------------|-----------|----------------|
| 1. 能適應不斷轉變的工作環境<br>Be adaptable and flexible to cope with a changing work environment.  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 2. 具國際視野，樂於接受物理/職業治療的新觀點及勇敢面對挑戰<br>Be aware of global issues, receptive to new ideas and the challenges that face our new generation in the field of Physiotherapy/ Occupational therapy. | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 3. 表現專業，如：有責任感、守時、可靠及守信用等<br>Demonstrate professional behaviours (e.g., sense of responsibility, punctuality, reliability and confidentiality, etc.)                                      | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 4. 有效率及有效地組織工作<br>Organise work in a cost effective and timely manner (i.e., efficiently).  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 5. 能獨立執行職務<br>Be able to work independently.  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 6. 表現恰當的領導能力<br>Demonstrate leadership appropriately.   | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 7. 在專業團隊中有效地工作<br>Work effectively in multidisciplinary teams.  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 8. 能就困難草擬解決問題的方案及運用適當的策略去處理<br>Apply problem-solving skills and use suitable strategies to overcome difficulties.   | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 9. 在各種專業範疇中表現出口述及書寫兼備的語言能力<br>Demonstrate language proficiency in oral and written communication in all aspects of professional practice.   | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 10. 使用適當資訊科技，如：電腦技能以提升工作效率<br>Utilise appropriate information technology skills to improve productivity at work.  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 11. 在適當時候尋求意見及澄清疑問<br>Seek advice and clarify doubts when necessary.  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 12. 在服務/業務上發揮創意，如：提出新的服務意念<br>Be innovative in services/areas of practice (e.g. generating new service ideas).  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 13. 在個人/專業發展方面表現主動<br>Demonstrate initiatives for personal/professional development.  | (4)        | (3)            | (2)            | (1)       | (NA)           |

## EMPLOYERS

畢業生在有關要求/標準之表現  
Performance of the graduates in meeting requirements/standards

## Q2. 專業技能/能力 Professional skills/competencies

標準以上 大致合乎標準 僅僅未達標準 標準以下 不適用

|   | Far exceed | Generally meet | Slightly below | Far below | Not applicable |
|---|------------|----------------|----------------|-----------|----------------|
| 1. 嚴守道德操守及法例準則<br>Adhere to ethical and/or legal practice standards.  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 2. 分析臨床評估結果以瞭解問題及提出治療方案<br>Analyse clinical findings to establish a problem list and outcomes of care.                                | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 3. 製訂完善的療程計劃，當中包括目標、治療、療效及執行計劃<br>Design a comprehensive plan of care that integrates goals, treatment, outcomes, and discharge plan. | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 4. 應用專業理論及分析於臨床實踐上<br>Apply the principles of clinical thinking or clinical reasoning to practice.                                    | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 5. 以有邏輯、組織及準確的方式進行臨床評估<br>Perform clinical examinations in a logical, organised, and accurate fashion.                                | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 6. 提供有效率、有成效及專業的治療方法<br>Perform interventions efficiently, effectively and professionally.  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 7. 能就服務提供精簡、清晰及準確的書面報告<br>Produce legible, concise, and accurate written documentation to support the delivery of services.           | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 8. 能應用知識以切合受僱機構的要求及性質<br>Apply learnt knowledge to meet the needs and nature of the employing organization.                           | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 9. 跟病人、其家人及其他照顧者建立良好關係<br>Develop good rapport with clients, their families and/or other caregivers.                                  | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 10. 用有效及適當方式教導病人、其家人及其他照顧者<br>Educate clients, families, or other caregivers using appropriate and effective teaching methods.        | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 11. 安全至上，盡量減低對病人、自己及其他人的風險<br>Practise in a safe manner that minimises risk to clients, self, and others.                             | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 12. 尊重及留意個別及不同病人之需要<br>Respect for and be sensitive to individual needs or differences.   | (4)        | (3)            | (2)            | (1)       | (NA)           |
| 13. 可勝任有效的健康推廣教育及基層醫療<br>Act as an effective educator in health promotion and primary care.   | (4)        | (3)            | (2)            | (1)       | (NA)           |

## Q3. 整體滿意度 Overall Satisfaction

|   | 非常滿意<br>Very satisfied |     | 不滿意<br>Not satisfied |
|---|------------------------|-----|----------------------|
| 1. 整體而言，你對理工大學「職業治療學(榮譽)理學士」或「物理治療學(榮譽)理學士」的滿意程度有多大?<br>Overall, how satisfied are you with your experience of the undergraduate programme provided by the Department of Rehabilitation Sciences? | (4)                    | (3) | (2) (1)              |

**EMPLOYERS**

**第三部 其他意見**  
**Part III Other Comments**

4. 你對理工大學畢業生哪方面的表現最感滿意?

Which aspects of the PolyU graduates' performance are you most satisfied with?

a. 共通技能/能力方面 Generic skills / competencies

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b. 專業技能/能力方面 Professional skills / competencies

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5. 就對「職業治療學 (榮譽)理學士」或「物理治療學 (榮譽)理學士」兩個課程的整體評價，請闡明給予此評價的原因。

Please explain your reasons for the overall satisfaction about the BSc (Hons) in Occupational Therapy or BSc (Hons) in Physiotherapy programme provided by the Department of Rehabilitation Sciences.

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6. 請就如何改善「職業治療學 (榮譽)理學士」或「物理治療學 (榮譽)理學士」兩個課程從而令畢業生達到業界或貴機構的要求及標準方面提出意見。

Please suggest how the BSc (Hons) in OT and PT programmes might be improved to produce graduates that meet the requirements and standards of the profession/your organisation.

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7. 其他意見 Other comments:

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