

Final-Term Professional Athletic Training Students' Perceived Abilities to Implement the Core Healthcare Competencies into Clinical Practice

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INTRODUCTION

- As final-term professional athletic training students prepare to transition to practice, it is necessary to ensure they are competent to provide patient care in an evidence-based manner, which promotes interprofessional collaboration, incorporates healthcare informatics, and supports quality improvement initiative
- These competency areas, set forth by the Institute of Medicine for all healthcare professionals, are required in post-professional athletic training programs
- However, only a few of these areas are required in professional athletic training programs, making it difficult to identify whether students are able to transition to practice with the skills and abilities to provide impactful patient care
- The purpose of this study was to determine final-term athletic training students' perceived abilities to implement the healthcare competencies into clinical practice

METHODS

Design and Participants

- Cross-sectional, self-reported paper survey
- 1,501 participants (84.72% response rate) from a convenience sample of 1,783 2013-2014 final-term athletic training students enrolled in 167 participating professional athletic training programs
- Participants included 575 males, 896 females, 30 missing
- The average age of participants was 22.6 ± 2.5 years

Instrumentation

- The survey consisted of one section for each identified healthcare competency:
 - Quality improvement (QI)
 - Professionalism (PROF)
 - Healthcare informatics (HCI)
 - Interprofessional education and collaborative practice (IPECP)
 - Evidence-based practice (EBP)
 - Patient-centered care (PCC)
- Each section included concept statements (range: 8-18) that directly related to each competency (Table 1)
- Participants rated their ability to incorporate concepts of each competency within their own clinical practice on a 4-point Likert scale:

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

Table 1. Concept Statements of the Healthcare Informatics Competency

Healthcare Informatics Competency
1. I understand the terminology used in informatics (informatics, medical informatics, health informatics, consumer health informatics, clinical health informatics, computer literacy, information literacy, medical terminology)
2. I understand the differences between the Electronic Health Records (EHR) and Electronic Medical Records (EMR) within the context of the stakeholders (providers, patients, payers)
3. I use computerized patient records to develop clinical questions and to support my plan of care
4. I have the ability to process, interpret and understand data which is collected to support patient care and decision making
5. I use standardized terminology that facilitates communication and sharing of information across providers and across professions
6. I follow security and confidentiality precautions in order to protect patient privacy
7. I use informatics within clinical practice as a teaching/learning mechanism for patient care
8. I am an active participant in the decisions concerning the utilization and development of our clinical information system within the clinical practice setting
9. I understand that healthcare information is a continual and multifaceted process that should be used to validate or change my clinical practice

Main Outcome Measures

- Composite ability scores were achieved by tabulating all values and then averaging the score back to the Likert scale; higher scores indicated participants perceived themselves to have **greater ability** to implement the competencies into clinical practice

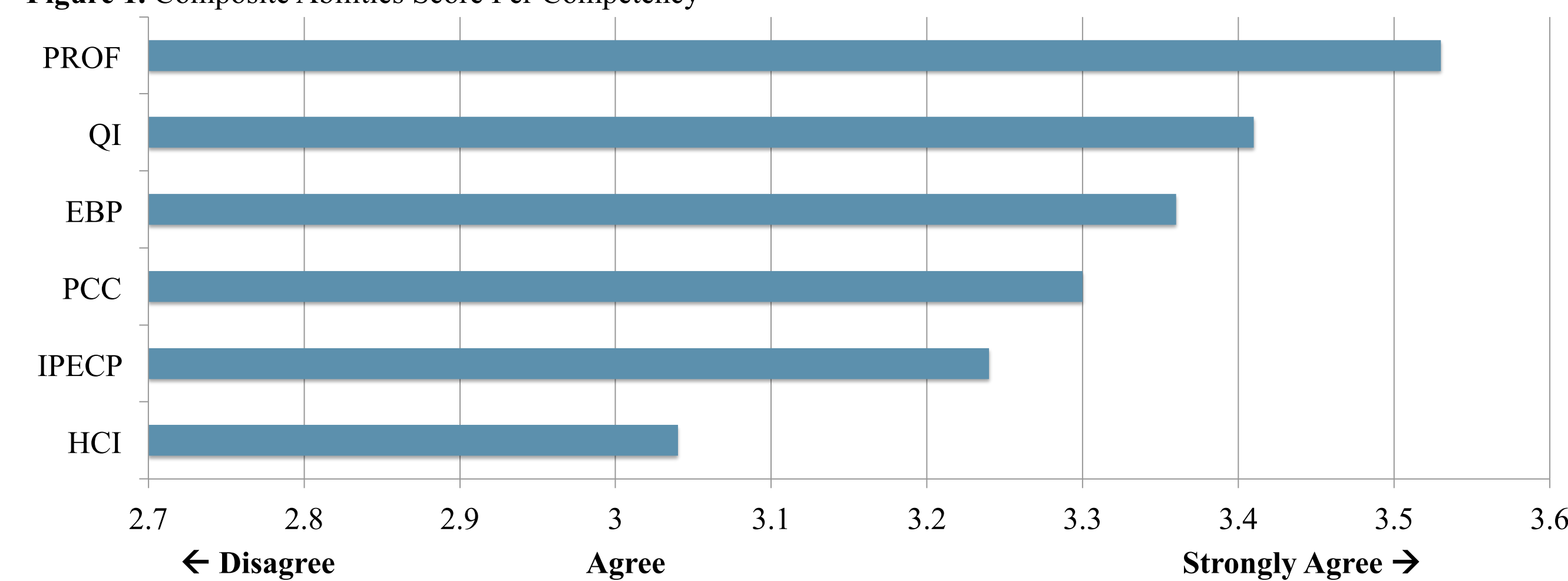
Statistical Analyses

- Reliability of the abilities scale was established prior to data collection ($\alpha = .955$)
- Descriptive statistics (mean ± SD, frequencies) were used to describe overall perceived abilities per competency

RESULTS

- On average, participants agreed or strongly agreed they had the ability to implement the competencies into their clinical practice (Figure 1)

Figure 1. Composite Abilities Score Per Competency



- For some of the healthcare competencies, participant responses for specific concepts varied between disagree and agree (Table 2)

Table 2. Number of Varied Participant Responses Per Competency

Competency	Number of Total Concept Statements	Number of Concept Statements with Varied Participant Responses
Quality Improvement	12	0
Professionalism	17	0
Interprofessional Education and Collaborative Practice	8	1
Evidence-Based Practice	13	1
Patient-Centered Care	11	2
Healthcare Informatics	11	4

- Participants **disagreed** that they had the ability to:
 - Understand the differences between electronic medical records and electronic health records (2.43/4.00 ± 0.78)
 - Utilize electronic medical record information to make clinical decisions (2.58/4.00 ± 0.80)
- Participants **disagreed-to-agreed** with their ability to:
 - Use computerized patient records to develop clinical questions (2.80/4.00 ± 0.82)
 - Work within a true collaborative practice (2.65/4.00 ± 0.85)
 - Utilize information from patient surveys to assess the quality of care provided (2.79/4.00 ± 0.84)
 - Provide patients access to real-time electronic information regarding their care (2.66/4.00 ± 0.85)
 - Use informatics within clinical practice as a teaching or learning mechanism for patient care (2.97/4.00 ± 0.72)
 - Be an active participant in the decisions concerning the utilization and development of clinical information systems (2.68/4.00 ± 0.86)

CONCLUSIONS

- These findings provide a better understanding of athletic training students' perceived abilities to implement the healthcare competencies into clinical practice
- As students prepare to transition to practice, it is important educators' emphasize the benefits of healthcare informatics for clinical practice
- Furthermore, educators and preceptors should demonstrate to students how to successfully incorporate real-time electronic information to support the clinical decision-making process

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