The Jefferson Scale of Attitudes Toward Interprofessional Collaboration

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**Background**

- **Collaboration**
  - Key element in today’s healthcare environment
  - Essential for positive patient outcomes
  - Can lead to optimal patient outcomes

- **Historical collaboration**
  - In US - WWII teams of healthcare professionals formed to treat soldiers
Literature Review

- Interprofessional Collaboration
  - IOM reports
  - Improve patient outcomes
  - Complement one’s professional identity

- Related instruments
  - 23
  - Lack principles of test construction
  - Psychometric testing
  - Used once
  - IPE
  - Profession specific
Purpose

• The purpose of this study was to develop an instrument for measuring attitudes toward interprofessional collaboration for administration to practicing health professionals, as well as to students enrolled in schools of health professions.

• Interprofessional collaboration defined as “multiple health workers from different professional backgrounds, provide comprehensive services by working with patients, their families, carers, and community to deliver the highest quality of care across settings.”

(WHO, 2010)
Methods

• Step 1: The initial study to generate items
  • Based on an extensive literature review, a preliminary version of the instrument was developed (26 items)
  • Search Terms: “interprofessional,” “interdisciplinary,” “health professions,” “collaboration,” “teamwork”
Methods

• Step 2: A pilot study to examine item relevancy and improving clarity
  • Step 2A
    • Preliminary study of face validity with 12 health professionals from JCIPE
    • Delphi Method
  • Step 2B
    • 124 respondents (from a variety of health professions) to judge the relevance, clarity, and representativeness of each item to the concept of interprofessional collaboration among health professionals.
    • Content Validity Index
      .77
Methods

• Step 3: Psychometric analyses of the final version in student samples
  • A two-stage analyses
    • Stage 1, data for the 26-item version of the instrument were used for the purpose of retaining items that could survive psychometric testing
    • A 7-point Likert scale (1=Strongly Disagree, 7=Strongly Agree) was used in responding to each item
  • Definitions
    • Interprofessional collaboration
    • Health professional
    • Patient/Client
  • Stage 2, the psychometric properties of the final version of the instrument were examined based on those items that survived psychometric testing in Stage 1
Methods

• Stage 1: Retaining items
  • Corrected item-total score distribution > .40
  • Statistical significant differences on mean scores of each item
  • Effect size estimate of the differences > .70
  • 20 items were retained
    • 12 were positively scored
  • Range
    • 20-140

• The higher the scores, the more positive the attitudes toward interprofessional collaboration
Methods

• Stage 2: Psychometrics of the final version in student samples
  • The preliminary version of the instrument was administered to 1976 health profession students in three universities
    • Thomas Jefferson University, \( n=510 \), Philadelphia, USA
    • Midwestern University, \( n=392 \); Chicago, USA
    • Monash University, \( n=1074 \); Victoria, Australia
  • Cronbach’s alpha coefficients
    • 0.84 to 0.90
Descriptive Statistics

- 26-item instrument
  - online and hard copies

- Gender, age, academic institution, academic program, and number of years in the program

- 1976 students in 3 different health profession programs
  - 510 students from Thomas Jefferson University \( (n=323, 63\% \text{ women}) \)
  - 392 from Midwestern \( (n=195, 50\% \text{ women}) \)
  - 1074 from Monash \( (n=674, 63\% \text{ women}) \)
Descriptive Statistics

• **Age**
  - TJU - $M=24.6(4.3)$
  - Midwestern - $M=24(2.9)$
  - Monash - $M=23.6(6.2)$

• **Health Professions**
  - TJU - Medical students ($n=219$, 43%), followed by nursing ($n=150$, 29%), pharmacy ($n=47$, 9%), occupational therapy ($n=45$, 9%), physical therapy students ($n=38$, 7%)
  - Midwestern - pharmacy students ($n=158$, 48%) followed by medical students ($n=115$, 29%) students in a graduate program of medical sciences ($n=75$, 19%), dentistry students ($n=44$, 11%)
  - Monash - paramedic students ($n=632$, 59%), occupational therapy ($n=148$, 14%), nutrition ($n=93$, 9%), physical therapy ($n=91$, 8%), and nursing students ($n=75$, 7%)
Results

- Twenty items survived the psychometric scrutiny
- Factor Analysis
  - Two constructs
    - “Working relationships” (Factor 1 = 12 items)
    - “Accountability” (Factor 2 = 8 items)
  - Cronbach’s alpha coefficients
    - 0.84 to 0.90
- Gender Differences
  - Women obtained significantly higher JeffSATIC mean scores than men
- Health Professions Differences
  - Medical students obtained lower mean scores
    - Significant only at TJU
Results

• Consistency of the findings
  • 3 samples
  • 3 different universities
  • 3 different geographical areas

• Two factors “working relationships” and “accountability”
  • key elements of interprofessional collaboration
Future Research

• Testing of the JeffSATIC
  • Health professionals
  • Settings
  • Areas of practice
  • Culture
Conclusion

• The importance of interprofessional collaboration and the development of a psychometrically sound instrument to measure this concept is timely, important, and applicable to today’s healthcare initiatives involving education as well as practice
Questions

JeffSATIC
References


