

A Longitudinal Mixed-Methods Study of IPE Students' Perceptions of Health Profession Groups: Revisiting the Contact Hypothesis

Barret Michalec, PhD Carolyn Giordano, PhD Sarah Dallas, BA Christine Arenson, MD

BACKGROUND

- IPE's impact on students' perceptions of attributes/abilities of other health professions → *mixed* results
 - *IF & HOW* IPE impacts students' attitudes and perceptions
- Contact Hypothesis
 - Perceived equal status, Common goals, Intergroup cooperation (non-competitive), Support of authorities
- Intergroup Contact → *Cognitive Representations* → Stereotypes
 - 3 Principle Models: Personalization, Common In-Group Identity, Mutual Intergroup Differentiation*

Ateah et al., 2011; Hewstone, Carpenter, Franklyn-Stokes, & Routh, 1994; Carpenter, 1995a; Lindqvist et al., 2005; Furze, Lohman, & Mu, 2008; Ragucci et al., 2009; Foster & Clark, 2015; Nisbet, Hendry, Rolls, & Field, 2008; Tunstall-Pedoe, Rink, & Hilton, 2003; Hansson, Foldevi, & Mattsoon, 2010; Ajjawi, Hyde, Roberts, & Nisbet, 2009; Allport 1954; Hean & Dickinson 2005

MODELS OF COGNITIVE REPRESENTATION

- **Personalization**: Decrease salience of "different-ness" of social categories (*Decategorization*)
 - a.) promotes "different-ness" of individual category members w/in category AND b.) promotes *Personalization* - seeing and responding to others as people not just group affiliations
- Common In-Group Identity: Transform group members' cognitive representations of memberships from separate groups to one inclusive group
 - No relinquish of original subgroup ID completely (actually impossible, even detrimental) → Promotes Dual-Identity
- *Both*: Focus on categorization/categories can evoke competition, out-group rejection & stymy interpersonal acceptance
- Mutual Intergroup Differentiation: Encourages differentiation → Contact situation structured so group members have distinct, but complementary, roles to contribute toward common goal(s)
 - Group members acknowledge how they are similar/different & what they bring to the "table" → each group is seen as it wished to be seen (in-line with group's autostereotypes), role security is strengthened, and intergroup harmony is cultivated

Brewer & Miller 1984; Brewer 1996; 1997; Gaertner, Rust, Dovidio, Bachman, & Anastasio 1994; Gaertner, Dovidio, & Bachman 1996, Gaertner et al. 1994; 2000; Hewstone & Brown 1996; Hewstone, Carpenter, Franklyn-Stokes, & Routh, 1994; Carpenter, 1995a; 1995b; Carpenter & Hewstone, 1996; Barnes, Carpenter, & Dickinson, 2000; Carpenter & Dickinson, 2016

METHODS: AIMS & STUDY SETTING

- A.) Change in students' stereotypes → IF
- B.) Allport's elements in program → HOW
- C.) Model(s) of cognitive representation → HOW
- Jefferson Health Mentors Program (JHMP)
 - 2-year longitudinal IPE program required during first 2 years of training for Med, Nursing, Pharm, OT, PT, CFT
 - Groups are mixed; led by a patient (from the community) with one or more chronic conditions

METHODS: SURVEYS

• Student Stereotype Rating Questionnaire (SSRQ)

- 9 Attributes: Academic Ability, Professional Competence, Interpersonal Skills, Leadership Abilities, Ability to Work Independently, Ability to be a Team Player, Ability to Make Decisions, Practical Skills, Confidence
 - Rate (1-5) their own profession as well as the other health professions on each attribute
- 528 students from 6 different disciplines (83% retention)
 - T1: before began JHMP (8/11) & T2: at end of JHMP (3/13)
- Analysis
 - Focused on mean SSRQ scores from T1 and T2 for each profession → Paired t tests

METHODS: INTERVIEWS

- Subsample of survey participants → 20 students randomly selected from the 6 different disciplines
- Questions about their experiences with/perceptions of JHMP, IPE in general, students from other disciplines, professions
 - Were not asked explicitly about "contact" specifically

Analysis

- Multi-step coding process
 - Identify patterns in students' experiences/perceptions

FINDINGS: SURVEY

Stereotypes of professions significantly decreased from T1 to T2

- Significant increases (p<.05) for all six disciplines' rating on the SSRQ from T1 to T2
- Explicit evidence for 2 of the 4 of Allport's Conditions: Common Goals & Intergroup Cooperation
 - "It was good the way it [JHMP] was set up because everyone just kind of cooperated towards one goal." (medical student)
 - "I learned that by working as a team, together, tasks can, and should, be shared by all of us, not just one specific profession." (nursing student)
 - Other 2 Assumed
 - Support from Authorities = assumed given JHMP, JCIPE, \$\$, space
 - *Equal Status* (groups must perceive they are equal status) = assumed but long established/engrained occupational (and gendered) status hierarchy in healthcare delivery

FINDINGS: INTERVIEWS

- Formal aspects of program (e.g., assignments) not extensively helpful in learning about other disciplines or how to work as a "team"
 - "I know [the faculty's] point is to try to get us to work as a team, and a lot of the times we're working together, but separately. We're all doing the same assignment, but we're doing it from our own departments. So we're not actually communicating with each other." (OT student)
 - "We didn't know enough about our respective jobs for me to learn anything about who we're going to work with, and [the faculty] kept trying to ask us, 'How did you work as a team?' in terms of learning about other groups. All we did was read off questions off a checklist." (medical student)

FINDINGS: INTERVIEWS

- Opportunities to *informally interact* with other students were not only preferred but were also reported as more useful in regards to learning about other students and their future processions
 - "But it was nice to get a chance to meet, overall soft getting a chance to meet people from other cohoors and talk about how we're students." (medical student)
 - "I learned tableat my group member beyond the superficial level of their profection. I learned a little not, about them as people and students." (nursing student)

REFLECTIONS ON FINDINGS

- Situations which charged with spotlighting their professional category (formal aspects) → felt "forced" and were not helpful in learning about other health professions or how to work in teams
 - Aspects of IPE programs that emphasize *differentiation* could be counter-balanced with other initiatives
 - Timing of IPE
- Students valued opportunities of "informal" contact (e.g., socializing, chatting, etc.) and learning about students as fellow students and people → not just representations of profession
- Approaches that emphasize *Decategorization* and *Personalization* may be useful in understanding how "contact" has positive impact → should be utilized in research
- These models may help to understand the IF, the HOW, and the WHY of IPE \rightarrow attitudes/perceptions

REFLECTIONS ON FINDINGS

- **Personalization model**: stresses that in-group-based situations that promote shared goals there is a need for decategorization
 - Decategorization lends to interactions b/w in- and out-group members that highlight distinctiveness of individuals within category & encourages personalization
- Common In-Group Identity Model: need for personalization to occur to shift group identities from "us" & "them" to "we" perspective
 - "We-ing" through mutual goals and shared factors lends to reduction in prejudices and stereotypes
 - "healthcare worker", "healthcare student", even "student"
 - Interprofessional
 - [timing of IPE]
 - Common In-Group Identity does not suggest relinquishing subgroup identity completely → Model promotes the Dual-Identity

REFLECTIONS ON FINDINGS

- Not saying *formal* aspects of ineffective or deleterious
- Perhaps providing IPE students (and health profession students in general) with more informal opportunities to interact
- Value of engaging with other cognitive representation models within IPE research

• Future Research:

- Formal testing of these models
- How various types of contact (sim pt; clinical experiences) and time related may be more/less impactful on stereotypes
- Address prominent mediators of intergroup contact → knowledge enhancement, decreasing anxiety, increasing empathy

THANK YOU! QUESTIONS?

Barret Michalec

Associate Dean of Interprofessional Education Associate Professor of Sociology University of Delaware bmichal@udel.edu