A longitudinal mixed-methods study of IPE students' perceptions of health profession groups: Revisiting the Contact Hypothesis

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ABSTRACT

Background/Purpose: Despite the increasing momentum and integration of interprofessional education (IPE) programs into various health professions curriculum, the findings of previous research are mixed regarding the impact these programs have on dismantling or even stifling students' stereotypes of health professions. Of those studies that find "positive" shifts in students' perceptions, elements of the Contact Hypothesis are frequently employed to support these apparent shifts. However, there is minimal attention paid to *how* intergroup contact within IPE programs may actually impact students' stereotypes. This study examines *if* students' attitudes towards health professions shifted following participation in a two-year IPE program. Furthermore, utilizing the tenets of the Contact Hypothesis as well as prominent models regarding cognitive representations of group membership, this study explores *how* contact within the IPE program may have impacted students' perceptions and attitudes.
Methods: To examine if students' attitudes shifted, 528 students from 6 different health profession training programs completed the Student Stereotypes Rating Questionnaire (SSRQ) assessing their perceptions/stereotypes of their own and other health professions at the beginning and end of the two-year IPE program. To further explore students' experiences and the nature of "contact" within the IPE program, interviewers were conducted with 20 students.
Results: Students' attitudes of health professions did positively shift (i.e., stereotypes significantly decreased), and from the students' perspective, as was evident in the interview data, the more informal aspects of the IPE program provided worthwhile opportunities to learn about students from other disciplines and other health professions.
Conclusion: The findings lend support for the Contact Hypothesis and the authors suggest that opportunities for students to informally interact and socialize may have significant positive impact on students' perceptions and knowledge of other health disciplines and professions, and that models of cognitive representation that emphasize more personalization may also be effective tools in examining how intergroup contact within IPE affects students' stereotypes.

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Introduction and background

To promote collaborative care within the next generation of health care professionals, a number of institutions have implemented interprofessional education (IPE) programs. These programs bring together students from multiple healthcare disciplines[a] to increase patient-centeredness, develop a team approach to care delivery, foster communication and respect among the health professions, dismantle stereotypes and negative perceptions of health professions, promote understanding of each other's roles, and breakdown the hierarchy within health care delivery.[1] However, although studies have shown that IPE programs can positively impact how students perceive the attributes and abilities of other health professions[2–8] there is also evidence that suggests IPE programs have little to no effect on altering students' attitudes regarding other health professions.[9–12] In this sense, the actual impact of IPE programs on students' attitudes, and how that impact actually happens, is still very unclear. Robust attention to theory could assist in explaining IPE program outcomes and may

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[a] In this article, we use the term 'discipline' to denote education/training-level pre-profession groups. Conversely, we use the term 'professions' to denote post-education/training occupation-specific groups. Given that we discuss students and professionals, both terms are utilized throughout the article.

lend clarity to the current murky waters of the *if* and *how* regarding health profession students' attitude change and the actual impact of interprofessional education.

The Contact Hypothesis is often utilized as the theoretical scaffolding to construct IPE programs, and as a lens to view and dissect positive outcomes of IPE programs (i.e., positive changes in students' attitudes/stereotypes). Despite the consistent utilization of the Contact Hypothesis in IPE-based studies, and Hean and Dickinson's[13] detailed presentation of the various nuances of the Contact Hypothesis, there are still generalizations and vague descriptions that have clouded IPE research employing the Contact Hypothesis. In this study, we utilize the Contact Hypothesis as a lens to examine the outcomes of a two-year IPE program. However, in order to fully explore the outcomes from the perspective of the Contact Hypothesis we feel a more thorough examination of the foundations and the primary approaches to the Contact Hypothesis is needed.

"Contact" and IPE: Foundations of the Contact Hypothesis and models of re-conceptualization

Hean and Dickinson[13] provide a broad review of the Contact Hypothesis, its history within IPE research, and detailed guidance regarding how its tenets can be more effectively used in IPE program construction and applied to the interpretation of program outcomes. However, further exploration of the social–psychological foundation of the Contact Hypothesis points to a more elaborate and expansive supposition than that presented by Hean and Dickinson. This paper offers a detailed background of the Contact Hypothesis, and the three primary approaches to how intergroup contact can be structured to result in altered cognitive representations of memberships and, in turn, lend to positively impact stereotypes and prejudice.

Put simply, the Contact Hypothesis suggests that "contact" between in- and out-groups will, in turn, reduce prejudice and stereotypes held by and between groups. Gordon Allport[14] is often credited as the forefather of the Contact Hypothesis,[b] and it was he who presented four key positive conditions in which intergroup contact could reduce prejudice and stereotypes between the group members: (1) equal status between groups — both groups must perceive equal status in the situation; (2) common goals — groups must work together toward a shared goal; (3) intergroup cooperation — groups must work interdependently, not competitively towards the shared goal; and (4) the support of authorities, law, and/or custom — the intergroup contact must be explicitly supported by the institution(s) and authorities of those institutions.

However, although Allport's positive conditions set the stage for *if* and *when* intergroup contact can potentially impact prejudice and stereotypes, there are three principle models that explore *how* intergroup contact can impact cognitive representations of group membership and, in turn, dissolve stereotypes: Personalization, Common In-group Identity, and Mutual Intergroup Differentiation.[c] Most evaluation-based IPE research spotlights the presence, or lack thereof, of Allport's positive conditions when discussing the structure of IPE programs and/or student attitudes of IPE programs. More often than not the models of cognitive representation are absent from IPE research despite the need to understand how

students' attitudes may be changing. Given this gap in the literature, we present a detailed presentation of these approaches here.

In their argument for the value of Personalization, Brewer and Miller[15–17]; stress that in-group-based situations where outcomes are highly interdependent (i.e., promote shared/common goals) highlighting distinctions between the groups can evoke competition and out-group rejection which, in turn, stymies collective positive outcomes and interpersonal acceptance. Hence, in these situations there is a need for reduced category differentiation to decrease the salience of different-ness of the social categories — an example of Decategorization. According to Brewer and Miller, this decategorization should lend to interactions between the in- and out-group members that promote differentiation (i.e., spotlight the "different-ness" of individual category members within that category) and personalization (i.e., "seeing" and responding to others as people not just their group affiliations). In this approach, differentiation is an essential but insufficient condition for personalization, meaning that before intergroup contact can lead to a reduction in stereotypes and prejudices, differentiation and personalization need to occur. "the contact experience reduces information processing and interaction decisions that are category-based and promotes attention to personalized information about others that is self-relevant and not correlated with category membership".[17, p. 288] This shift to focus on more "personal", non-category-based information becomes the basis for future interactions with members of the out-group. However, the authors posit that category-based understanding and responding can only effectively be reduced in contact situations that provide extended interactions that "… force continual realignments of individuals based on different category identities at different times …" (290) — consistent and persistent interactions that force in-group members to see out-group members in situations that misalign with their previously upheld category-based understandings of those out-group members.

Similar, yet distinct from the Personalization approach, the Common In-group Identity model[23,24] also cites social categorization as contaminating group interaction by promoting intergroup bias and competition. This model diverges slightly however, in that although Gaertner and colleagues note the key role of personalization,[25] the model argues specifically for the need to transform group members' cognitive representations of their memberships "… from separate groups, to one, more inclusive group".[24, p. 226] In short, the authors propose the need to shift group identities from an "us" and "them" to a "we" perspective, thereby promoting a *Common* In-group Identity. This Common In-Group Identity is evoked by conjuring the prominence of "existing common superordinate group memberships or by introducing factors (e.g., common tasks or fate) that are perceived to be shared by the memberships".[24, p. 226] According to this model, the four positive contact categories originally proposed by Allport reduce intergroup prejudice because they encourage this shift in members' cognitive representations of memberships. The Common In-Group Identity is an outcome of positive contact conditions, and it is this uniting under the umbrella of this Common In-Group Identity, this "we-ing" (as opposed to "us" and "them"), that lends to the reduction in prejudices and stereotypes. Interestingly, however, Gaertner and colleagues argue that the adoption of a common in-group identity does not necessarily require groups to relinquish their original "subgroup" identity completely. In fact, according to this model, such a requirement would be impossible, and even detrimental to generalization processes (i.e., extending perception-based benefits beyond immediate out-group members). The Common In-Group Identity approach promotes a dual-identity for group members, especially in regard to generalizing reformed perceptions of the out-group beyond those out-group members in the immediate intergroup contact situation.

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[b] Although, as Dovidio et al[18] note, there was extensive work on if/how intergroup contact may reduce bias that predates Allport's[14] *The Nature of Prejudice.*

[c] These models, although stemming from Allport's original Contact Hypothesis, are also deeply rooted in the tenets of Social Identity Theory,[19,20] and Social Categorization,[21] Social Categorization Theory[22] along with other prominent social-psychological theories and concepts.