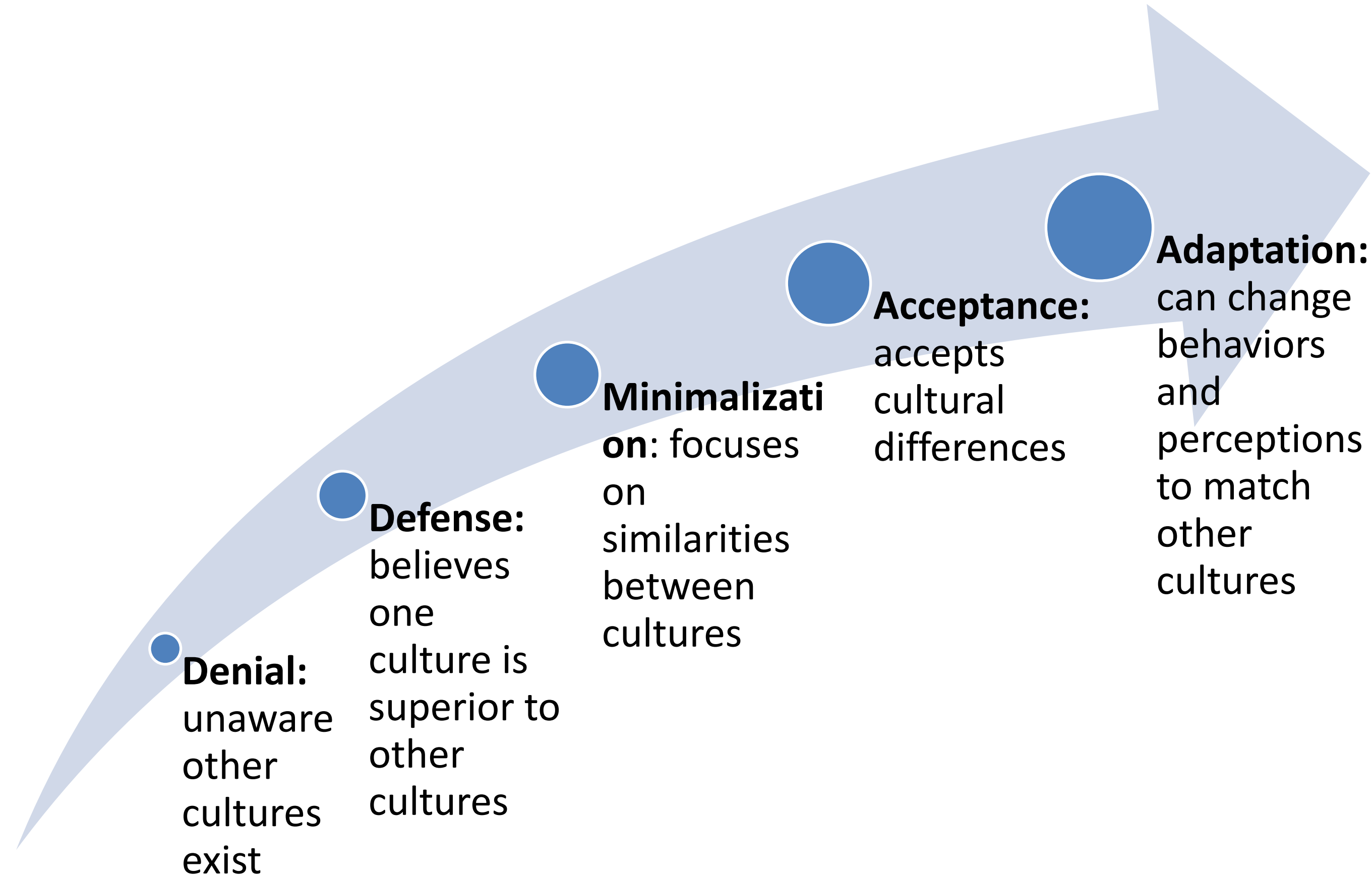


Background

Pharmacy schools need to create a more inclusive and culturally responsive environment to increase the number of minority students and faculty, as well as to prepare pharmacy students for a diverse patient population. This requires engagement in improving intercultural competence. Intercultural competence can be measured through a variety of assessment tools. The Intercultural Development Inventory (IDI) is a proprietary self-assessment tool that has been used amongst institutions. Respondents are categorized as being within one of five stages;



The goal is for respondents to be categorized as being in Adaptation stage.

The validity of the IDI has been established within non-healthcare contexts. Since validity in one context does not automatically mean validity in different contexts, the validity of the IDI of health professional education needs to be examined.

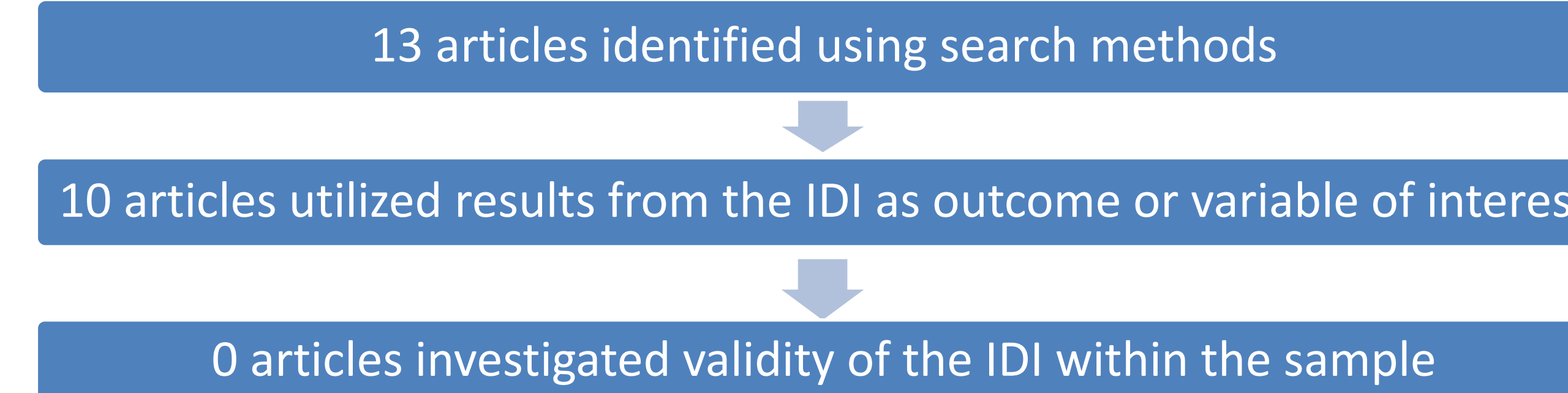
Objective

Narrative literature review completed to discuss the practical issues and implications of using the IDI in health professional education

Methods

- Databases searched to identify articles utilizing IDI as outcome or variable of interest using the term “Intercultural Development Inventory”
 - Medline and Embase
 - Online search engines of journals focusing on health professional education
- Reference lists of identified articles searched as well
- Full text of identified articles reviewed by two investigators to determine if authors assessed face, content, construct, or criterion validity

Results



Respondents in 9/10 studies were students with the majority being nursing students. Only 1/10 studies included a pharmacist or pharmacy student

Characteristics of the 10 articles utilizing results from the IDI as outcome or variable of interest

Study	Intervention/Comparison groups	Change in IDI score statistically significant?	Stage of most subjects
Altshuler et al 2003	2 hr workshop + OSCE vs OSCE alone	No	Minimalization
Boggis 2012	Occupational therapy students (purposeful integration of cultural content across the curriculum) vs	No	Minimalization
	Other health professional students (no formal integration of cultural content across the curriculum)	Yes	Baseline: Minimalization End: Defense
Fitzgerald et al 2018	7-wk class + 12-day service learning in Nicaragua (no comparison group)	Pre/post scores not compared	Minimalization
Halm et al 2012	Inservice + critical reflection (no comparison group)	Pre/post cores not compared	Minimalization
Harder 2018	3 brief video vignettes (no comparison group)	Statistical analysis not completed	Minimalization
Huckabee et al 2012	15 contact hrs of didactic & experiential learning + 12 months of experiential learning (no comparison group)	IDI only completed after intervention	Minimalization
Kirby et al 2021	20 hrs of didactic learning (no comparison group)	Yes	Baseline: Minimalization End: Minimalization
Kruse et al 2014	Students: given IDI results Faculty, staff: given IDI results + 3 hr session (groups not compared)	IDI only completed after intervention	Minimalization
Peiving et al 2012	4-wk study abroad experience (no comparison group)	No	Minimalization
Zazzi 2020	Considered effect of whole curriculum (specific details of intervention not provided by authors)	Yes	Baseline: Minimalization End: Minimalization

Practical Issues and Implications for IDI

- Resources needed for IDI
 - Fee for each respondent to take the IDI
 - Training individuals to analyze results and debrief respondents
- Other limitations of IDI
 - Complexity of intercultural competence hard to capture with single tool
 - Relies on individual’s own perceptions of their intercultural experiences → may not be accurate
 - Most studies didn’t detect significant change in IDI score, regardless of how extensive the intervention was (i.e., few hours vs > 20 hrs)
 - Whether statistically significant but small numerical changes in IDI scores seen result in meaningful outcomes (e.g., patient satisfaction) not studied, limiting utility of IDI in determining efficacy of interventions, especially considering interventions that require extensive resources
- To determine if the IDI should be utilized, colleges/schools of pharmacy need to consider
 - Type of decision made based on IDI results
 - High stakes (e.g., student progression within the curriculum): validity needs to be firmly established
 - Low stakes (e.g., determining content of intercultural competency training): validity doesn’t need to be as firmly established
 - Extent of resources available
 - Sufficient to administer IDI?
 - Sufficient to create intervention to see progress in IDI scores?

Conclusion

Validity of the IDI has not been investigated within the context of health professional education. Although the IDI may offer valuable insights as a measuring tool, the decisions to be made based on the results and the availability of resources to utilize this tool need to be discussed before considering the IDI as an outcome measure. The results of the IDI may need to be correlated with additional tools such as patient satisfaction scores or peer evaluations in order to provide an accurate picture of the intercultural competence of pharmacy faculty, staff, and students.