



INSTITUTO
UNIVERSITÁRIO
DE LISBOA

A scoping review on critical incidents as a training tool in diversity interventions.

Itumeleng Magoai

ERASMUS Mundus Joint Master in the Psychology of Global Mobility, Inclusion, and Diversity in Society (Global-MINDS)

Supervisor:

Christin-Melanie Vauclair, Assistant Professor, Consortium Coordinator of the European Master in the Psychology of Global Mobility, Inclusion and Diversity in Society. Instituto Universitário de Lisboa (Iscte-IUL), CIS-IUL, Lisboa, Portugal

Co-Supervisor:

Karolina Mazurowska, PhD. Cross-Cultural Psychologist, Academic Coordinator of the European Master in the Psychology of Global Mobility, Inclusion and Diversity in Society. SWPS University of Social Sciences and Humanities, Warsaw, Poland

July, 2020

A scoping review on critical incidents as a training tool in diversity interventions.

Itumeleng Magoai

ERASMUS Mundus Joint Master in the Psychology of Global Mobility, Inclusion, and Diversity in Society (Global-MINDS)

Supervisor:

Christin-Melanie Vauclair, Assistant Professor, Consortium Coordinator of the European Master in the Psychology of Global Mobility, Inclusion and Diversity in Society. Instituto Universitário de Lisboa (Iscte-IUL), CIS-IUL, Lisboa, Portugal

Co-Supervisor:

Karolina Mazurowska, PhD. Cross-Cultural Psychologist, Academic Coordinator of the European Master in the Psychology of Global Mobility, Inclusion and Diversity in Society. SWPS University of Social Sciences and Humanities, Warsaw, Poland

July, 2020

Dedication

This thesis is dedicated to my family, thank you for your continued support!
For my son Oratile Azania, you have been incredible, thank you!

Acknowledgement

I sincerely want to thank my supervision team for the incredible support they have given me through this process:

Christin-Melanie Vauclair - Thank you for your leadership through the discoveries we made as the project evolved. I appreciate the guidance you have provided through critical questions and thorough feedback, particularly during the writing process.

Karolina Mazurowska - Thank you for the encouragement and knowing that you were available when I needed your input.

Elena Piccinelli - I want to express my sincere gratitude for your assistance and expert input on the methods, while simultaneously working on your Phd. The future of academia looks bright with someone like you heading in that direction. I am confident that the students will be in good hands under your leadership. You were absolutely incredible during this process, thank you.

Funding: I also want to acknowledge the privilege I have been offered by the Global-Minds program in partnership with the Erasmus Mundus Joint Master scholarship. This experience has been the most amazing journey of my life. I am eternally grateful for the opportunity.

Resumo

Os estudos de diversidade baseiam-se nas diferenças de valores, comportamento, visões de mundo, entre outros. Intervenções foram projetadas para preencher as lacunas que geralmente são desencadeadas por mal-entendidos, falta de conhecimento, consciência ou conflito de expectativas e valores. Pesquisadores que se concentram na diversidade cultural têm defendido o método do Incidente Crítico (IC) como uma ferramenta apropriada para intervenções porque contextualiza as situações de comunicação interpessoal, esclarecendo mal-entendidos que ocorreram devido a estas diferenças. Todavia, pouco se sabe até que ponto os ICs têm sido usados em treinamentos de diversidade com o objetivo de abordar questões relacionadas a grupos minoritários e como eles são usados como uma ferramenta nesses treinamentos. Portanto, é importante ter uma visão geral da literatura sobre o assunto. Pelo levantamento que realizamos, tal revisão não está disponível no momento. O objetivo desta revisão é fornecer uma visão geral da literatura sobre o uso de Incidentes Críticos no contexto de intervenções de diversidade. Seguimos a metodologia descrita no Manual do Instituto Joanna Briggs para Síntese de Evidências (JBI), que envolveu um critério de inclusão abrangente e uma estratégia de busca aplicada para buscar fontes no PsycINFO. Um total de 43 dos 869 registros foram considerados elegíveis. Resultados indicam que o uso de Incidentes Críticos em intervenções de diversidade é baseado na diversidade cultural. Estudos relataram sucesso das intervenções. Embora o IC tenha sido usado com outras ferramentas, pesquisas futuras devem indicar a eficácia independente desse método. Tamanhos de amostra maiores e grupos de controle devem ser usados.

Palavras-chave: Intervenção de Diversidade; Técnica de incidente crítico; Incidente crítico; Microagressão

PsychINFO codes:

2930 Culture & Ethnology

3020 Group & Interpersonal Processes

Abstract

Diversity studies are based on differences in values, behavior, worldviews, among others. Interventions are designed to fill gaps that are often triggered by misunderstandings, lack of knowledge, awareness, or conflicting expectations. Researchers who focus on cultural diversity have defended the Critical Incident (CI) method as an appropriate tool for interventions because it contextualizes situations of interpersonal communication, clarifying misunderstandings that have occurred due to these differences. However, little is known to what extent CIs have been used in diversity training to address issues related to minority groups and how they are used as a tool in these trainings. Therefore, it is important to have an overview of the literature on the subject. Based on the survey we carried out, such a review is not currently available. The purpose of this review is to provide an overview of the literature on the use of Critical Incidents in the context of diversity interventions. We followed the methodology as described in the Joanna Briggs Institute Manual for Evidence Synthesis (JBI), which involved a comprehensive inclusion criterion and a search strategy to search for sources in PsycINFO. A total of 43 of the 869 records were considered eligible. Results indicate that the use of Critical Incidents in diversity interventions is based on cultural diversity. Although studies have reported successful interventions outcomes, CI has been used with other tools, future research should indicate the independent effectiveness of this method. Larger sample sizes and control groups should be used.

Keywords: Diversity Intervention; Critical Incident technique; Critical incident; Microaggression

PsychINFO codes:

2930 Culture & Ethnology

3020 Group & Interpersonal Processes

Table of Contents

Acknowledgement	iii
Resumo	v
Abstract	vii
Chapter 1. Introduction	1
Chapter 2. Literature Review	3
2.1. Diversity Interventions	3
2.2. Critical Incident Technique	5
2.3. Critical Incident as a Training Tool	6
2.4. Diversity Interventions and Discriminations	7
Chapter 3. Methods	
3.1. Identify Research Question	11
3.2. Search Strategy	12
3.3. Selection of Sources of Evidence	13
3.4. Data Chart	15
3.5. Synthesis of results	16
3.6 Results	17
3.6.1 Study Characteristics	16
3.6.2 Objectives of Diversity Intervention	19
3.6.3 Key Concepts and Definitions of Critical Incident	21
3.6.4 Reference to Discrimination	23
3.6.5 Effectiveness of the Intervention	23
Chapter 4. Discussions	27
Conclusion	29
Sources	33
References	35
Appendix 1 Scoping Review Protocol	45
Appendix 2 Table A	55
Appendix 3 Table B	63
Appendix 4 Checklist	69

CHAPTER 1

Introduction

Since the 1980s, a number of initiatives have been developed to deal more effectively with diversity issues in societies. For instance, in the United States, the uncertainties related to the continuation of Affirmative Action Laws – which had been previously introduced to curb the issue of inequality towards minority groups – and the consequential need to implement diversity management strategies in the organizational context, led to the introduction of diversity programs, which included antidiscrimination policies, training and recruitment practices (Kelly & Dobbin, 1998).

At the same time, initiatives to improve intercultural relations were developed in Europe. The establishment of the ‘European Region Action Scheme for the Mobility of University Students’ in 1987 (Erasmus Commission, 2017), popularly known as the Erasmus program, shed a light on the need for intercultural training in the context of cultural exchanges. Such trainings are consistent with the premise of diversity management.

Moreover, organizations nowadays have an increasing diverse workforce due to the effects of globalization comprising employees with different behaviors, expectations, and needs (Berzukova et al., 2016). Schools are also becoming more multicultural, which requires teachers to develop cultural competencies to accommodate diverse groups of children (Stier et al., 2012). Therefore, it is not surprising that the demand for diversity trainings across various settings is continuously growing with an emphasis on intergroup, interethnic, and interracial relations and dynamics.

The general goal of diversity management is to provide knowledge, awareness, and skills and to address issues related to cultural diversity, culture clashes, unequal treatment, discrimination, and prejudice in organizations or other domains (Alhejji, et al. 2016). Hence, with diversity training we refer to educational interventions that aim to make trainees more aware of diversity issues (e.g., in the workplace, communities, schools etc.) as well as their own beliefs and biases about diversity. The goal is usually to increase competencies and skills that facilitate intergroup interaction. The importance of diversity intervention has been progressively recognized and the demand of these types of trainings has increasingly grown in the last decades.

Trainers and researchers focusing on cultural diversity have found the use of Critical Incidents (CI) to be a helpful tool in addressing intercultural and intergroup conflicts (Triandis, 1977; Stier et al., 2012). There are various definitions of a 'Critical Incident' in the literature depending on the contextual framework in which this tool is used and one of the goals of this review is to obtain more clarity about its conceptualization. Therefore, for the purpose of the current review, we started out with a general concept of CIs by relying on the intercultural literature in which the terms "Critical Incidents", "intercultural sensitizers" or "culture assimilators" refer to the same training tool and have been used interchangeably or in conjunction with each other (Fiedler et al., 1971; Kim & Leong, 1991) In this context, we consider Critical Incidents as:

Situations that are indicative of underlying trends, motives, and structures, they appear to be 'typical' rather than 'critical' at first sight but are rendered critical through analysis. Therefore, Critical Incidents are produced by the way we look at a situation and the interpretation of the significance of a given situation" (Tripp, 1993:24-5,27 as cited in Spencer-Oatey, 2013).

This method represents a useful tool for diversity interventions because it provides a contextualization of the situation regarding misunderstandings between parties which have occurred due to differences in cultural outlook or as an indication of underlying factors such as biases and prejudice in various social contexts. The aim of the current review is to explore and map the literature on the usage of Critical Incidents in diversity trainings in general, and, more specifically to uncover how Critical Incidents have been used, in what contexts they have been applied and to what extent the interventions using Critical Incidents as training tools have been effective in facilitating intergroup relations.

CHAPTER 2

Literature Review

2.1. Diversity Interventions

Diversity intervention is defined as a training that addresses issues such as unequal treatment, discrimination and prejudice by improving participants' knowledge, awareness, and skills (Reio & Ghosh, 2009). Although diversity interventions find their origin in the organizational context, over the decades they have been expanded to be applied in different areas of society. Cultural differences or even just conflicting worldviews or insensitivity for minority issues can result in confusion and disconnection, thereby increasing the risk of misunderstandings in intergroup contact. In addition, many organizations are making more efforts to have a public image that reflect their inclusivity and as a result diversity training are common practice in larger organizations (Ghai, 2006).

Diversity interventions with a focus on culture are generally aimed as preparations for intercultural contact targeted at people who are going to visit or are moving to other countries for various reasons such as employment engagement, attending an international university, volunteering for peace corporations amongst others (Erasmus Commission, 2017, Agency for Fundamental Rights [AFR], 2019). These trainings in cross-cultural competence have taken either the form of culture-specific trainings, i.e., trainings that are designed specifically for a particular culture or they can be designed as culture-general, which are trainings that increase the trainees' level of cultural competence and coping strategies when engaging with a new culture (Fiedler et al., 1971; Kim & Leong, 1991; Triandis, 1977). It has also been argued that culture competence trainings increase self-awareness (King et al., 2013), which is an important condition for interventions to take effect as it is considered an important element in the learning process. When people know themselves well, they can engage more effectively in interpersonal interactions (Faloughi & Herman, 2020; King et al., 2013).

Researchers have found that when people engage with different cultures, they are likely to experience culture shock, which is defined as feelings and experiences that can be uncomfortable when travelers find themselves in new and unfamiliar places (Ward et al., 2001). Therefore, cultural competence provides the skills and knowledge to engage effectively with others in intergroup settings (Diller, 1999). Several scholars strongly suggest that cultural trainings have a positive effect on cultural competence and previous engagement

in these types of diversity training was found to be a predictor of developing the required cultural competencies (Guy-Walls, 2007; Hall & Theriot, 2016). The outcome of diversity training can also lead to a reduction of biases, and can therefore, lead to less discrimination as well as an increased disposition to provide equal opportunities for underrepresented groups which is especially relevant in the organizational or educational context. When the outcomes of diversity interventions are positive, participants also understand the importance of respecting differences, and the impact they have on others and society at large (Faloughi & Herman, 2020). Studies from the organizational context indicate that when a diversity program is successful, members of the majority groups also indicate satisfaction with their jobs (Bond & Haynes, 2014). However, the failure of diversity efforts can result in minority members suffering more discrimination and losing trust towards the organization (Mor Barak, 2005; Brown, 2004; Cropanzano & Rupp, 2008). Hence, failed diversity trainings can even backfire.

While Berzukova, et al., (2016) reported that some diversity trainings have large effect sizes resulting in improved diversity related outcomes, the literature as a whole is quite inconclusive when it comes to the effectiveness of diversity trainings (Litlrell & Salas, 2005; Selmer, 2005; Black & Mendenhall, 1990). This might be due to the great diversity of training tools, study designs and methods that are used. Therefore, there is a need to have a clear comprehension of what diversity training approaches worked and what did not work, in order to arrive at a clearer picture of the factors that contribute to their effectiveness. For this purpose, it is important to compare what is comparable, for example, by examining the effectiveness of studies that use similar training tools but differ regarding their design and study method. A promising training tool from the intercultural training literature is the Critical Incidents (CI), it has been widely used during culture diversity trainings (Herfst et al., 2008; Spencer-Oatey, 2013) and which may be particularly helpful to sensitize trainees in regard to biases and instances of discrimination (Morell et al., 2002).

For the purpose of the current study and given the variety of contexts and industries within which diversity interventions can be found, we define a diversity training or intervention as any instructional program intended to sensitize participants about various aspects of diversity within their environment which can involve race, ethnicity, gender, age, religion, sexual orientation, disability or any other minority characteristics.

2.2. Critical Incident Technique

The reference to Critical Incidents can be traced back to the introduction of the Critical Incident Technique (CIT) by John Flanagan. The seminal work by Flanagan (1954), provides details of how the technique was carried out and the way valid Critical Incidents were determined and subsequently used in trainings in the army. The CIT method was initially used to identify Critical Incidents in organizational context across various industries to determine the job requirements that are considered critical for jobs (Butterfield et al., 2005). The CIT has become a widely used qualitative research method and it is currently recognized as an effective exploratory and investigative tool (Chell,1998; Woolsey,1986). To put into perspective, the Critical Incident technique is a method of data collection aiming to retrieve incidents considered “critical” or significant from the participants’ experience. There are different ways of obtaining recalled or retrospective data in the form of Critical Incidents: (1) individual interviews; (2) group interviews; (3) questionnaires; and (4) record forms which record the details of these incidents (Flanagan, 1954). A Critical Incident is then an output or unit of analysis that is established through the CIT process and procedures defined by Flanagan (1954) as follows:

Any observable human activity that is sufficiently complete to permit inferences and predictions to be made about the person performing the act. To be critical, an incident 'must occur in a situation where the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects (p. 327)

In order to understand how we framed the concept of a Critical Incident to guide the process for the current literature review, it is important to consider the developments in the literature as well as the evolution of the Critical Incident Technique as the original basis for a Critical Incident. The CIT was originally intended to facilitate the observation and categorization of human behaviours so that the critical requirements of a particular activity could be formulated (Byrne, 2001; Flanagan, 1954). Therefore, the premise of CIT was to explore and determine what helps or hinders in a particular situation or experience (Borgen, & Amundson, 2009)

While Flanagan is often referenced by researchers who make use of the Critical Incident technique or just use the Critical Incident itself, there have been a lot of developments and deviations from his original work. Many researchers highlighted the emergence of new terminologies and frameworks that apply some of the principles of CIT. For example, this is the case for the Critical Incident report, Critical Incident study technique,

or Critical Incident exercise, to name a few (Bradbury-Jones & Tranter, 2008; Butterfield et al., 2005). These inconsistencies and variations in the literature indicate that a definition of a Critical Incident potentially varies depending on the framework that is used.

The current study does not focus on CIT or on the creation of the Critical Incidents, but rather on the usage of the Critical Incident itself as a diversity intervention tool. However, it is important to consider that the above-mentioned inconsistencies in the perspectives and definitions of Critical Incidents as a technique could be reflected in the development and usage of Critical Incidents as training tools as well.

2.3. Critical Incident as a Training Tool

Critical Incidents have been used in various training context such as healthcare, education, but often in culture-focused trainings. The definitions and descriptions of Critical Incidents vary across the literature; however, in the context of culture-focused trainings, the situations reported are generally using the original approach of retrospective self-reports as suggested by Flanagan (1954). Moreover, Critical Incidents teach people from different cultural groups to make isomorphic attributions regarding the behavior of people from another culture (Triandis, 1977). They are based on experiences or events that are usually something atypical or not commonplace (Fiedler et al., 1971; Kim & Leong, 1991; Triandis, 1977). The Critical Incident method (CI) provides an example of an intercultural training tool that can link skills and knowledge competencies in ways that are appropriate (Engelking, 2018).

Intercultural researchers were amongst the first to recognize the usefulness of Critical Incidents. By the 1960s, they had started to collect the experiences of international volunteers about their experiences in foreign cultures (Wight, 1995). As such, Critical Incidents have been used frequently in intercultural trainings, where trainees are sensitized about another culture leading towards cultural competency (Herfst et al., 2008; Spencer-Oatey, 2013; Tran & Saab, 2019). In the context of intercultural training, the incident can sometimes begin as a simple description of a situation where cultural differences caused a misstep, conflict, or misunderstanding. The description most often takes the form of a narrative text (Wight, 1995) which is why it could also be considered to be a vignette.

Another variation of using Critical Incidents in culture focused trainings is the culture assimilator or intercultural sensitizer. Culture Assimilator, which is a training format that allows for the analyses and interpretation of a collection of Critical Incidents. In this case participants are given multiple-choice options, some of which are culture-relevant while others are culture-irrelevant but may still seem plausible from the participant's perspective.

As the participants compare their choice with the correct option, they learn about cultural nuances that may be very different from their own (Fiedler et al., 1971; Kim & Leong, 1991; Triandis, 1977). Critical Incidents can be very important because they provide a way of enabling participants to be more aware of the nature of their values and associated issues, to question their own practice, and to concretise their generally abstract notions of values such as social justice (Tripp, 1993). Raising awareness is especially relevant when it comes to implicit biases and subtle forms of discrimination.

2.4. Diversity Interventions and Discriminations

Different diversity trainings have been used to decrease prejudices and discrimination towards minority groups by addressing both blatant forms of discrimination (e.g., rude treatment of a colleague or fellow student) and subtle forms of discrimination (e.g., microaggressions, such as assumptions and comments about a person based on race, gender, sexuality etc.). The latter are especially relevant as they tap into implicit biases which have become more common over the past four decades due to anti-prejudice norms (Plant & Devine, 1998), but are also somewhat hidden. Microaggressions are defined as:

Subtle, innocuous, preconscious, or unconscious degradations, and putdowns, often kinetic but capable of being verbal and/or kinetic. In and of itself a microaggression may seem harmless, but the cumulative burden of a lifetime of microaggression can theoretically contribute to diminished mortality, augmented morbidity, and flattened confidence (Pierce 1995, p. 281).

These situations are cumulative in nature of and have effects on minorities mental health and wellbeing (Omi & Winant 1994; Sue et al. 2007a, 2007b). Microaggressions as a subtle form of discrimination are especially difficult to detect for majority members because they are usually not aware that they hold implicit biases that are expressed in subtle ways (Sue, Lin, et al., 2009; Sue et al., 2009.). Hence, it is even more important to find effective training tools that uncover the biases of majority members.

The rise in human rights policies and a greater awareness about discrimination have made good progress in the reduction of blatant discrimination. In recent years, the growing amount of literature about microaggressions towards different minority groups has contributed to raise awareness about subtle discrimination in different contexts and has brought to the development of several diversity interventions aimed at addressing the issue. Moreover, Sue's work on microaggressions was very important for raising awareness about the shift from blatant to subtle forms of discriminations from the targets' perspective.

Findings related to the effectiveness of these interventions are mixed (Williams, 2020). For example, Williams (2020), indicated the importance of contextualizing micro aggressive incidents and strengthening ethnic identity for black students, while improving interracial connections, therefore, they developed the Racial Harmony Workshop (RHW). The method encourages intergroup contact, vulnerability through mutual sharing of experiences between white and black participants, as well as discussions about racial microaggressions, including meditation sessions. Although positive results were found with the workshop; the outcomes indicate that the workshop benefited white students than black students in the main outcome measure. The authors assume that perhaps the intervention put black students in difficult interracial situations and indicate the need for diversity trainings that do not privileging one group over another. Although RHW workshop also uses personal experiences as sensitizers, it also emphasizes connection between minority and majority groups. Critical incidents approach on the other hand, is generally geared towards providing clarity, knowledge or understanding where situations of interest are presented with full contextual reference and analysed (Herfst et al., 2008)

Some scholars suggest that Critical Incidents can be used to address issues related to subtle discrimination and microaggressions (Morell et al., 2002). For example, a study using video recordings of participants interacting with people from different cultures were analyzed for Critical Incidents. The analyzed incidents were then used as sensitizer, this process moved participants away from the unconscious stage of being incompetent or unaware of their unconscious bias to allowing for the opportunity to interrogate the implicit biasness they did not know they carried with them (Morell et al., 2002). In another study, a Critical Incident that was experienced by a student while living in a different cultural context was subsequently applied in the classroom as a teaching lesson with their peers. In this case the one person's Critical Incident allowed for the generation of group knowledge (Engelking, 2018). These situations indicate the versatility of the Critical Incident method. The Critical Incident method is commonly used in intergroup contacts such as intercultural contact situations which can also include patients in the healthcare system. An intervention with Critical Incidents can be delivered through many ways such as readings, assignments, group activities, and with trained facilitators. The incidents can sensitize participants and allow for connection across differences (Griffin, 2003; Morell et al., 2002).

To date, the extent to which Critical Incidents have been used in diversity trainings and more specifically, to address subtle discrimination, is unknown. For this reason, the purpose of this scoping review is to map and systematize the literature about diversity training

that adopted Critical Incidents as an intervention tool. More specifically, we will map information about the content and context of the diversity training using Critical Incidents, as well as the findings of the literature, specifically about the effectiveness of this method. Lastly, we aim to understand the research gaps of the literature in this context.

CHAPTER 3

METHODS

We followed the methodology outlined in the Joanna Briggs Institute Manual for Evidence Synthesis (Aromataris & Munn, 2020) and in the Joanna Briggs Institute Reviewers' Manual (2020). The main objectives of the study were to identify if there was any evidence of Critical Incidents being used in diversity trainings, and how research was conducted in this context, as well as to determine the effectiveness of this method. We particularly aimed to determine whether they were used in diversity intervention, how they were used and defined and whether such interventions were effective or not. Therefore, the framework for conducting scoping reviews proposed by Arksey and O'Malley (2005) was followed. The scoping review methodology was considered relevant in this current study because this type of synthesis is useful for various purposes: (a) to identify the types of available evidence in a given field; (b) to clarify key concepts/ definitions in the literature, (c) To examine how research is conducted on a certain topic or field. Scoping reviews are intended to provide analytical interpretation of the literature. The outcome of the review may also provide background for systematic review or help to identify areas where existing research is limited or needs to be explored further (Munn et al., 2018).

The procedures of this scoping review were informed by a a-priori study protocol, which was redacted at the beginning of the review process (Appendix A). The creation of the protocol followed the JBI recommendation of applying the PCC mnemonic, which stands for Population, Concept, and Context. The PCC framework was instrumental in guiding the creation of the main search concepts and parameters for inclusion criteria. The review involved following five stages: (1) identifying the research questions, (2) search strategy (3) selection of sources of evidence, (4) charting the data, and collating, (5) summarizing, and reporting the results.

3.1. Identifying the research question

The research questions were established through ongoing discussions among the authors. An agreement was reached to address the following two main questions: 1) How have Critical Incidents been used in the context of diversity training? 2) To what extent is the Critical Incidents tool effective in facilitating intergroup relations?

The more specific sub questions were as follows (a) What are the objectives of the diversity training that use Critical Incidents (e.g., increasing intercultural competence; inequality awareness; unconscious biases)? (b) What are the key concepts and definitions of

Critical Incidents as applied in diversity training (e.g., if Critical Incidents are defined as case studies, vignettes, intercultural sensitizers, etc.)? (c) Do the studies included in this review tackle issues related to discrimination? And how are different forms of discrimination (blatant vs. subtle) addressed in this context? (d) Does the study provide evidence that the objectives have been fulfilled? Is there any post-intervention evaluation and how is the effectiveness of the training evaluated?

3.2. Search Strategy

The search strategy was conducted through electronic database, focusing specifically on PsycINFO. PsycINFO was selected because of its relevance for psychological studies and because it served our subgoal to better understand the psychological processes involved in diversity trainings using Critical Incidents. PsycINFO was also found to be common amongst previous reviews in social sciences. The primary search terms focused on the concepts of diversity, Training and Critical Incident. We also included related synonyms and common references of the concepts in the literature (see Table 1). The Boolean term “AND” was used between the three key concepts. The search based on the above-mentioned search strategy was conducted on the 21st of March 2021.

Table 1

Keywords entered in relevant database

Database	Search terms
PsycINFO	Divers* OR *Cultur* OR Competenc* OR Awareness AND Training OR intervention* OR program OR Education* AND "Critical Incident*" OR "Intercultural Sensitizer" OR "*Cultur* Assimilator*" OR Vignette*

3.3. Selection of sources of evidence

An inclusion strategy was set up through discussions between the authors and piloted by the main author. There were several criteria for inclusion which were consistent with the objectives of the current review and they were listed in the protocol as follows: a) Population: [interventions/training with] participants of all ages, regardless of their gender, ethnicity, culture, and any other demographic information. b) Concept: in the context of this review, Critical Incidents are considered to be a narrative methodology, or a tool applied during diversity training. Sources were included when that explicitly mentioned the usage of the following training tools: Critical Incident, Vignettes, Cultural Assimilator, or Intercultural Sensitizer. The above-mentioned tools are generally referenced interchangeably or in conjunction with each other (Fiedler et al., 1971; Kim & Leong, 1991), because there are overlapping definitions between the tools, we consider them to be the same or similar concepts. Sources that did not explicitly mention these training tools or that only mention other narrative tools (e.g., Case studies, Wight, 1995) were not included; c) Context: sources that indicated that the tool (Critical Incident or similar) was applied in an educational and/or training context related to diversity issues. Sources had to explicitly refer to an instructional program intended as a training, intervention, or educational tool for individuals and/or groups to sensitize them about various aspects of diversity within their environment.

To be included, sources also had to focus on factors such as, but not limited to cultural competency, intergroup contact, group identification, cultural differences, intercultural conflict, issues faced by various minority groups such as stigma, bias, prejudice, and/or discrimination, etc. (Faloughi & Herman, 2020; Bezrukova et al., 2016). Sources referring to trainings performed in any cultural context and setting (e.g., academic, organization, communities etc.) regardless of geographical location were included. We excluded sources that mentioned diversity interventions but *did not* refer to the usage of any of the tools (Critical Incident; Vignettes; Cultural Assimilator; Intercultural Sensitizer), as well as those that made reference to instructional programs but *did not* focus on diversity issues (including but not limited to cultural competency, intergroup contact, group identification, intercultural conflict, issues faced by various minority groups such as stigma, bias, prejudice, discrimination, etc.).

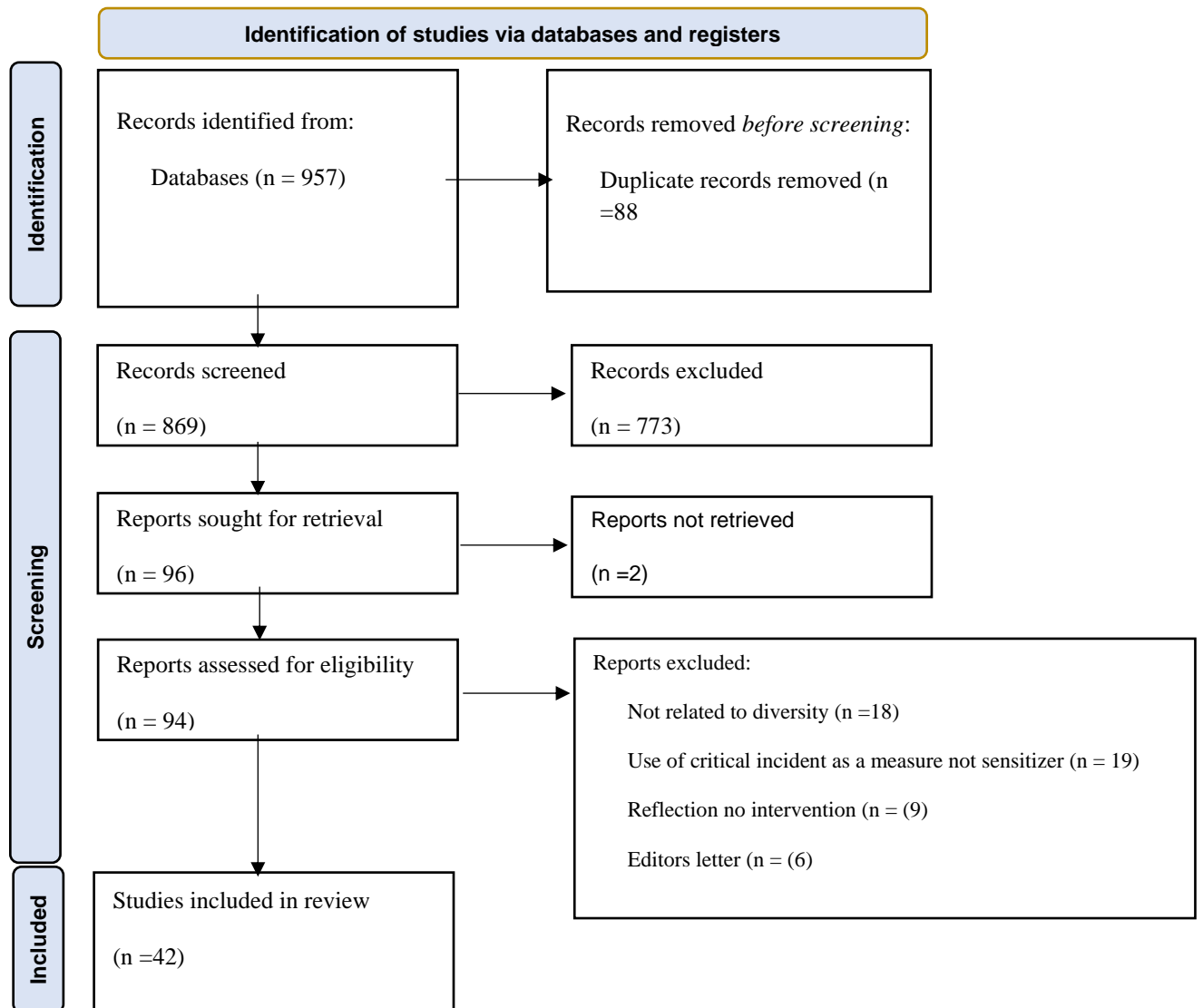
Sources also had to be published after 1954, which corresponds to the first publication of the Critical Incident Technique (Flanagan, 1954). Our focus was on peer-reviewed articles published in the psychological domain. All types of primary empirical studies (qualitative, quantitative, mixed methods) as well as all types of secondary studies (reviews) and

theoretical articles were included. For ease of analysis and because of limited resources for translations, the sources had to be written in English (regardless of the language in which the training was conducted).

A total of 957 records were identified in PsycINFO and imported in Mendeley. After duplicates were removed, a total 869 records were identified for the first screening phase and ultimately 42 articles were included in the second screening phase. One article featuring two interventions; therefore, it was coded as two separate articles bringing the final included articles as 43 in total.

After importing the results of the search to Mendeley, duplicates were removed. A two-stage screening process followed (Figure 1). First, the abstract and titles of the retrieved articles were assessed in terms of the inclusion criteria by the main author. Uncertainties about whether to include or exclude a certain abstract were resolved with a second reviewer. Secondly, the full text of the selected articles was then screened in terms of the inclusion criteria; uncertainties were again solved with a second reviewer. Articles meeting the inclusion criteria were included for data extraction.

Figure 1



3.4. Data Charting Process

A coding scheme was developed in a word document following the structural principles of the chart described in the JBI reviewer’s manual (Aromataris & Munn, 2020) with a focus on the specific research questions for this study. Table A in the (see Appendix 2) provides an overview of what was coded. The main author piloted the coding scheme by coding eight articles on an excel sheet, and then discussed and validated the process with the other two team members. Adjustments were made to the code book and the excel sheet upon validation and the main author coded the rest of the articles.

3.3. Synthesis of results

The analyses of the results were conducted using SPSS version 27. We primarily used the frequency functionality because it was fit for purposes of the current study.

3.5. Results

A total of 43 studies were included in accordance with our inclusion criteria. The publication dates for all included articles ranged between 1969 and 2020. There were gaps in the data where certain years did not have any publications. (see Figure 2). The pattern of publications per year was consistent throughout the time range of the included articles. There was also a long gap between publications in 1976 to 1985 until a publication by Brislin (1985), which was a theoretical article on the development of culture assimilators in cross-cultural trainings. The presented studies indicate that post Brislin (1995), the frequency of publications increased to at least one article a year, and this trend was identified from 2002 with a steady increase and subsequently a spike in 2011.

Figure 2 Frequency of publications



3.5.1. Study Characteristics

The coded information for each paper with regards to the general study characteristics are reported in Table 1. The studies were conducted in 11 different countries, with the majority of studies (74.4%) being conducted in the United States of America (USA). This

overrepresentation could be attributed to general historical tendency for research to be carried out in Western countries, particularly the USA, in comparison to other parts of the world (Henrich et al., 2010). The remaining 26% was distributed amongst all other countries as follows: Australia, Greece, India, Iran, Israel, Italy, Netherlands, Sweden, Thailand, featuring one article per country, the exception was Germany with two articles. One article reported two studies that were carried out in multiple countries, with a unique sample. The studies were coded and presented separately (42, 43.¹).

Of the retrieved studies, 60.5% (N = 26) reported empirical procedures while 39.5% (N = 17) adopted a theoretical perspective. With regards to the methodologies employed by the above-mentioned percentage of empirical studies, it was found that they were quasi-experimental, 38.5% (N = 10), experimental, 30.8% (N = 8), and qualitative, 26.9% (N = 7), with one paper utilizing mixed methods, 3.8% (N = 1). We were also interested in the information about the instructors, a total of (N = 6) studies provided the instructor or facilitator qualification, moreover (N = 3) articles also mentioned the racial identities and two of them included gender of the instructors.

There was great a variety with regards to the populations that was targeted with the diversity trainings in the articles. For ease of understanding, we refer to target population as a collective term to indicate ‘study sample’ in empirical studies and ‘target audience’ in theoretical papers.

Below is the distribution of the various target populations for all the articles included in the study (N = 43). University students and mental health practitioners (inclusive of psychologists, psychiatrists, and social workers) each accounted for 16.3% (N = 7) of included articles. Similarly, the army (used as an inclusive term for all employees that were employed by the military, including civilian workers), and academic supervisors each accounted for 9.3% (N = 4). High school students, community health workers, and teachers each accounted for 7% (N = 3); community members 4.7% (N = 2), while police officers, primary school children and families each made up the 2.3% (N = 1). Three articles targeted mixed populations 7% (N = 3).

When it comes to empirical studies in particular, only a few studies reported the representation of women (N = 8) with the percentages ranging between 44% to 86%, (M= 56.6%). The percentage of women in each study can be seen in Table 3. The duration of the interventions varied greatly across studies: the number of training sessions ranged from 1 to

¹ Numbers refers to the article references in Table 1& 2

12 sessions, with each session lasting between 42 minutes to 7 hours. The sample sizes in general varied greatly across selected articles, ranging between 17 to 640 participants. There was an outlier with 10000 participants (30), a longitudinal study using drama with culture appropriate cues. This study assessed participants through a written evaluation that was based on the Theory of Planned Behavior. The total sample size reported above is a representation of all the participants who viewed the drama and completed the pre and post-test immediately, although only 2660 valid assessments were received during a follow up to measure long term effects of the intervention. The high drop-out rate in sample sizes between different points in time was found to be common across the studies that have adopted a pre-post-test design. For all empirical studies, the study designs were distributed as follows: nine studies applied between groups pre-post-test design (N = 9), eight studies applied the within groups design (N = 8), seven studies used qualitative design (N = 7); one study applied experimental vs control (N = 1)

The interventions were generally carried out in person through facilitators or lectures, however two studies used web-based assessments (19,21) as the primary intervention method. There was a general tendency to use a combination of various materials such as films, assignments in addition to Critical Incidents or Vignettes as intervention tools.

The theoretical papers identified, 39.5% (N = 17) in the current review covered variety of diversity topics as follows; culture, 29.4% (N = 5), race, 23.5% (N = 4) and multicultural supervision, 11.8% (N = 2); the rest of the topics each accounted for 5.9% (N = 1) and were as follows: disability, language diversity, minority health, religion, sexual orientation and socio-economic class.

Table 2

Frequencies of Population, (N=43)

	Frequency	Percentage
Mental Health/Social work	7	16.3
University Students	6	14.0
Army	4	9.3
Healthcare	4	9.3
Academic Supervisor	4	9.3
High school students	3	7
Community Health Workers	3	7
Mixed Population	3	7
Teachers	3	7
Community Members	2	4.7
Police Officers	1	2.3
Primary School Kids	1	2.3
Business Employees	1	2.3
Families	1	2.3
Total	43	

3.5.2. Objectives of Diversity Intervention

The highest proportion of the studies addressed cultural diversity, 48.8% (N = 21). The high proportion of articles addressing this topic is not surprising because it is consistent with the common usage of Critical Incidents in intercultural trainings (Spencer-Oatey, 2013). Some of the articles included in the current review are well known for their contribution to the theory and application of Critical Incidents in culture-focused trainings, particularly in using Critical Incidents within the scope of Culture Assimilators (5, 6, 8, 15, 23, 32, 42, 43).

Minority health access and race were each addressed in 11.6% (N = 5) of the studies. Studies dealing with race aimed to improve race relations and increase participants competency to deal with the implications of racial dynamics within their context such as therapeutic and counselling strategies related to racial minorities (1, 4). They also referred to the need to increase racial understanding and awareness (10, 24) as well as addressing unconscious race related biases (31). The minority health access interventions were found to focus on health-related accessibility challenges such as the development of culturally adapted

clinical tools in the provision of psychiatric services (3), the health providers' ability to recognize the manifestation of mental disorders that may be unusual because of influences of cultural behaviors and values (16), and the development and implementations of health promotion activities that took a bottom-up approach to provide culturally and linguistically relevant interventions. Moreover, some of these interventions focusing on health promotion adopted unconventional delivery methods, such as multimedia communication or drama-based tools. For example, some interventions used vignettes in brochures and others randomly displayed vignettes with cultural cues in-between the drama scenes, (30, 34, 40). In addition, identified diversity issues, 9.3% (N = 4), included learning processes as well as the impact and effects of language for service delivery. Studies addressing these issues aimed to increase knowledge, confidence, and attitudes with regards to factors such as the importance of reliable interpretation resources in healthcare and the attitudes required to deal with demands around limited language skills (19) and teaching requirements (17). The remaining topics focused on disability challenges or multicultural supervision, with each accounting for 4.7% (N = 2) of the articles. Multicultural supervision differs from other diversity themes because it emphasizes the issue of unbalanced power relations between supervisors and trainees, which is not always present in general cultural interactions. We also found that 32.6% (N = 14) of articles made reference to the aspects of power relations in conjunction or related to the specific diversity issue that is being addressed in the article.

It is worth mentioning that the categories created to identify diversity issues were not mutually exclusive. For example, although only four articles (9.3%) were primarily focused on language diversity, other studies recognized the language needs of participants during the intervention, mentioned language as a sub-goal of the intervention or acknowledged the role of language as a barrier (33,35,14,39,16). Similarly, some of the articles that had a key focus on diversity issues such as religion, disability, sexual orientation, gender or phenotypical characteristics such as race and ethnicity, made mention of intercultural processes and set intervention goals related to cultural competencies (4,10,13,31,36). In this context, the application of concepts derived from cultural psychology to address these diversity issues could be explained based on the definition of culture as "broad, and potentially inclusive of all salient, ethnographic, demographic, status, or affiliation identities" (Pedersen, 1999, p. 3). Furthermore, culture is a basis for common understandings such as beliefs and attitudes (e.g., stereotypes and prejudices), which are often unstated but shared by members of a community and generally assumed to be valid, making culture fundamental to the way groups and individuals make sense of the world (Elfenbein & Ambady, 2002). However, the diversity

categories mentioned in this review are pertinent issues in modern society, therefore, it is justifiable that they should be addressed independently, as they are addressed and categorized by human rights organizations (Gender Equality Institute [EIGE], 2020; Agency for Fundamental Rights [AFR], 2019). Of the 26 empirical studies identified, 48.8 (N = 21) focused on culture diversity. In contrast, theoretical papers tended to focus on other types of diversity themes (e.g., religion, disability, sexual orientation, gender) as mentioned above.

In general, the aims of the studies followed the same pattern, focusing on developing participants' knowledge, awareness, and skills about a specific diversity or cultural issues. Therefore, it seems probable that the studies adopting this focus are based on the tripartite model of competence which organize competency into three areas - knowledge, skills, and awareness. The model was developed as a standard for well-equipped and inclusive mental health practitioners (Sue et al., 1982) and updated (Sue et al., 1992; Sue et al., 1998).

Table 2

Frequencies of types of Diversity Topics, (N=43)

	Frequency	Percentage
Culture	21	48.8
Race	5	11.6
Minority Health Access	5	11.6
Language Diversity	4	9.3
Disability	2	4.7
Multicultural Supervision	2	4.7
Sexual Orientation	1	2.3
Religion	1	2.3
Learning and development	1	2.3
Socio economic class	1	2.3
Total	43	

3.5.3. Key Concepts and Definitions of Critical Incident

A preliminary search at the beginning of the current study showed that there are various definitions of a 'Critical Incident' in literature, depending on the contextual framework in which this tool is used. Therefore, to guide our search strategy we relied on what the literature defined as "Critical Incidents", "intercultural sensitizers" or "culture assimilators". The idea is

that these definitions often refer to the same training tool and have been used interchangeably or in conjunction with each other (Fiedler et al., 1971; Kim & Leong, 1991). On basis of this information, we sought to find the different definitions given for these tools in the included sources. As already mentioned, all selected articles had to refer to Critical Incident, and/or culture assimilator and/or intercultural sensitizer. We also included a more general reference to “vignettes”, to avoid the possibility of missing Critical Incidents that were labeled under this term. The definitions provided in the articles were analyzed through thematic qualitative analysis. For a clear contextual reference, the definitions or descriptions of Critical Incidents were classified with some examples as reported below:

- a) Critical Incidents were commonly defined as brief vignettes representing episodes of conflict or misunderstanding, within the context of an interaction. Some of the definitions made mention of the implicit meanings that accompanies such interactions: “critical incidents vary and can be...subtle interactions that are grounded in differing racial/cultural worldviews, or they can be more blatant occurrences of racial conflict” (10,3)
- b) Critical Incidents often have an emotional dimension, for example, some of the retrieved definitions referred to the feelings of anxiety that often accompany misunderstandings or conflicts:
“As part of the study, students reflected on Critical Incidents, which display misunderstandings or conflicts that arise as a result of cultural differences. In dealing with these cases, students were encouraged to reflect on their own cognitive and affective processes (such as categorization and judgement) in order to become aware that thoughts, emotions and actions are socially and culturally influence.” (7, 11)
- c) Although the Critical Incidents are mentioned as being used to sensitize the participants, they are often contextualized instead of defined (e.g., in the context of a study program, culture, counselling training, cultural differences):
“A Critical Incident in the program is described using participant observation to illustrate how the program’s reflection-inaction pedagogy promoted collaborative learning in addressing diversity” (25). “The incidents were adapted from the electronic data bases. Each vignette describes an intercultural setting where an incident and its consequences were given without explaining the cultural differences that led to the situation” (7, 11)

Although the definitions of Critical Incidents identified in the articles were structured differently and even using different concepts and definitions, there were some recurring themes in the majority of the definitions as emphasized on the quotes above. Key themes were misunderstandings and emotions, particularly as it related to intercultural encounters (5,7,24,10,39). This could be indicative of the common usage of literature in culture-focused trainings that uses Critical Incidents. However, despite the identified common themes retrieved, the definitions were very heterogeneous and presented very different aspects of Critical Incidents. Furthermore, some of the definitions were longer and provided a lot more context, while others were very short. Moreover, most articles simply referred to a general vignette. The reference to vignettes in most papers instead of the conceptual term Critical Incident could be linked to the various approaches that apply some aspects of CIT and simply call the unit of analysis as a vignette. The themes identified in the definition of Critical Incidents as indicated above, do not show a structured framework of applying Critical Incidents in trainings, although many articles referenced vignettes that fit the basic criteria for Critical Incident, as per our predetermined criteria in relation to the current study.

Some of the included sources also provided a description of “culture assimilators”. The application of culture assimilator was commonly referenced as a tool used in culture-based training. The culture assimilators are developed from critical incidents in cultural diversity. However, the structured and clear methods provided by this tool allows for its application and replication of studies in different contexts. The culture assimilator is defined as:

A training technique designed to reduce the conflicts, tensions, and misunderstandings frequently resulting from encounters between individuals from different cultural backgrounds. This is accomplished by exposing the trainees to culturally relevant information presented to them so that they become sensitized to subtle cues important in social interaction with representatives of another culture. The information is presented in the form of many short episodes which briefly describe interpersonal situations often encountered in cross-cultural contexts, along with alternative explanations for the events presented (24, p. 3).

One of the main differences with Critical Incidents, where participants must conduct a critical analysis of the situation, is that the culture assimilator provides multiple answers to select from during training (5,24). Cultural Assimilators were originally developed by Fiedler et al., (1971) and applied and modified by other researchers in various training contexts (Chemers, 1969).

Table 3

Frequency of Key Concepts (N=43)

	Frequency	Percentage
Vignettes	24	57.1
Culture Assimilators	7	16.7
Critical Incident	6	14.3
Mixed (both Critical incidents & Culture Assimilators)	6	11.9

3.5.4. Reference to Discrimination

More than 50% (N = 25) of the articles mentioned concepts related to discrimination such as prejudice, bias, negative attitudes, discrimination, and stigma, as common occurrences in intercultural interactions. However, only four of articles included directly addressed discrimination as a topic during the intervention (4,20,24,31). Negative attitudes and biases on basis of cultural background, disability, sexual orientation, religion, and race were amongst factors addressed (4;2,36). One study referred to both subtle and blatant discrimination (10), while two articles (20,28) referred to subtle and microaggressions. Two articles referenced a combination of discriminatory concepts such as implicit biases, prejudice, negative attitudes or stigma (29,31).

3.5.5. Effectiveness of the Intervention

The determination for effectiveness was based on the overall outcomes mentioned in the studies. Out of the 26 empirical studies included, (69.2%, N = 18) of the studies reported that the diversity intervention implemented was effective (see Table 2). The remaining (30.8 %, N = 8), reported partial success of the intervention, partial success indicates the results for some of the expected outcomes were successful while others may have not shown significant results in accordance with the hypothesis. There was no intervention reported as completely ineffective.

The effectiveness of the studies in relation to the design were as follows:

- a) Between group design accounted for (N = 9), four studies reported outcome as effective, while 5 studies reported a combination of effective and non-effective outcomes on the measures, therefore, they were classified as partially effective.
- b) Within groups accounted for (N = 9), six of the studies reported outcome as effective, whereas 3 studies reported a combination of effective and non-effective outcomes on the measures, therefore, they were classified as partially effective.
- c) Qualitative (N = 7) Studies that applied qualitative methods were all reported as effective.
- d) Mixed design (N = 1), was only used in one study which was reported as effective

The empirical studies addressed the variety of populations as follows: university students 19.5% (N = 5); the army and healthcare each accounted for 15.5% (N = 4); community health works, high school students accounted for 11.5% (N = 3); community members and teachers each accounted for 7.7% (N = 2), police officers accounted for 3.8% (N = 1). There was also 7% (N= 2) of mixed populations.

3.5.6. Limitations of the selected studies

A number of study limitations were mentioned in the articles. Some of the key areas were in relation to (a) participants: issues presented were related to small sample size, and whether the results can be generalized to other populations; (b) Assessment methods: the concern that the measurement methods can lead to biases and compromise the reliability of the results; in addition, the reliability of qualitative measures was also mentioned,; (c) Control group: some articles indicated concern with confounding variables for studies where there was no control group,; (d) Length of intervention: various articles mentioned concerns about the short duration of the interventions. A frequent concern was that a short time frame makes it difficult to predict long term effects of the intervention on behaviour. Similarly, in cases where pre and post-test were conducted within a shorter time frame, there were also concerns regarding the prediction of long-term effects of the intervention; (e) Gender representation: while there were only eight studies that reported the gender representation, only one study made reference to gender as a limitation.

CHAPTER 4

DISCUSSIONS

This review aimed to identify and synthesize research done on the usage of the concept of Critical Incidents in diversity interventions. We found that almost 75% of the studies were published in the United States of America (USA). The dominance of articles from the USA is indicative of the historical bias of research from the West. Given that research plays a role in guiding practice and other aspects of social norms, the prevalence of Western studies consequently makes the western perspective of social and psychological frame of reference as ideal and standard. The context and extent of this bias is well documented in the article titled “The weirdest people in the world” by Henrich et al., (2010).

The common thread amongst both empirical and theoretical articles was that the aim of the studies centered around improving knowledge, awareness, and skills. This is consistent with the tripeptide model by Sue et al. (1998) which has been originally formulated for mental health practitioners who have sufficiently acquired competence to attend to the diversity of clients they meet. Some of the identified articles showed that interventions were incorporated into the curriculum of the courses as an ongoing learning process (Cross et al., 2008; Ikram et al., 2015) with the intent to provide ongoing awareness, skills, and knowledge. This is important to equip competent service providers that can address the needs of a multicultural society. Cultural competence in psychology has been influenced by the universality of psychological laws and theories that excludes cultural practices outside of the western principles (Sue, 2001). The advancement to equip mental health practitioners with relevant skills is indicated (Bäärnhielm & Sundvall, 2018; Uribe Guajardo et al., 2018). It is considered important because of the rate of migration particularly forced migration that is often accompanied by trauma. The continuous unrest in the Middle East and some parts of Africa could be contributors to the ongoing challenges. The sporadic flare-ups in war situation, often requires urgency on emergency personnel, therefore it is indicated in the articles that mental health practitioners need to be able to identify symptoms even when they manifest differently from what they are accustomed to (Bäärnhielm & Sundvall, 2018). The focus on these topics is clear as also identified in the frequency of publication around 1997 onwards, in comparison to previous years where there were some years that did not have any publication based on the articles identified in the current review. This may well reflect globalization with increased migration patterns, particularly as it relates to refugees.

The current study also identified some broad categories of diversity topics. In this context, many of the empirical studies focused on cultural diversity. This focus on culture makes sense because intercultural specialists were the early adopters of the Critical Incidents to address issues of cultural misunderstanding (Wight, 1995). Given the current situations of global unrest, the need for interventions will probably continue in an upward trend. In contrast to empirical articles, we found that theoretical papers tended to reference a variety of diversity situations which reflect global narratives around these issues over the last decades. Problems such as the etiology and manifestation of trauma because of factors such as skin colour discriminations in therapy (Adames et al., 2016) are addressed on basis that the effects may not be obvious to psychologists; therefore, such problems may not be considered as the possible causes of depression and other mental health issues-unless the therapist is aware of the topics or if they are included in the diagnostic process. Similarly, topics around social class (Storck, 2002) as they manifest in a therapeutic context are raised as well as the implications of police brutality as a function of unconscious racial biases (Moon et al., 2018).

Although the theoretical papers have indicated a broader spectrum of diversity issues, they also generally propose culture-focused interventions. The cultural approaches might be effective in some cases and not others, for example, “psychologists have indicated that an inclusive definition of multiculturalism can minimize the understanding and study of race as a powerful dimension of human existences” Sue, (2001, p 791). This indicates that pertinent issues of racial discrimination might be avoided as it makes people uncomfortable, where people rather focus on broader topics of culture. It is imperative that therapist intentionally address such issues. While cultural frameworks maybe effective in clarifying general misunderstandings in intercultural contexts, some of the issues that occur in intergroup settings require a deeper delve beyond general cultural norm and behaviours. Ongoing efforts to develop a framework of diversity interventions, such as the multidimensional model of cultural competence (MDCC) (Sue, 2001), is proposed in one article (Collins & Pieterse, 2007) where the authors suggest that although the model was developed to deal primarily with racial issue, it has been applied to culture and can potentially be applied to other areas such as gender, disability, and sexual orientation as well. These kinds of developments that go further into the problem are much needed to tackle the various kinds of conflicting situations that go beyond cultural mishaps. However, they also need to be empirically tested.

Diversity issues are generally complex and carry with them the aspects of power relations and privilege. This was evident in the current review as 32.6% of the articles referred

to the impact of power-relations in various intergroup context. Moreover, how such power dynamics changes in various contexts due to multiple identities that people carry with them, for example the shift in privilege due to being a racial minority but also being an able-bodied and heterosexual male (Jendrusina & Martinez, 2019). The effects of trainers, facilitators or instructors is also important because they have an impact on the dynamics of the diversity intervention; “who we are and the identities we bring with us shape and are shaped by the participants commentary” (Dunn et al. 2014, p.1). A good example of facilitation challenges that can come up in diversity intervention setup are reflected in (Leigh et al., 2010), and how they can be addressed as a learning process. Therefore, self-awareness and declaration are considered important in relation to subject expertise, but also to be able to identify own biases, privileges, and power dynamics - which links to the competency of the facilitator to create a safe space for the participants to address complex topics (Dunn et al., 2014; Hall, 2008). In the current review, there were six articles, 14% in total that explicitly mentioned the facilitator or authors’ background as it directly relates to the topic being addressed. Three of the six articles mentioned a variation of other personal identities such as ethnicity, gender, religion etc., moreover they have linked such identities to power dynamics (Roysircar, 2003; Jendrusina & Martinez, 2019; Rovegno & Gregg, 2007). Based on the implications of the personal identity influences or impact on diversity interventions and trainings as indicated above, it goes without saying, that the identities and backgrounds of the trainers, facilitators or instructors are considered part and parcel of the diversity dynamics and gets reported in future studies.

The definitions and conceptualization of Critical Incidents varied greatly amongst the included studies. It was also common for articles to just refer to a vignette to describe the situation that is considered problematic. Moreover 9 out of the 26 used culture assimilators as sensitizers for the intercultural and cross-cultural trainings. One of the findings that we found to be interesting was the way culture assimilators are created from critical incidents. What was particularly important about this method is that Critical Incidents can be collected according to needs of the specific context and then systematized within a framework that allows for empirical testing (Landis et al., 1985), and, therefore, they can subsequently use them as intervention sensitizers. This indicates the usefulness and versatility of Critical Incidents as tools that can be structured and conceptualized as needed, at the same time this also renders the tool a somewhat elusive concept as evidently identified in the variability of the definitions that was found in this review. It was also indicated how the Critical Incidents

can be constructed to reflect nuances of a specific context (national culture, issues within a specific organization or interaction), or as general as needed (Brislin, 1986).

The articles that explicitly mentioned a Critical Incident and provided a clear definition pointed to a hindsight problematic situation that was then used as a point of discussion amongst participants. This is consistent with the premise of Critical Incidents as a retrospective situation that has enough contextual reference to allow for analysis. The length, structures and tone of the incident also differed greatly, and this made sense while reading through the incidents because various issues present themselves differently. The tone of the incidents tended to reflect elements of misunderstanding and generally created equal discomfort on both parties. However, incidents related to other diversity such as the ones experienced by people living with disability (Andrews et al., 2013); and biases as well as stereotypes based on race (Beckett et al., 1997); the burden of the incident seems to be carried by the minority group, that is they are the one that identify the incident as problematic or offensive. It could be assumed that this is because generally such incidents are embedded in subconscious beliefs within the individual or the influences of the society they belong to. Therefore, the majority or the individual probably do not think they are saying or doing anything wrong.

Discriminations and biases faced by minority groups such as religious beliefs can be influenced by many other factors such as political climate between nations (Roysircar, 2003), similarly sexual orientation is rooted in social norms and cultural beliefs. However, it is clear that they are not unique to any particular cultural reference, people from various walks of life can deviate from heteronormative sexual orientations (Malpas, 2011), and the same can be said about racism, especially in relation to implicit biases (Moon et al., 2018); the devastating effects on minority groups in this regard requires that they be addressed within their contextual framework based on their unique Critical Incidents. This clearly points to the need for interventions that are effective at sensitizing participants with full contextual reference. Regarding the effectiveness of the studies, we found that they were very promising, indicating that there might be some potential for using Critical Incidents. However, it is worth noting that most interventions applied various tools therefore it may not always be very clear whether it is the Critical Incident itself or the duration of the interventions or other factors that rendered the training effective. Moreover, only 10 of the articles applied a control group design. Most of the empirical studies adopted the pre and post-test design, therefore they were able to observe the effects of the intervention. However, the post-test method can influence

the reliability of the results because participants may guess the hypothesis, which is known as a demand effect, thereby influencing the results. Although in the current review we did not identify a consistent pattern between studies that have used control groups and those that did not in terms of effectiveness of the intervention, there was one example where this was observed in the study by Busse & Krause (2015), here the impact of the intervention was only identifiable on the measure that was not included in the pre-test, therefore this indicates that it is important to use control groups to guard against confounding effects, but also include some measures that can confirm the impact of the intervention.

Limitations of the current review

A major limitation of the current review has to do with the time and resources required to carry out a scoping review thoroughly in terms of considering all available literature including the grey literature. In our case we only searched the PsycINFO database to mitigate the resource factor, while making sure we can find more psychology related articles. The second limitation is that in order to be systematic, our inclusion criteria meant that we consider those articles where the abstract read in such a way that it indicates or suggests that an intervention was conducted, this may have made us miss other studies that were not clear about this aspect on the abstract. Another limitation is that we had initially aimed to explore the psychological processes at play when engaging with Critical Incidents, however this question was not addressed because we found that this was not generally explicitly indicated in the studies, therefore we left the question out due to time constraints; it is important that future studies allocate more time towards answering this question because the information is not always available or easy to identify. Exploring the psychological processes question in future research studies will be a valuable contribution to research. This information will particularly be important in determining the kinds of intervention that leads to long term effects particularly as it relates to cognitive processing and behavior.

Conclusion

In conclusion the current review mapped 43 studies on the usage of Critical Incidents covered in diversity interventions and indicated the limitations of the theoretical frameworks and empirical literature on this topic. We also highlighted how other diversity topics are often confounded with cultural diversity. More research is needed on interventions using the Critical Incidents in domains other than cultural competence, given that it seems to be a promising training tool to provide contextual reference in situations of conflicting values,

misunderstandings and with potential to bring the unconscious biases and behaviors to the surface.

Sources

Erasmus Commission (2017, 15 June) Celebrating 30 years of the Erasmus Programme.

<https://www.consilium.europa.eu/en/documents-publications/library/library-blog/posts/celebrating-30-years-of-the-erasmus-programme/>

European Union Agency for Fundamental Rights, 2019,

<https://fra.europa.eu/en/themes/sex-sexual-orientation-and-gender>

European Union Agency for Fundamental Rights, 2019,

<https://fra.europa.eu/en/publication/2019/being-black-eu-summary>

European Union Agency for Fundamental Rights, 2019,

<https://fra.europa.eu/en/themes/religion-and-belief>

European Institute for Gender Equality, 2020,

<https://eige.europa.eu/gender-mainstreaming/what-is-gender-mainstreaming>

Joanna Briggs Institute. (2020). Joanna Briggs Institute reviewers' manual: 2020 edition/supplement. Adelaide: The Joanna Briggs Institute.

References

- Alyssa Hadley Dunn, Erica K. Dotson, Jillian C. Ford & Mari Ann Roberts (2014) “You Won't Believe What They Said in Class Today”: Professors’ Reflections on Student Resistance in Multicultural Education Courses, *Multicultural Perspectives*, 16:2, 93-98, DOI: 10.1080/15210960.2014.899779
- Adames, H. Y., Chavez-Dueñas, N. Y., & Organista, K. C. (2016). Skin color matters in Latino/a communities: Identifying, understanding, and addressing mestizaje racial ideologies in clinical practice. *Professional Psychology: Research and Practice*, 47(1), 46–55. <https://doi.org/10.1037/pro0000062>
- Andrews, E. E., Kuemmel, A., Williams, J. L., Pilarski, C. R., Dunn, M., & Lund, E. M. (2013). Providing culturally competent supervision to trainees with disabilities: In rehabilitation settings. *Rehabilitation Psychology*, 58(3), 233–244. <https://doi.org/10.1037/a0033338>
- Alhejji, H., Garavan, T., Carbery, R., O'Brien, F. and McGuire, D. (2016), Diversity Training Programme Outcomes: A Systematic Review. *Human Resource Development Quarterly*, 27: 95-149.
- Arksey H, & O’Malley L (2005). Scoping studies: towards a methodological framework. *International journal of social research methodology*, 8(1):19–32.
- Aromataris E, Munn Z (Editors). *JBIM Manual for Evidence Synthesis*. JBI, 2020. Available from <https://synthesismanual.jbi.global>. <https://doi.org/10.46658/JBIMES-20-01>
- Bäärnhielm, S., & Sundvall, M. (2018). Clinical challenges in cultural psychiatry—searching for meaning, searching for methods †. *Nordic Journal of Psychiatry*, 72(sup1), S9–S12. <https://doi.org/10.1080/08039488.2018.1525648>
- Bradbury-Jones, C., Sambrook, S., & Irvine, F. (2008). Power and empowerment in nursing: a fourth theoretical approach. *Journal of Advanced Nursing*, 62(2), 258–266. <https://doi.org/10.1111/j.1365-2648.2008.04598.x>
- Beckett, J. O., Dungee-Anderson, D., Cox, L., & Daly, A. (1997). African Americans and multicultural interventions. *Smith College Studies in Social Work*, 67(3), 540–563.

<https://doi.org/10.1080/00377319709517506>

- Bernard M. Bass, Wayne F. Cascio, J. Westbrook McPherson and Harold J. Tragash Source: The Academy of Management Journal, Vol. 19, No. 3 (Sep., 1976), pp. 353-369
- Bezrukova, K., Spell, C. S., Perry, J. L., & Jehn, K. A. (2016). A Meta-Analytical Integration of Over 40 Years of Research on Diversity Training Evaluation. *Psychological Bulletin*.
- Bhawuk, D. P. S. (1998). The role of culture theory in cross-cultural training: A multimethod study of culture-specific, culture-general, and culture theory-based assimilators. *Journal of Cross-Cultural Psychology*, 29(5), 630–655.
<https://doi.org/10.1177/0022022198295003>
- Black, J. S., & Mendenhall, M. (1990). Cross-cultural training effectiveness: A review and a theoretical framework for future research. *Academy of Management Review*, 15(1), 113-136. doi:10.5465/AMR.1990.11591834
- Brislin, R. W. (1986). A culture general assimilator: Preparation for various types of sojourns. *International Journal of Intercultural Relations*, 10(2), 215–234.
[https://doi.org/10.1016/0147-1767\(86\)90007-6](https://doi.org/10.1016/0147-1767(86)90007-6)
- Brown, K. M. (2004). Assessing preservice leaders' beliefs, attitudes, and values regarding issues of diversity, social justice, and equity: A review of existing measures. *Equity & Excellence in Education*, 37(4), 332–342.
- Busse, V., & Krause, U. M. (2015). Addressing cultural diversity: effects of a problem-based intercultural learning unit. *Learning Environments Research*, 18(3), 425–452.
<https://doi.org/10.1007/s10984-015-9193-2>
- Butterfield, L. D., Borgen, W. A., Amundson, N. E., & Maglio, A.-S. T. (2005). Fifty years of the critical incident technique: 1954-2004 and beyond. *Qualitative Research*, 5(4), 475–497. <https://doi.org/10.1177/1468794105056924>
- Byrne, D. (2001). Culture and the urban: commodity, understanding and resource. *Understanding the Urban*, 129–147. https://doi.org/10.1007/978-1-137-18512-9_7
- Bond, M. A., & Haynes, M. C. (2014). Workplace Diversity: A Social–Ecological Framework and Policy Implications. *Social Issues and Policy Review*, 8(1), 167–201.
- Chemers, M. M. (1969). Cross-Cultural Training as a Means for Improving Situational

- Favorableness. *Human Relations*, 22(6), 531–546.
<https://doi.org/10.1177/001872676902200604>
- Chell, E. (2004). Critical incident technique. In: C. Cassell and G. Symon (Eds.) *Essential Guide to Qualitative Methods in Organizational Research* (pp.45–60). London: Sage
- Clabby, J. F. (2017). Enter as an outsider: Teaching organizational humility. *International Journal of Psychiatry in Medicine*, 52(3), 219–227.
<https://doi.org/10.1177/0091217417730285>
- Collins, N. M., & Pieterse, A. L. (2007). Critical incident analysis based training: An approach for developing active racial/cultural awareness. *Journal of Counseling and Development*, 85(1), 14–23. <https://doi.org/10.1002/j.1556-6678.2007.tb00439.x>
- Cross, D., Walsh Brennan, A. M., Cotter, V. T., & Watts, R. J. (2008). Cultural Competence in the Master’s Curriculum-A Course Exemplar. *Journal of Professional Nursing*, 24(3), 150–154. <https://doi.org/10.1016/j.profnurs.2008.01.007>
- Cropanzano, R., & Rupp, D. E. (2008). Social exchange theory and organizational justice: Job performance, citizenship behaviors, multiple foci, and a historical integration of two literatures. In S. W. Gilliland, D. P. Skarlicki, & D. D. Steiner (Eds.), *Research in social issues in management: Justice, morality, and social responsibility* (pp. 63–99). Greenwich CT: Information Age
- Cope, J. & Watts, G. (2000). Learning by doing. An exploration of experience, critical incidents and reflection in entrepreneurial learning. *International Journal of Entrepreneurial Behaviour and Research*, 6(3), 104–124.
- Damron, R. L., & Halleck, G. B. (2007). Generating cross-cultural training data for THE UNIVERSITY GAME. *Simulation and Gaming*, 38(4), 556–568.
<https://doi.org/10.1177/1046878107308058>
- Darvin, J. (2011). Situated performances in a graduate teacher education course: An inquiry into the impact of Cultural and Political Vignettes (CPVs). *Teachers and Teaching: Theory and Practice*, 17(3), 345–364. <https://doi.org/10.1080/13540602.2011.554710>
- Diller J.V. (1999). *Cultural diversity. A primer for the human services*. Belmont, CA:Wadsworth Publishing Company
- Education, 23:4, 285-296 KELLY, E., & DOBBIN, F. (1998). How Affirmative Action

- Became Diversity Management: Employer Response to Antidiscrimination Law, 1961 to 1996. *American Behavioral Scientist*, 41(7), 960–984.
- Elfenbein, H. A., & Ambady, N. (2002). Predicting workplace outcomes from the ability to eavesdrop on feelings. *Journal of Applied Psychology*, 87(5), 963–971.
<https://doi.org/10.1037/0021-9010.87.5.963>
- Ekman, P., & Friesen, W. V. (1969). The repertoire of nonverbal behavior: Categories, origins, usage, and coding. *Semiotica*, 1, 49– 98.
- Engelking, T. L. (2018). Joe’s Laundry: Using Critical Incidents to Develop Intercultural and Foreign Language Competence in Study Abroad and Beyond. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 30(2), 47–62.
- Faloughi, R., & Herman, K. C. (2020). Examining the Effects of an Intergroup-Based Diversity and Social Justice Course on Students’ Multicultural Competencies and Engagement. *Journal of Prevention and Health Promotion*, 1(1), 104–130.
- Filmer, T., & Herbig, B. (2020). A training intervention for home care nurses in cross-cultural communication: An evaluation study of changes in attitudes, knowledge and behaviour. *Journal of Advanced Nursing*, 76(1), 147–162. <https://doi.org/10.1111/jan.14133>
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, 51(4), 327–358. <https://doi.org/10.1037/h0061470>
- Griffin, M. L. (2003). Using Critical Incidents to Promote and Assess Reflective Thinking in Preservice Teachers. *Reflective Practice*, 4(2), 207–220.
- Guy-Walls, P. (2007). Exploring cultural competence practice in under- graduate social work education. *Education*, 127, 569–580
- Halquist, D. 2009. Negotiating power, identity and relationships: Graduate students in relation with faculty, administrators and each other. Doctoral diss., University of New Mexico, Albuquerque.
- Hall, J. C., & Theriot, M. T. (2016). Developing Multicultural Awareness, Knowledge, and Skills: Diversity Training Makes a Difference? *Multicultural Perspectives*, 18(1), 35–41.
<https://doi.org/10.1080/15210960.2016.1125742>
- Harrison, J. K. (1992). Individual and Combined Effects of Behavior Modeling and the

Cultural Assimilator in Cross-Cultural Management Training. *Journal of Applied Psychology*, 77(6), 952–962. <https://doi.org/10.1037/0021-9010.77.6.952>

Herfst, S. L., van Oudenhoven, J. P., & Timmerman, M. E. (2008). Intercultural Effectiveness Training in three Western immigrant countries: A cross-cultural evaluation of critical incidents. *International Journal of Intercultural Relations*, 32(1), 67–80.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world?. *The Behavioral and brain sciences*, 33(2-3), 61–135.

Hofmann-Broussard, C., Armstrong, G., Boschen, M. J., & Somasundaram, K. V. (2017). A mental health training program for community health workers in India: impact on recognition of mental disorders, stigmatizing attitudes and confidence. *International Journal of Culture and Mental Health*, 10(1), 62–74.

<https://doi.org/10.1080/17542863.2016.1259340>

Hornberger, N. H. (2004). The Continua of Biliteracy and the Bilingual Educator: Educational Linguistics in Practice. *International Journal of Bilingual Education and Bilingualism*, 7(2–3), 155–171. <https://doi.org/10.1080/13670050408667806>

Hunter, J., Langdon, S., Caesar, D., Rhodes, S. D., & Pinkola Estés, C. (2011). Voices of African American Health: stories of health and healing. *Arts & Health*, 3(1), 84–93. <https://doi.org/10.1080/17533011003710891>

Ikram, U. Z., Essink-Bot, M. L., & Suurmond, J. (2015). How we developed an effective e-learning module for medical students on using professional interpreters. *Medical Teacher*, 37(5), 422–427. <https://doi.org/10.3109/0142159X.2014.939579>

Jendrusina, A. A., & Martinez, J. H. (2019). Hello from the other side: Student of color perspectives in supervision. *Training and Education in Professional Psychology*, 13(3), 160–166. <https://doi.org/10.1037/tep0000255>

Jonas Stier , Marja-Terttu Tryggvason , Margareta Sandström & Anette Sandberg (2012) Diversity management in preschools using a critical incident approach, *Intercultural*

Kalet, A. L., Mukherjee, D., Felix, K., Steinberg, S. E., Nachbar, M., Lee, A., Changrani, J., & Gany, F. (2005). Can a web-based curriculum improve students' knowledge of, and attitudes about, the interpreted medical interview? *Journal of General Internal Medicine*, 20(10), 929–934. <https://doi.org/10.1111/j.1525-1497.2005.0193.x>

- King, P. M., Perez, R. J., & Shim, W. (2013). How college students experience intercultural learning key features and approaches. *Journal of Diversity in Higher Education*, 6(2), 69–83.
- Kirshblum, S., Murray, R., Potpally, N., Foye, P. M., Dyson-Hudson, T., & DallaPiazza, M. (2020). An introductory educational session improves medical student knowledge and comfort levels in caring for patients with physical disabilities. *Disability and Health Journal*, 13(1). <https://doi.org/10.1016/j.dhjo.2019.100825>
- Landis, D., Brislin, R. W., & Hulgus, J. F. (1985). Attributional Training Versus Contact in Acculturative Learning: A Laboratory Study. *Journal of Applied Social Psychology*, 15(7), 466–482. <https://doi.org/10.1111/j.1559-1816.1985.tb02266.x>
- Landis, D., Day, H. R., McGrew, P. L., Thomas, J. A., & Miller, A. B. (1976). Can a Black “Culture Assimilator” Increase Racial Understanding? *Journal of Social Issues*, 32(2), 169–183. <https://doi.org/10.1111/j.1540-4560.1976.tb02501.x>
- Leigh, J. M., Shapiro, E. R., & Penney, S. H. (2010). Developing diverse, collaborative leaders: An empirical program evaluation. *Journal of Leadership and Organizational Studies*, 17(4), 370–379. <https://doi.org/10.1177/1548051809355510>
- LEONG, F. T. L., & KIM, H. H. W. (1991). Going Beyond Cultural Sensitivity on the Road to Multiculturalism: Using the Intercultural Sensitizer as a Counselor Training Tool. *Journal of Counseling & Development*, 70(1), 112–118.
- Lonner, W. J. (1997). Three paths leading to culturally competent psychological practitioners. *International Journal of Intercultural Relations*, 21(2), 195–212. [https://doi.org/10.1016/s0147-1767\(96\)00045-4](https://doi.org/10.1016/s0147-1767(96)00045-4)
- Malpas, J. (2011). Between pink and blue: A multi-dimensional family approach to gender nonconforming children and their families. *Family Process*, 50(4), 453–470. <https://doi.org/10.1111/j.1545-5300.2011.01371.x>
- McKinley, M. T. (2019). Supervising the sojourner: Multicultural supervision of international students. *Training and Education in Professional Psychology*, 13(3), 174–179. <https://doi.org/10.1037/tep0000269>
- Mirsky, J. (2011). Working through countertransference blocks in cultural-competence training. *Psychoanalytic Social Work*, 18(2), 136–148.

<https://doi.org/10.1080/15228878.2011.611788>

- Mitschke, D. B., Loebel, K., Tatafu, E., Segal Matsunaga, D., & Cassel, K. (2010). Using Drama to Prevent Teen Smoking: Development, Implementation, and Evaluation of Crossroads in Hawai'i. *Health Promotion Practice, 11*(2), 244–248.
<https://doi.org/10.1177/1524839907309869>
- Moon, S. H., Morgan, T., & Sandage, S. J. (2018). The Need for Intercultural Competence Assessment and Training Among Police Officers. *Journal of Forensic Psychology Research and Practice, 18*(5), 337–351. <https://doi.org/10.1080/24732850.2018.1510274>
- Mor Barak, M. E. (2005). *Managing diversity: Toward a globally inclusive workplace*. San Francisco, CA: Sage.
- Morell, V. W., Sharp, P. C., & Crandall, S. J. (2002). Creating student awareness to improve cultural competence: creating the critical incident. *Medical Teacher, 24*(5), 532–534.
<http://10.0.4.56/0142159021000012577>
- Nelson H. L. (2001). *Damaged identities: Narrative repair*. Ithaca, NY: Cornell University Press.
- O'brien, G. E., Fiedler, F. E., & Hewett, T. (1971). The Effects of Programmed Culture Training upon the Performance of Volunteer Medical Teams in Central America. *Human Relations, 24*(3), 209–231. <https://doi.org/10.1177/001872677102400303>
- Pierce, C. M. (1995). Stress analogs of racism and sexism: Terrorism, torture, and disaster. In C. Willie, P. Rieker, B. Kramer, & B. Brown (Eds.), *Mental health, racism and sexism* (pp. 277–293). Pittsburgh: University of Pittsburg Press.
- Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A., & McEwen, S. A. (2014). A scoping review of scoping reviews: advancing the approach and enhancing the consistency. *Research synthesis methods, 5*(4), 371-385.
- Plant, E., & Devine, P. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social ..., 75*(3), 811–832.
- Qi, W., Wang, Z., Wu, L. Z., & Luo, X. (2019). Multicultural supervision with Chinese international trainees. *Training and Education in Professional Psychology, 13*(3), 185–193. <https://doi.org/10.1037/tep0000254>

- Reio, T., & Ghosh, R. (2009). Antecedents and Outcomes of Workplace Incivility. *Computational Complexity*, 2(1), 1–9. <https://doi.org/10.1002/hrdq>
- Rios-Ellis, B., Frates, J., D'Anna, L. H., Dwyer, M., Lopez-Zetina, J., & Ugarte, C. (2008). Addressing the need for access to culturally and linguistically appropriate HIV/AIDS prevention for Latinos. *Journal of Immigrant and Minority Health*, 10(5), 445–460. <https://doi.org/10.1007/s10903-007-9105-3>
- Rovegno, I., & Gregg, M. (2007). Using folk dance and geography to teach interdisciplinary, multicultural subject matter: a school-based study. *Physical Education & Sport Pedagogy*, 12(3), 205–223. <https://doi.org/10.1080/17408980701610151>
- Roysircar, G. (2003). Religious differences: Psychological and sociopolitical aspects of counseling. In *International Journal for the Advancement of Counselling* (Vol. 25, Issue 4, pp. 255–267). <https://doi.org/10.1023/B:ADCO.00000005525.71147.e8>
- Sinnema, C., Sewell, A., & Milligan, A. (2011). Evidence-informed collaborative inquiry for improving teaching and learning. *Asia-Pacific Journal of Teacher Education*, 39(3), 247–261. <https://doi.org/10.1080/1359866X.2011.597050>
- Spencer-Oatey, H. (2013) Critical incidents. A compilation of quotations for the intercultural field.
- Storck, L. E. (2002). Hearing, speaking and doing class-aware psychotherapy: A group-analytic approach. In *Group Analysis* (Vol. 35, Issue 3, pp. 437–446). <https://doi.org/10.1177/0533316402035003615>
- Surian, A., & Damini, M. (2014). “Llegar a ser” un aprendiz-maestro cooperativo. *Anales de Psicología*, 30(3), 808–817. <https://doi.org/10.6018/analesps.30.3.201521>
- Sue, D. W., & Sue, D. (2007). *Counseling the culturally diverse: Theory and practice* (5th ed.). Hoboken, NJ: Wiley.
- Sue, D. W., Rivera, D. P., Capodilupo, C. M., Lin, A. I., & Torino, G. C. (2010). Racial dialogues and white trainee fears: Implications for education and training. *Cultural Diversity and Ethnic Minority Psychology*, 16, 206–214.
- Sue, D. W., Arredondo, P., & McDavis, R. J. (1992). Multicultural counseling competencies and standards: A call to the profession. *Journal of Counseling & Development*, 70, 477–486.

- Sue, D. W., Bernier, J. B., Durran, M., Feinberg, L., Pederson, P., Smith, E., et al. (1982). Position paper: Cross-cultural counseling competencies. *The Counseling Psychologist*, 10, 45–52.
- Sue, D. W., Carter, R. T., Casas, J. M., Fouad, N. A., Ivey, A. E., Jensen, M., et al. (1998). *Multicultural counseling competencies: Individual and organizational development*. Thousand Oaks, CA: Sage.
- Sue, D. W., Ivey, A. E., & Pedersen, P. B. (1996). A theory of multicultural
- Tran, Tran Thien Quynh, Wilfried Admiraal, and Nadira Saab. 2019. “Effects of Critical Incident Tasks on the Intercultural Competence of English Non-Majors.” *Intercultural Education* 30(6):618–33. doi: 10.1080/14675986.2019.1664728.
- Uribe Guajardo, M. G., Slewa-Younan, S., Kitchener, B. A., Mannan, H., Mohammad, Y., & Jorm, A. F. (2018). Improving the capacity of community-based workers in Australia to provide initial assistance to Iraqi refugees with mental health problems: An uncontrolled evaluation of a Mental Health Literacy Course. *International Journal of Mental Health Systems*, 12(1). <https://doi.org/10.1186/s13033-018-0180-8>
- Van Assche, J. (2019). Ethnic Diversity, Ideological Climates, and Intergroup Relations: A Person × Context Approach. *Psychological Belgica*, 59(1), pp. 33–49.
- Ward, C., Bochner, S., & Furnham, A. (2001). *The Psychology of Culture shock*(2nd ed.). Philadelphia: Routledge.
- Wilson, K., Barron, C., Wheeler, R., & Jedrzejek, P. E. A. (2018). The importance of examining diversity in reflective supervision when working with young children and their families. *Reflective Practice*, 19(5), 653–665. <https://doi.org/10.1080/14623943.2018.1538956>
- WOOLSEY, L. O. R. E. T. T. E. K. (1986). Research and Practice in Counseling: A Conflict of Values. *Counselor Education and Supervision*, 26(2), 84–94. <https://doi.org/10.1002/j.1556-6978.1986.tb00700.x>
- Worchel, S., & Mitchell, T. R. (1972). An evaluation of the effectiveness of the culture assimilator in Thailand and Greece. *Journal of Applied Psychology*, 56(6), 472–479. <https://doi.org/10.1037/h0033759>

Yu, Z., Bowers, B., & Yeoh, B. (2019). A Scoping Review of the Health of East and Southeast Asian Female Marriage Migrants. *Journal of Immigrant and Minority Health, 22*, 182-211.

Appendix 1

Scoping Review Protocol

Protocol title

The usage of critical incidents in diversity training: a scoping review protocol

Author's information

Itumeleng Magoai, ISCTE-IUL (Instituto Universitário de Lisboa), imigt@iscte-uil.pt

Elena Piccinelli, ISCTE-IUL (Instituto Universitário de Lisboa), ElenaPiccinelli@iscte-iul.pt

Christin-Melanie Vauclair, ISCTE-IUL (Instituto Universitário de Lisboa),

Melanie.Vauclair@iscte-iul.pt

PCC elements

Population: Trainings featuring all participants regardless of age.

Concept(s): In the context of this review, Critical Incidents are considered to be a narrative methodology, or a tool applied during diversity training.

Context: In the context of this review, diversity training is defined as any instructional program intended as a training or intervention to sensitize participants about various aspects of diversity within their environment.

We consider diversity within any setting such as workplace, schools, universities, and communities regardless of geographical location or context where they were conducted. We will only consider papers that are written in English.

Scoping review objective (s)

The main objective of the current scoping review is to map the literature on the use of critical incidents in the context of diversity training.

Specifically, the review will synthesize the following information:

- The geographic context, domain, and industrial settings where the diversity training using critical incidents have been implemented.
- The demographic profiles of the parties involved in the training (trainers and participants)
- The key concepts related to the critical incidents, the mode of delivery and the content of the narratives.

- The psychological (cognitive and emotive) processes related to the usage of critical incidents.
- The findings regarding the effectiveness of the critical incident and how this is measured.
- The limitations and research gaps presented in the papers.

Scoping review question(s)

General research question: How have critical incidents been used in the context of diversity training? To what extent is the critical incidents tool effective in facilitating intergroup relations?

Sub-questions:

- What are the objectives of the diversity training that use critical incidents (e.g., increasing intercultural competence; inequality awareness; unconscious biases)?

Demographic information, the context of training and socio-psychological processes

- Who is the target audience (demographics), and in which context have the training s been conducted (e.g., settings, cultures, countries)?
- What are the professional backgrounds of the trainers/facilitators of the training?
- Do the authors of the included studies acknowledge the eventual implication of the training/intervention/methodology (e.g., influence of power dynamics between trainers/facilitators and participants, social and political implications of the training)?
- What are the psychological processes that are assumed to play a role when engaging with critical incidents in diversity training?
- Do the studies included in this review tackle issues related to discrimination? And how are different forms of discrimination (blatant vs. subtle) addressed in this context?

Key concepts and effectiveness:

- What are the key concepts and definitions of critical incidents as applied in diversity training (e.g., if critical incidents are defined as case studies, vignettes, intercultural sensitizers, etc.)?
- Does the study provide evidence that the objectives have been fulfilled? Is there any post-intervention evaluation and how is the effectiveness of the training evaluated?
- What are the findings regarding the effectiveness of the critical incident and how is this measured?

- Did the trainers ask for participants' feedback at the end of the training, in order to better understand possible issues related to the effectiveness or (lack of it) of the usage of critical incidents?

Research gaps:

- What are the research gaps in relation to the use of critical incidents in diversity training?

Background (≈1000 words)

In the 1980s, the uncertainties related to the continuation of Affirmative Action Laws – which had been previously introduced to curb the issue of inequality towards the minority groups in the United States – and the consequential need to implement diversity management strategies in the organizational context, led to the introduction of diversity programs, which included antidiscrimination policies, training, and recruitment practices. (Kelly & Dobbin, 1998).

At the same time, in Europe, the establishment of 'European Region Action Scheme for the Mobility of University Students', popularly known as the Erasmus program, in 1987 (Erasmus Commission, 2017), shed a light on the need for intercultural training in the context of cultural exchanges. Such trainings are consistent with the premise of diversity management, which takes into consideration the inclusion of disadvantaged groups. Therefore, it is not surprising that in the last decade, the demand for diversity training across various settings is continuously growing with emphasis on global mobility and other intergroup dynamics.

Organizations have more diverse workforce, comprised of employees with different behaviours, expectations and needs (Berzukova et al., 2016). Pre-schools are becoming multicultural, which requires teachers to develop cultural competencies to accommodate diverse group of children (Stier et al., 2012). The general goal of diversity management is to provide knowledge, awareness, and skills, in order to address issues including, but not limited to, cultural diversity, culture clashes, unequal treatment, discrimination, and prejudice in organizations (Alhejji, et al. 2016).

With diversity training we refer to educational interventions that aim to make trainees more aware of diversity issues (e.g., in the workplace, communities, schools etc.) as well as their own beliefs and biases about diversity. The goal is usually to increase competencies and skills that facilitate intergroup interaction.

The current review seeks to contribute towards the need for better understanding of the growing multicultural society (Van Assche, 2019). In the context of this review, diversity training is defined as any instructional program intended as a training or intervention to sensitize participants about various aspects of diversity within their environment (Bezrukova et al., 2016). Readings, assignments, group activities, and trained facilitators, can sensitize participants and allow for connection across differences with the intention to better understand the self and others (Faloughi & Herman, 2020).

The outcome of diversity training can be positive, leading to a reduction in discrimination as well as provision of equal opportunities for underrepresented groups. In such positive cases, participants also understand the importance of respecting differences, and the impact they have on others and society at large (Faloughi & Herman, 2020). Studies in organizational context indicate that when a diversity program is successful, members of the majority groups also indicate satisfaction with their jobs (Bond & Haynes, 2014). When diversity efforts fail, the impact can result in minority members suffering more discrimination and losing trust towards the organization (Mor Barak, 2005; Brown, 2004; Cropanzano & Rupp, 2008). Research indicates that certain training approaches and design of the diversity training procedures have large effect size, resulting in persistent diversity related outcome (Berzukova and colleagues, 2016). Therefore, there is a need to have a clear comprehension of what diversity training approaches worked, what didn't work and possibly have a clear picture of the contributing factors from the literature.

The current scoping review will focus on the literature exploring diversity training/interventions that have used critical incidents (CI) as an intervention method. Critical incidents (CI) are defined as a narrative methodology or a tool applied during training. In the literature, there is a reference to two aspects of the Critical Incident Technique (Flanagan, 1954). The method is used as a retrieval of critical incidents through interviews as well as the usages of the incidences themselves. In the current review we are focusing on the usage of the critical incidents.

There are various definitions of a 'Critical Incident' in literature depending on the contextual framework in which this tool is used. Therefore, for purposes of the current review, we rely on what the literature has defined as "critical incidents", "intercultural sensitizers" or "culture assimilators". These definitions often refer to the same training tool and have been used interchangeably or in conjunction with each other (Fiedler et al., 1971; Kim & Leong, 1991). In this context, we consider that critical incidents "appear to be 'typical' rather than 'critical' at first sight but are rendered critical through analysis. Therefore, critical incidents are produced by the way we look at a situation and the interpretation of the significance of a given situation" (Tripp, 1993 as cited in Spencer-Oatey, 2013). These tools have been used in trainings aimed at, among others, addressing culture differences, LGBTQ, ethnic and religious minority issues allowing for inquiry of issues of power structures, facilitation of cultural competencies and the improvement of

relationships between diverse individuals and groups (see Griffin, 2003; Halquist, 2009, p. 190; Tran & Saab, 2019).

Critical incidents are commonly used in intercultural training where narratives are presented with full context of the story to the participants (Spencer-Oatey, 2013) and can be presented in various formats (e.g., vignette, video, images, audio records, etc.). Moreover, the application of critical incidents in training appeared to sensitize participants to consider different perspectives and to shift focus to broader contextual/societal issues (Nelson, 2001).

The current scoping review seeks to map the extent to which this method is used in the context of diversity training. This focus on diversity trainings that applies narrative method with detailed contextual information is a warranted contribution to academic knowledge. Although the application of critical incidents in trainings is evident, there is no clear indication of the amount of literature that focuses on the usage of critical incidents in the context of diversity training. As such, a scoping review would allow us to map the available literature in a specific field of interest and seeks to provide a descriptive overview of the reviewed material, without assessing the quality of the evidence (Arksey H, & O'Malley, 2005; Pham et al., 2014; Yu et al., 2020).

We conducted a preliminary research on PROSPERO and EBSCO Host and no undergoing or past reviews about this topic were found (JBI, 2020). The key objective of this review is to assess the scope of literature on the usage of critical incidents in the context of diversity training. We also aim to map information about the content and context of the diversity training using critical incidents, as well as the findings of the literature, specifically about the effectiveness of this method and the psychosocial processes related to its effectiveness. Lastly, we aim to understand the research gaps of the literature in this context.

The objectives, inclusion criteria and methods for this scoping review will be specified in advance and documented in this protocol (JBI, 2015).

Eligibility criteria

	Inclusion	Exclusion
Population	Training with participants of all ages, regardless of their gender, ethnicity, culture, and any other demographic information.	
Concept	1. Sources that explicitly mention the usage of the following training tools: Critical Incident; Vignettes; Cultural Assimilator; Intercultural Sensitizer. The above-mentioned	1. Sources that DO NOT explicitly mention the following training tools: Critical Incident; Cultural Assimilator;

	<p>tools are generally referenced interchangeably or in conjunction with each other (Fiedler et al., 1971; Kim & Leong, 1991); therefore, because there are overlapping definitions between the tools, we consider them to be the same or similar concepts.</p>	<p>Intercultural Sensitizer; Vignettes or that only mention other narrative tools (e.g., Case studies) (Wight, 1995)</p>
Context	<p>Sources must indicate that the tool (critical incident or similar) was applied as educational and/or training context related to diversity issues.</p> <ol style="list-style-type: none"> 1. Sources that make reference to any instructional program intended as training or intervention for individuals and/or groups to sensitize them about various aspects of diversity within their environment AND 2. Sources that focus on factors such as, but not limited to cultural competency, intergroup contact, group identification, Cultural differences; intercultural conflict, issues faced by various minority groups such as stigma, bias, prejudice, discrimination, etc. (Faloughi & Herman, 2020; Bezrukova et al., 2016). 3. Any cultural context and any setting (e.g., academic, organization, communities etc.) regardless of geographical location (countries) 	<p>Sources that focus on diversity training but do NOT refer to the usage of any of the tools (Critical Incident; Vignettes; Cultural Assimilator; Intercultural Sensitizer)</p> <p>Sources that make reference to instructional programs but do NOT focus on diversity issues including but not limited to (e.g., cultural competency, intergroup contact, group identification, intercultural conflict, issues faced by various minority groups such as stigma, bias, prejudice, discrimination, etc.)</p>
Type of sources	<ol style="list-style-type: none"> 1. Sources published from 1954 (i.e., time frame of the first introduction of critical incident technique (Flanagan, 1954) 	<ol style="list-style-type: none"> 1. Sources published prior to 1954 2. Non peer reviewed articles 3. Non-English papers

	<ol style="list-style-type: none"> 2. Sources that are published in Psychological domain. 3. All types of primary empirical studies (qualitative, quantitative, mixed methods) 4. All types of secondary studies (reviews) and theoretical articles. 5. Peer reviewed published articles. 6. Sources written in English (regardless of the language in which the training was conducted). 	
--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Methodology

The scoping review will follow the JBI Scoping Review methodology as outlined in the Joanna Briggs Institute Manual for Evidence Synthesis (2020) and in the Joanna Briggs Institute Reviewers' Manual (2020).

Search strategy

Following the JBI reviewers' manual (2020), a multiple-step search strategy will be adopted:

1. The following search string will be applied in PsycINFO. The database was selected on basis of its relevance to psychological studies, thus allows for consistency in the sources to be analyzed. The search will be restricted to an abstract. Furthermore, results will be refined according to the above-mentioned inclusion/exclusion criteria.

Divers* OR *Cultur* OR Competenc* OR Awareness

AND

Training OR intervention* OR program OR Education*

AND

"Critical Incident*" OR "Intercultural Sensitizer" OR "*Cultur* Assimilator*" OR Vignette*

2. Other sources (e.g., reviews and articles known to the authors) may be consulted in order to identify records that may fit with the inclusion criteria

3. After the full text screening is done the reference lists of the selected articles will be searched for further sources.

Screening and assessment for inclusion:

After importing the results of the search on Mendeley, duplicates will be removed. The screening process will be based on two different phases:

1. Abstract screening: The abstract of all retrieved articles will be assessed for inclusion
2. Full-text screening: The selected articles will be screened again through full-text reading and assessment, and articles meeting the inclusion criteria will be included in the review for coding.

In both phases uncertainties about whether to include/exclude a source will be discussed with a second reviewer.

Data Extraction

The coding scheme will be developed following the structural principles of the chart below (Adopted from JBI reviewers manual 2020). A pilot process will be conducted by one reviewer and discussed/validated with two team members. Reliability will be insured through intercoder agreement with one other researcher reviewing up to 10% of the sources. Disputes will be resolved through discussions with guidance from inclusion/exclusion criteria. The following coding scheme is a draft and will be refined when required during the coding process. Modifications will be reported and justified in the scoping review.

Source characteristics

1. Author(s)
2. Year of publication:
3. Aims/purpose of the study
4. Population (ages and gender) and sample size
5. Type of source (empirical studies - qualitative, quantitative, mixed methods – theoretical paper, review)
6. Mentioning of discrimination blatant/subtle (Yes/No)
7. Identified Research gaps

Diversity training characteristics

8. Aims of the diversity training
9. Target audience
10. Context of the training countries, settings (e.g., organizational, schools, communities etc.)
11. Trainers' characteristics and profession (specify; when applicable)
12. Mode of delivery of training (online/presential)
13. Training feedback and method of collecting feedback (specify; when applicable)
14. Limitations related to delivery of the training

Critical incidents characteristics

15. Conceptualization/Definition of the narrative methodology used: (Critical incident, Cultural assimilator, Vignette, Intercultural Sensitizer)
16. Content of the incident
17. Mode of delivery of Critical incidents

Results of the study

18. Socio-psychological links to critical incidents (Yes/No)
19. Effectiveness of the usage of critical incidents.

Data analysis and presentation of reviews

A qualitative content analysis will be conducted based on the computation of frequency counts of the categories in the coding scheme. Furthermore, qualitative thematic analysis will be conducted and classified under main conceptual categories. Results will be presented following the PRISMA Flow Diagram for the Scoping Review Process (JBI, 2020). A table of coded data will be presented, followed by a narrative description of key findings. The usage of figures and diagrams will be applied if necessary, for best presentation of data.

Conflicts of interest

All sources in the scoping review that were authored by one of the reviewers, will be screened and coded by another reviewer, therefore, limiting any bias that may occur (Harfield et al., 2015).

Appendix 2

Table A1

Evidence table of article characteristics

Article ID	Author	country	Target Population	Type of paper	Diversity topic	Aims	Delivery mode
1	(Adames et al., 2016)	USA	Mental Health/Social work	Theoretical	Race	To present a multiracial/multi-ethnic/multicultural competency building model (M3CB), which is presented to provide guidance to help practitioners in addressing the role of skin color/racial features in the treatment of Latino/as.	n/a
2	(Andrews et al., 2013)	USA	Academic Supervisor	Review	Disability	To explore legal and ethical concerns, cultural considerations of disability as an aspect of human diversity during the professional journey of training future psychologists with disabilities.	n/a
3	(Bäärnhielm & Sundvall, 2018)	Sweden	Mental Health/Social work	Theoretical	Minority Health Access	To discuss how clinicians in Sweden can deal with a series of challenges in a changing globalized society and finding culturally adapted clinical tools.	n/a
4	(Beckett et al., 1997)	USA	Mental Health/Social work	Theoretical	Race	To propose a model aimed at enhancing social work practice by promoting and increasing multicultural social work understanding and competence.	n/a
5	(Bhawuk, 1998)	USA	University Students	Empirical	Culture	To examine the role of theory in cross-cultural training and to compare culture-general and culture-specific assimilators, which are evaluated in view of the findings of the study.	in-person

6	(Brislin, 1986)	USA	Not Applicable	Theoretical	Culture	To describe a set of cross-cultural training materials which were designed to be useful in a wide variety of orientation programs (Brislin, Cushner, Cherrie, Bi Yang, 1986).	n/a
7	(Busse & Krause, 2015)	Germany	Mixed Population	Empirical	Culture	To explore the usefulness of the problem-based learning unit developed for the intervention and to observe students' reaction to a teaching approach that focuses on cooperative learning and affectively oriented methods.	in-person
8	(Chemers, 1969)	Iran	Mixed Population	Empirical	Culture	To design a cultural training so that it will change the individual's work relations and test the effects of training in appropriate work contexts.	in-person
9	(Clabby, 2017)	USA	Healthcare	Empirical	Culture	To enhance learners' organizational curiosity when they enter a system, by proposing the concept of culture humility.	in-person
10	(Collins & Pieterse, 2007)	USA	Mental Health/Social work	Theoretical	Race	To discuss Critical Incident analysis as a tool for increasing active racial/cultural awareness. A sample analysis and suggestions for implementation are provided.	n/a
11	(Cross et al., 2008)	USA	University Students (Nurses)	Empirical	Culture	To describe a comprehensive Faculty Development Program at the School of nursing school to address the complex issues of diversity and cultural competence in health care.	in-person
12	(Damron & Halleck, 2007)	USA	University Students	Theoretical	Culture	To present the development of a university game using culture assimilators. One of the goals of the game is to help international students negotiate the American university system and understand various aspects of a new culture.	in-person

13	(Darvin, 2011)	USA	Teachers	Empirical	Culture	To determine whether the pedagogical strategy of using Critical Political Vignettes had merit and to see what impact, if any, it had on the teachers to deal with culturally and politically sensitive issues in their classrooms and schools.	in-person
14	(Filmer & Herbig, 2020)	Germany	Community Health Workers	Empirical	Culture	To assess whether a training intervention in cross-cultural communication can positively impact attitudes, knowledge, and behaviour and to investigate possible dependencies between these components.	in-person
15	(Harrison, 1992)	USA	Army	Empirical	Culture	To examine the effects of combining two highly effective cognitive and experiential approaches in Cross Cultural Training.	in-person
16	(Hofmann-Broussard et al., 2017)	India	Community Health Workers	Empirical	Minority Health Access	To increase recognition of mental disorders, enhance appropriate response and referral, support people with mental disorders and their families, and improve mental health promotion in communities.	in-person
17	(Hornberger, 2004)	USA	Teachers	Theoretical	Language Diversity	To illustrate the potential of the continua model of biliteracy uses heuristic in continually (re)writing the bilingual or language educator's knowledge base in response to the demands of educational policy and practice	n/a
18	(Hunter et al., 2011)	USA	Community Members	Empirical	Race	To Illustrate the experiences of African Americans living with or caring for someone with chronic disease, and to create a forum through which photographs and words can communicate these experiences to increase public awareness of African Americans health.	in-person

19	(Ikram et al., 2015)	Netherlands	Healthcare	Empirical	Language Diversity	To increase knowledge and self-efficacy: e-learning module was developed for medical students about using professional interpreters during the medical interview, and evaluated its effects on students' knowledge and self-efficacy	Online
20	(Jendrusina & Martinez, 2019)	USA	Academic Supervisor	Theoretical	Culture	To enhance the presence of a multiculturally informed approach in supervision and client care. Examples in the supervision process that were notable in relation to racial minority supervision, as being either multiculturally responsive or unresponsive.	n/a
21	(Kalet et al., 2005)	USA	Healthcare (medical students)	Empirical	Language Diversity	To develop and evaluate a web-based curriculum to introduce first year medical students to the knowledge and attitudes necessary for working with limited English proficient (LEP) patients through interpreters.	Online
22	(Kirshblum et al., 2020)	USA	Healthcare	Empirical	Disability	To assess the knowledge and comfort level of first-year medical students towards People with Disability (PWD) before and after a mandatory educational session focused on the health disparities and appropriate care of (PWD).	in-person
23	(Landis et al., 1985)	USA	University Students	Empirical	Culture	To conduct a culture assimilator and behavioural interaction training materials and procedures, scales to test knowledge/sensitivity of Black culture and the subjective level of anxiety.	in-person

24	(Landis et al., 1976)	USA	Army	Empirical	Race	To describe the development and initial evaluation of a new technique for increasing racial understanding in the army context.	in-person
25	(Leigh et al., 2010)	USA	Business Employees	Empirical	Learning and Development	To examine a leadership development program dedicated to developing diverse leaders. It teaches participants how to lead collaboratively within diverse groups; and it establishes a strong sense of cohort support, which bridges gender, race, ethnicity, and institutional diversity.	in-person
26	(Lonner, 1997)	USA	Mental Health/Social work	Theoretical	Culture	This special issue features different answers to an important question facing the education, training, and preparation of applied “global” psychologists.	n/a
27	(Malpas, 2011)	USA	Families	Theoretical	Sexual Orientation/ LGBTQI	To Illustration of how The Multi-Dimensional Family Approach (MDFA) supports gender nonconforming children and their parents in negotiating a series of tasks, often ordinary to the life cycle of prepubertal child-rearing families, yet highly complicated by the nonconformity of the child.	in-person
28	(McKinley, 2019)	USA	Academic Supervisor	Theoretical	Multicultural Supervision	To contribute to the existing research on the needs and experiences of international students in U.S.-based counselling and psychology graduate programs. By focusing specifically on the supervision needs of international counselling students.	n/a

29	(Mirsky, 2011)	Israel	University Students	Empirical	Culture	1) An intermediate aim, central to the training model, is to help trainees develop the awareness of their own subjectivity and of their cultural attitudes and biases. Modelling is offered for a continuous reflection and. 2) The long-term goals of the training are (1) to help practitioners develop empathy toward clients from various cultural backgrounds, (2) enrich their knowledge about clients' culture, and (3) help them implement culture-attuned interventions.	in-person
30	(Mitschke et al., 2010)	USA	High school students	Empirical	Culture	To describe the development and implementation of a tobacco prevention drama for Asian and Pacific Islander youth. Especially important is a need to implement culturally relevant methods to reach youth.	Drama
31	(Moon et al., 2018)	USA	Police Officers	Theoretical	Race	To provide a recommendation for police officers receive intercultural competence assessment through the Intercultural Development Inventory (IDI; Hammer, 2011; Hammer et al., 2003) as part of training and ongoing development to decrease frequency of police-involved shootings of people of color, especially Black men.	Review
32	(O'Brien et al., 1971)	USA	High school students	Empirical	Culture	To investigate the effects of a task-related assimilator on the productivity of groups working for a considerable period.	in-person
33	(Qi et al., 2019)	USA	Academic Supervisor	Theoretical	Multicultural Supervision	To highlight some of the complexities of supervision with Chinese international trainees. (China vs. United States and other countries) and race/ethnicity (Chinese vs. others).	n/a

34	(Rios-Ellis et al., 2008)	USA	Community Members	Empirical	Minority Health Access	Longitudinal project featuring needs assessment and intervention. Thematic analysis of qualitative findings revealed limited awareness of risk factors, and a need for culturally and linguistically appropriate, family-centered HIV/AIDS education incorporating Latino values.	in-person
35	(Rovegno & Gregg, 2007)	USA	Police Officers	Empirical	Indigenous Cultures/Education needs	To describe a research project focused on teaching a Native American folk dance a classroom geography unit and to interrogate our curriculum decisions in relation to Native American scholar Carol Cornelius' (1999) theoretical framework for respectfully teaching about different cultures.	in-person
36	(Roisircar, 2003)	USA	Mental Health/Social work	Theoretical	Religion	To discuss reasons why therapists should develop an understanding of Islam. This information is useful to therapists in any nation that is struggling with increasingly diverse populations and the effects of international relations. The author, reflecting on her Hindu socialization in India and her working graduate training in diversity issues in the United States (U.S.)	n/a
37	(Sinnema et al., 2011)	USA	Teachers (Post-graduate teachers' course)	Empirical	Indigenous Cultures/Education needs	The central research question was: 'What is the impact of evidence-informed collaborative inquiry in efforts to improve teaching and learning for diverse social studies learners?' This article argues for the use of evidence-informed collaborative inquiry in efforts to improve teaching and learning for diverse students.	in-person

38	(Storck, 2002)	USA	Mental Health/Social work	Theoretical	Socio economic class	To addresses a few myths that devalue the contested concept of class and explores values that enrich a new psychosocial perspective about social class.	n/a
39	(Surian & Damini, 2014)	Italy	High school students	Empirical	Culture	To identify educational and teaching conditions that help students to develop interest and open mindedness towards diversity, especially cultural diversity.	in-person
40	(Uribe Guajardo et al., 2018)	Australia	Community Health Workers (Refugees mental health)	Empirical	Minority Health Access	To evaluate whether the tailored Mental Health Literacy Course on providing help to Iraqi refugees with mental health problems was effective in changing participants' knowledge, intentions, confidence, and attitudes.	in-person
41	(Wilson et al., 2018)	USA	University Students	Theoretical	Culture	The authors posit that reflective supervision can support cultural sensitivity, relationship building, professional growth, and positive infant and family outcomes	n/a
42	(Worchel & Mitchell, 1972)	Thailand	Army	Empirical	Culture	To evaluate the effectiveness of culture assimilator training for Americans working in Thailand	in-person
43	(Worchel & Mitchell, 1972)	Greece	Army	Empirical	Culture	To evaluate the effectiveness of culture assimilator training for Americans working in Greece.	in-person

Appendix 3

Table A2

Evidence table of Empirical studies

Article ID <i>(as reported in the text)</i>	Author	study methodology	Study design	Effectiveness	Population	N sample	Post test	Age mean	Female representa tion in Target population	Intervention duration	Scales
5	(Bhawuk, 1998)	Experimental	Experiment vs Control group	Partially	University Students	N = 102 IG = 76 CG = 26		21.00		N.Session: Time range: Two weeks	Intercultural Sensitivity Inventory ICSI Category Width Scale Attribution making Reaction measures (information and opinion) Behaviour Recall
7	(Busse & Krause, 2015)	Quasi- experimental	Experiment vs Control group	Partially	Mixed Population	N = 56 IG1 = 13 IG2 = 21 CG = 22 t1 = 20 t2 = 20	Less than one month	19.98 (2.11)		N. of sessions: 3 (over two weeks) Hours: 90 minutes per session	cultural misunderstandings
8	(Chemers, 1969)	Experimental	Experiment vs Control group	Effective	Mixed Population	N = 48 IG = 24	Less than one month			N. of sessions: 4 Hours/session:5 Time range: 4 Days	Fiedler's esteem for less preferred co-worker (LPC) scale Culture assimilators based on Stolurow (1965)

16	(Hofmann-Broussard et al., 2017)	Quasi-experimental	Pre-test./Post-test	Partially	Community Health Workers	N= 70 t1= 66 t2= 46	1-6 Months	37.00		interviewer-administered Mental Health Literacy Survey
								86.4%		
18	(Hunter et al., 2011)	Qualitative	Qualitative	Effective	Community Members	N = 24			Time range:2 months	Qualitative analysis: Short Form (MOS SF-36)
19	(Ikram et al., 2015)	Quasi-experimental	Pre-test./Post-test	Effective	Healthcare	N = 324 t1 = 281 t2 = 281			Time range: Two-week training	knowledge and self-efficacy in interpreter use pre-post-test on 1 (lowest) – 10 (highest) scale
								80%		
21	(Kalet et al., 2005)	Quasi-experimental	Pre-test./Post-test	Effective	Healthcare	N = 640 t1 = 456 t2 = 155	Same day		Hours/Session: 42 Minutes	Pre and post knowledge Pre and post attitudes
22	(Kirshblum et al., 2020)	Quasi-experimental	Pre-test./Post-test	Partially	Healthcare	N = 355 t1 = 355 t2 = 278 valid sample	Same day	26-30	longitudinal course over the first two years of the curriculum, Health Equity and Social Justice, which focuses on health and healthcare disparities and identifies interventions that can help lead to greater health equity.	Pre and post knowledge Pre and post comfort levels
								49%		
23	(Landis et al., 1985)	Experimental	Experiment vs Control group	Partially	University Students	N = 45 t1 (IG +CG) = 45 t2 (IG +CG) = 45	Less than one month	25.78	N. of sessions: 2	Culture Assimilator Behavioral interaction

24	(Landis et al., 1976)	Experimental	Experiment	Effective	Army	N = 310 IG= 85			Hours: 4 hours	Culture Assimilator Intercultural Sensitivity
25	(Leigh et al., 2010)	Quasi-experimental	Pre-test./Post-test	Effective	Business Employees	N = 58 IG = 27 CG = 25 t1 = t2			Time Range: 8 Months	Kouzes and Posner's Leadership Practices Inventory based in a learning model
									44.4%	
29	(Mirsky, 2011)	Qualitative	Qualitative	Effective	University Students	N = 26			N. of sessions: Weekly Hours/session: 50 hours Time range: 1 year	Qualitative: Narrative analysis (sense making) AND The exploration of group processes
30	(Mitschke et al., 2010)	Mixed methods	Pre-test./Post-test	Effective	High school students	N = 10000 t1= 10000 t2= 10000 t3 = 2660	Same day and assessment follow up	12.02	Longitudinal project	Theory of Planned Behavior Knowledge attitudes Intended behaviour
									48.6%	
32	(O'brien et al., 1971)	Experimental	Experiment vs Control group	Effective	High school students	N = 265 IG = 119 CG = 146			N. of sessions: Weekly Hours/session:5-6 hours: Time range: 1 Month	Culture Assimilator
34	(Rios-Ellis et al., 2008)	Qualitative	Qualitative	Effective	Community Members	71			Longitudinal: Project activities took place over a 3-year period in 14 cities throughout the United States and Puerto Rico.	

35	(Rovegno & Gregg, 2007)	Qualitative	Qualitative	Effective	Primary school kids	N = 17		8.00	N. of Sessions: 12	Qualitative: Cornelius' (1999) framework- respect different worldviews and ways of life.
								59%		
37	(Sinnema et al., 2011)	Qualitative	Qualitative	Effective	Teachers	N = 26			Time range: 1 year	Qualitative: postgraduate course
39	(Surian & Damini, 2014)	Quasi-experimental	Pre-test./Post-test	Effective	High school students	N = 127 t1 = 127 t2 = 102	6-12 Months		Through monthly training sessions,	Bennett's Development Model of Intercultural Sensitivity
40	(Uribe Guajardo et al., 2018)	Quasi-experimental	Pre-test./Post-test	Partially	Community Health Workers	N= 86 t1=86 t2=86	1-6 Months	44.10	Sessions: 2 (One day) Hours:7 hours and 6-month follow up	Demographics Recognition of PTSD, Recognition of depression Knowledge of helpfulness of interventions for PTSD and depression, Social distance towards PTSD and depression Stigma towards PSTD and depression Weak-not-sick subscale Dangerous/unpredictable subscale Offer help to a person with PTSD and depression related problems Confidence helping a person with PTSD and depression related problems
								82.6%		

										Helping intentions
										General mental health knowledge Helping behaviours
42	(Worchel & Mitchell, 1972)	Experimental	Experiment vs Control group	Effective	Army	N = 51 t1=45 t2=37	1-6 Months	N. of Sessions: 2	Culture Assimilator (incident and responses in Fiedler et al., 1971). Thai Culture and Behavior" (Benedict, 1946)	
43	(Worchel & Mitchell, 1972)	Experimental	Experiment	Effective	Army	N = 76 t1= 14 (Random selection for assimilator training) t2= 14	1-6 Months	N. of Sessions: 2	Greek assimilator consisted of 68 items in one Book (Mitchell, Gagerman, & Schwartz, 1969)	

IG = Intervention Group; CG = Control Group

Appendix 4

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	i
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	vii
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	1
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	2
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	n/a
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	Appendix 1
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	12
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	13
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	13
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	15
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	n/a
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	n/a
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	16
RESULTS			

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	15
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	16
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	n/a
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	Appendix 2 Appendix 3
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	Appendix 2 Appendix 3
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	27
Limitations	20	Discuss the limitations of the scoping review process.	30
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	30
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	n/a

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med.* 2018;169:467–473. doi: [10.7326/M18-0850](https://doi.org/10.7326/M18-0850)